



EPA Information Collection Request

*Prepared For
Georgia Power
(In Response to EPA's Section 114 Letter, Dated 6 April 2022)*

Performed At The
Georgia Power
Plant McDonough
Combined Cycle Combustion Turbines - Units 4A and 4B
Smyrna, Cobb County, Georgia
5551 S. Cobb Drive, Georgia 30080

Test Date(s)
October 12 through 20, 2022

Report No.

TRC Environmental Corporation Report 499970

Report Submittal Date
January 4, 2023



Report Certification

I certify that to the best of my knowledge:

- Testing data and all corresponding information have been checked for accuracy and completeness.
- Sampling and analysis have been conducted in accordance with the approved protocol and applicable reference methods (as applicable).
- All deviations, method modifications, or sampling and analytical anomalies are summarized in the appropriate report narrative(s).
- This report contains a total of 628 pages - including coversheet, table of contents and certification pages.

A handwritten signature in black ink, appearing to read "Jon T. Howard".

Jon T. Howard
Technical Director

January 4, 2023
Date

A handwritten signature in black ink, appearing to read "Jason Grizzle".

Jason Grizzle
Project Manager

January 4, 2023
Date

TRC was operating in conformance with the requirements of ASTM D7036-04 during this test program.

A handwritten signature in black ink, appearing to read "BR".

Bruce Randall
TRC Emission Testing Technical Director



TABLE OF CONTENTS

1.0 INTRODUCTION	4
1.1 Project Contact Information.....	4
1.2 Facility and Process Description	5
2.0 SUMMARY OF RESULTS.....	6
2.1 Summary of Test Results- CT Unit 4A.....	6
2.2 Summary of Test Results- CT Unit 4B.....	7
3.0 DISCUSSION OF RESULTS	8
4.0 SAMPLING AND ANALYSIS PROCEDURES	9
4.1 Determination of Sample Point Locations by USEPA Method 1	9
4.2 Volumetric Flow Rate Determination by USEPA Method 2	9
4.3 Determination of the Concentration of Gaseous Pollutants Using a Multi-Pollutant Sampling System	9
4.3.1 CO ₂ Determination by USEPA Method 3A.....	9
4.3.2 O ₂ Determination by USEPA Method 3A.....	9
4.3.3 CO Determination by USEPA Method 10	10
4.4 Moisture Determination by USEPA Method 4.....	10
4.5 Moisture Determination by USEPA Method 320.....	10
4.6 Filterable PM Determination by USEPA Method 5	10
4.7 Trace Metals Determination by USEPA Method 29	10
4.8 Formaldehyde Determination by USEPA Method 320.....	11
5.0 QUALITY ASSURANCE PROCEDURES.....	13
6.0 TEST RESULTS SUMMARY	14
Table 6.1 CT Unit 4A- Detailed Summary of Method 320 and Method 10 Results	14
Table 6.2 CT Unit 4A - Detailed Summary of Method 5 and 29 Results.....	15
Table 6.3 CT Unit 4B - Detailed Summary of Method 320 and Method 10 Results	17
Table 6.4 CT Unit 4B - Detailed Summary of Method 5 and 29 Results.....	18
APPENDIX	
Qualified Individual Certificate(s).....	21
Process and Pollution Control Equipment Operating Data	27
Sample Location Information.....	124
Calculation Nomenclature and Formulas.....	131
Method 320 Processed Data	141
Method 320 QA Data	201
Gaseous QA and Logged Data	231
Lab Analysis	369
Processed Field Data and Results	503
Raw Field Data Sheets	532
Sample Train Diagrams.....	567
Quality Assurance Data	573
Sampling Equipment Calibration Data	574
Analyzer Interference Test Data	594
Calibration Gas Certificates.....	603
Test Protocol	613



EMISSION COMPLIANCE STUDY

1.0 INTRODUCTION

TRC Environmental Corporation (TRC) performed a comprehensive emission test program on two Combined Cycle Combustion Turbines (CTs) (Units 4A and 4B) at Georgia Power-Plant McDonough in Smyrna, GA beginning the week of October 12, 2022. The test program was conducted in response to the EPA's Section 114 Information Collection Request (ICR) letter issued to Ms. Rosa Chi, Air Manager, Environmental Affairs of Georgia Power. This emission testing program was completed in accordance with the methods and procedures presented in Enclosure 1 of 40 CFR, Part 63, Subpart YYYY and in accordance with technical discussion between representative EPA Officials, Georgia Power, and TRC. The Test Protocol dated August 31, 2022, was provided to the Georgia Department of Natural Resources, Environmental Protection Division and EPA officials although not required by rule.

1.1 Project Contact Information

Entity/Location	Address	Contact
Georgia Power Environmental Affairs	Georgia Power Environmental Affairs 2480 Maner Rd SE Atlanta, Georgia 30339	Rosa Chi Regulatory and Strategy Manager (404) 664-2940 (phone) TRCHI@southernco.com Jason Grooms Air Monitoring & Testing Supervisor (912) 687-3137 (phone) jgrooms@southernco.com GA Power- Testing Coordination Hien Mai Specialist, Environmental (404) 801-5908 (phone) hmai@southernco.com
Test Facilities	Georgia Power Plant McDonough 5551 S Cobb Drive Smyrna, GA 30080 Permit No. 4911-067-0003-V-04-0 Facility No. 04-13-067-00003	Plant Contact: Rosa Chi (404) 664-2940 (phone) TRCHI@southernco.com

Testing Company	TRC Environmental Corporation 9225 US Highway 183 South Austin, Texas 78747	Jon Howard Technical Director (334) 704-4706 (phone) (512) 243-0222 (fax) jhoward@trccompanies.com
		Jason Grizzle Project Manager/Test Team Lead (720) 838-3857 (phone) jgrizzle@trccompanies.com

The tests were conducted by Jason Grizzle, Will McKibben, Mike Lawrie, Sean MacLeod and Martin Morales of TRC. Documentation of the on-site ASTM D7036-04 Qualified Individual(s) (QI) is appended.

No governmental representatives observed the testing.

1.2 Facility and Process Description

The McDonough-Atkinson Combined-Cycle Facility includes 3 lean pre-mix, combined-cycle power blocks, which primarily burn natural gas. Each power block is nominally rated at 840 MW and consists of two combustion turbines, two heat recovery steam generators with duct-burners, and one steam turbine. Two of the combustion turbines, CT4A and CT4B, also have the capability to burn ultra-low sulfur diesel as a back-up fuel; however, this testing is only required while firing natural gas for these combined-cycle CTs. The site also includes 4 simple-cycle CTs that are not required to be included as part of this testing.





2.0 SUMMARY OF RESULTS

The results of this test program are summarized in the tables below. Detailed individual run results are presented in Section 6.0.

2.1 Summary of Test Results- CT Unit 4A

Source/Parameter	Mean Test Result	Mean Test Result
Method 320		
Hydrogen Chloride	0.06 ppm@15%O ₂	0.481 lb/hr
Hydrogen Fluoride	0.65 ppm@15%O ₂	2.75 lb/hr
Formaldehyde	< 0.0248 ppm@15%O ₂	< 0.1580 lb/hr
Method 10		
Carbon Monoxide	< 0.08 ppm@15%O ₂	< 0.00057 lb/hr
HAP Metals (Method 29)		
Total HAP Metals	3.18E-03 mg/dscm@15%O ₂ - DLL	1.64E-02 lb/hr - DLL
Antimony	1.50E-04 mg/dscm@15%O ₂ - DLL	7.70E-04 lb/hr - DLL
Arsenic	4.04E-04 mg/dscm@15%O ₂ - DLL	2.06E-03 lb/hr - DLL
Beryllium	1.13E-05 mg/dscm@15%O ₂ - DLL	5.80E-05 lb/hr - DLL
Cadmium	3.41E-04 mg/dscm@15%O ₂ - DLL	1.82E-03 lb/hr - DLL
Chromium	2.07E-04 mg/dscm@15%O ₂ - ADL	1.05E-03 lb/hr - ADL
Cobalt	4.29E-04 mg/dscm@15%O ₂ - DLL	2.20E-03 lb/hr - DLL
Lead	3.73E-04 mg/dscm@15%O ₂ - DLL	1.91E-03 lb/hr - DLL
Manganese	6.66E-03 mg/dscm@15%O ₂ - ADL	3.41E-03 lb/hr - ADL
Mercury	8.79E-05 mg/dscm@15%O ₂ - DLL	4.50E-04 lb/hr - DLL
Nickel	1.59E-04 mg/dscm@15%O ₂ - ADL	8.14E-04 lb/hr - ADL
Selenium	3.55E-04 mg/dscm@15%O ₂ - DLL	1.82E-03 lb/hr - DLL
Method 5		
Particulate Matter (<i>filterable</i>)	4.66E-04 gr/dscf - DLL	3.53E-04 gr/dscf@15%O ₂ - DLL

Note:

ADL - all analytical values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

DLL - at least one, but not all values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

BDL - all analytical values used to calculate and report an in-stack emissions value are less than the laboratory's reported detection level(s)



2.2 Summary of Test Results- CT Unit 4B

Source/Parameter	Mean Test Result	Mean Test Result
Method 320		
Hydrogen Chloride	0.04 ppm@15%O ₂	0.314 lb/hr
Hydrogen Fluoride	0.71 ppm@15%O ₂	3.04 lb/hr
Formaldehyde	< 0.0183 ppm@15%O ₂	< 0.1170 lb/hr
Method 10		
Carbon Monoxide	< 0.08 ppm@15%O ₂	< 0.00057 lb/hr
HAP Metals (Method 29)		
Total HAP Metals	1.77E-02 mg/dscm@15%O ₂ - DLL	1.43E-02 lb/hr - DLL
Antimony	1.77E-04 mg/dscm@15%O ₂ - DLL	9.56E-04 lb/hr - DLL
Arsenic	3.32E-04 mg/dscm@15%O ₂ - DLL	1.78E-03 lb/hr - DLL
Beryllium	1.06E-05 mg/dscm@15%O ₂ - DLL	5.70E-05 lb/hr - DLL
Cadmium	2.60E-04 mg/dscm@15%O ₂ - DLL	1.34E-03 lb/hr - DLL
Chromium	1.56E-04 mg/dscm@15%O ₂ - ADL	8.51E-04 lb/hr - ADL
Cobalt	3.53E-04 mg/dscm@15%O ₂ - DLL	1.90E-03 lb/hr - DLL
Lead	2.39E-04 mg/dscm@15%O ₂ - BDL	1.28E-03 lb/hr - BDL
Manganese	5.46E-04 mg/dscm@15%O ₂ - ADL	2.91E-03 lb/hr - ADL
Mercury	8.27E-05 mg/dscm@15%O ₂ - BDL	4.45E-04 lb/hr - BDL
Nickel	2.04E-04 mg/dscm@15%O ₂ - DLL	1.14E-03 lb/hr - DLL
Selenium	3.05E-04 mg/dscm@15%O ₂ - DLL	1.64E-03 lb/hr - DLL
Method 5		
Particulate Matter (<i>filterable</i>)	2.27E-04 gr/dscf - DLL	1.69E-04 gr/dscf@15%O ₂ - DLL

Note:

ADL - all analytical values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

DLL - at least one, but not all values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

BDL - all analytical values used to calculate and report an in-stack emissions value are less than the laboratory's reported detection level(s)



The table below summarizes the test methods used, as well as the number and duration of each at each test location:

Unit ID/ Sample Location	Parameter Measured	Test Method	No. of Runs	Run Duration
CT Units 4A and 4B	Formaldehyde (CH_2O) Hydrogen Chloride Hydrogen Fluoride	USEPA 320	5-7	60 min
	Carbon Monoxide	USEPA 10	5-7	60 min
	Oxygen (O_2) and carbon dioxide (CO_2)	USEPA 3A	With all test runs	----
	Moisture Content (B_{ws})	USEPA 320 USEPA 4	7	60 min- M320 180 min
	HAP Metals	USEPA 29	7	180 min
	Filterable PM	USEPA 5	7	180 min
	Volumetric flow rate	USEPA 1-4	7	180 min

3.0 DISCUSSION OF RESULTS

No major problems were encountered with the test equipment or procedures during the test program. Source operation was normal during the entire test program. No changes or problems were encountered that required modification of any procedures presented in the test plan.

Matrix spike recovery for HF and HCL was challenging as expected but was met for both the Method 320 spiking and Method 301 validation testing requirements. TRC utilized dedicated high-density polyethylene (HDPE) tubing to deliver the HF and HCL gas to the sample probe for recovery through the sample lines and siliconert gas regulators were used.



4.0 SAMPLING AND ANALYSIS PROCEDURES

All testing, sampling, analytical, and calibration procedures used for this test program were performed in accordance with the methods presented in the following sections. Where applicable, the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods, USEPA 600/R-94/038c, September 1994 was used to supplement procedures.

4.1 Determination of Sample Point Locations by USEPA Method 1

Sampling was conducted at the main sample platform. Samples were collected from each of the 12 Method 1 traverse points during each test run. For instrumental testing, an initial O₂ stratification test using Method 7E procedures was performed. Once the absence of O₂ stratification was confirmed, sampling for CO, CH₂O, HCL, HF, O₂, CO₂ and moisture was conducted from a single point in one test port. Manual method testing including sampling at all appropriate traverse points defined by Method 1.

4.2 Volumetric Flow Rate Determination by USEPA Method 2

This method is applicable for the determination of the average velocity and the volumetric flow rate of a gas stream.

The gas velocity head (DP) and temperature were measured at traverse points defined by USEPA Method 1. The velocity head was measured with a Type S (Stausscheibe or reverse type) pitot tube and oil-filled manometer; and the gas temperature was measured with a Type K thermocouple. The average gas velocity in the flue was calculated based on: the gas density (as determined by USEPA Methods 3A and 4); the flue gas pressure; the average of the square roots of the velocity heads at each traverse point, and the average flue gas temperature.

4.3 Determination of the Concentration of Gaseous Pollutants Using a Multi-Pollutant Sampling System

Concentrations of the pollutants in the following sub-sections were determined using one sampling system. The number of points at which sample was collected was determined in accordance with 40CFR60 specifications.

4.3.1 CO₂ Determination by USEPA Method 3A

This method is applicable for the determination of CO₂ concentrations in controlled and uncontrolled emissions from stationary sources only when specified within the regulations. The CO₂ analyzer was equipped with a non-dispersive infrared (IR) detector.

4.3.2 O₂ Determination by USEPA Method 3A

This method is applicable for the determination of O₂ concentrations in controlled and uncontrolled emissions from stationary sources only when specified within the regulations. The O₂ analyzer was equipped with a paramagnetic-based detector.



4.3.3 CO Determination by USEPA Method 10

This method is applicable for the determination of CO concentrations in controlled and uncontrolled emissions from stationary sources only when specified within the regulations. The non-dispersive infrared analyzer (NDIR) CO analyzer was equipped with an internal gas correlation filter wheel, which eliminates potential detector interference. As such, use of an interference removal trap was not required.

4.4 Moisture Determination by USEPA Method 4

This method is applicable for the determination of the moisture content of stack gas.

A gas sample was extracted at a constant rate from the source. Moisture was removed from the sample stream by a series of pre-weighed impingers immersed in an ice bath. A minimum of 21 dry standard cubic feet of flue gas was collected during each sample run.

4.5 Moisture Determination by USEPA Method 320.

Per Section 16.3 of Method 4, this method is an applicable alternative for the determination of the moisture content of stack gas. Please refer to Section 4.4 for additional detail.

4.6 Filterable PM Determination by USEPA Method 5

This method is applicable for the determination of PM emissions from stationary sources. USEPA Methods 2-4 were performed concurrently with, and as an integral part of, these determinations.

Flue gas was withdrawn isokinetically from the source at traverse points determined per USEPA Method 1, and PM was collected in the nozzle, probe liner, and on a glass fiber filter. The probe liner and filter were maintained at a temperature of $120\pm14^{\circ}\text{C}$ ($248\pm25^{\circ}\text{F}$). The PM mass, which included any material that condensed at or above ~~filtration~~ temperature, was determined gravimetrically after the removal of uncombined water.

4.7 Trace Metals Determination by USEPA Method 29

This method is applicable for the determination of metals emissions from stationary sources. This method may be used to determine particulate emissions in addition to the metals emissions if the prescribed procedures and precautions are followed. USEPA Methods 2-4 were performed concurrently with, and as an integral part of these determinations.

Flue gas was withdrawn isokinetically from the source at traverse points determined per USEPA Method 1 through a nozzle, probe liner, glass fiber filter and a series of impingers. The probe liner and filter were maintained at a temperature of $120\pm14^{\circ}\text{C}$ ($248\pm25^{\circ}\text{F}$). Particle-bound metals were collected in the nozzle, probe on the filter. Gaseous metals were collected in a solution of nitric acid and hydrogen peroxide (analyzed for all metals including Hg) and a solution of acidified potassium permanganate (analyzed only for Hg).



The recovered samples were analyzed using the techniques identified in the appended analytical report.

4.8 Formaldehyde Determination by USEPA Method 320

This method applies to the analysis of vapor phase organic or inorganic compounds which absorb energy in the mid-infrared spectral region, about 400 to 4000 cm⁻¹ (25 to 2.5μm). This method is used to determine compound-specific concentrations in a multi-component vapor phase sample, which is contained in a closed-path gas cell. Spectra of samples are collected using double beam infrared absorption spectroscopy. A computer program is used to analyze spectra and report compound concentrations.

A Spectrum WaveRunIR™ FTIR spectrometer was used for this test program. This device utilizes a liquid nitrogen-cooled, 2-color detector (MCT/InSb sandwich) and a 10.6 meter heated fixed-path sample cell. The 2-color detector has much better sensitivity than traditional detectors in the 2200-5000 cm⁻¹ region where formaldehyde absorbs. The spectral resolution is 0.5 cm⁻¹ (wavenumbers). The instrument was calibrated using a digital library of reference spectra, and all measurements and analytical results were recorded and stored digitally.

Flue gas was transported to the analyzer via a heated, extractive sample system with temperature maintained greater than 250°F. After assembly and warm-up, the sample system was checked for leaks by capping the end of the sample probe and verifying that no sample flowed through the system via an in-line rotameter.

Instrument and sample system responses to calibration gas were verified on-site using:

1. A calibration transfer standard (CTS) gas (ppm-range Ethylene in nitrogen),
2. A Nitrogen zero gas,
3. A CH₂O gas standard with a tracer component (ppm-range sulfur hexafluoride in nitrogen)
4. A HCl gas standard with a tracer component (ppm-range sulfur hexafluoride in nitrogen)
5. A HF gas standard with a tracer component (ppm-range sulfur hexafluoride in nitrogen)

Matrix spiking using the tracer components was also performed and EPA Method 301 Validation testing was completed for each FTIR test parameter for Natural Gas Condition. The Method 301 validation testing was completed in-part during the ICR testing at Plant McIntosh. Those data for the natural gas condition are provided in the Quality Assurance Data Appendix.

The FTIR Classical Least Squares (CLS) approach was used to calculate the concentrations of target compounds on a wet basis and the residual, which is the error associated with each reported concentration. If the measured concentration was less than the minimum detection limit (MDL), the value is considered a non-detect and is reported as "<MDL".



TRC also implemented the following procedures from the Electric Power Research Institute (EPRI) document “FTIR Field Test Protocol” which specifically applies to low-level formaldehyde testing at CT sources:

- Use an FTIR instrument with a demonstrated formaldehyde detection limit less than approximately 1/3 of the compliance level.
- Use clean sampling equipment (heated probe/filter, sample line and pump manifold) to minimize system bias.
- Verify stability of the FTIR and sample system via periodic baseline checks prior to the first test run.
- Confirm that the FTIR pressure sensor measures correctly at the test location by comparing to a calibrated barometer.
- Use FTIR scan durations of 5 minutes with backgrounds measured for 10 minutes.
- Generate and analyze a Source Specific Water Standard during the test program. This Standard matched the moisture level moisture of the turbine emission matrix to within $\pm 10\%$. The resulting spectrum was incorporated into the FTIR analytical method to minimize water interference.
- Determine instrument Detection Limit (DL) using 3 times the standard deviation of 8 consecutive direct measurements of zero gas for the same duration as the source measurements (3-5 minutes). Apply the same approach to determine in-stack DL.
- Use formaldehyde gases for calibration and spiking with certified accuracy of $\pm 5\%$.
- Perform Formaldehyde spiking once for each CT tested with a dilution ratio exceeding 10:1. If the concentration of formaldehyde in the exhaust gas is below the in-stack DL, the spike concentration was approximately 50% of the applicable standard.
- Measure a final background spectrum at the conclusion of the test. The final spectrum was used to correct test data if background deviations observed during the test are greater than $\pm 5\%$ in an analytical region (absorbance of 0.021 to -0.022).

The analysis was confirmed by manual subtraction of the measured compounds from a representative spectrum. This confirmation served to validate the computerized FTIR analysis.



5.0 QUALITY ASSURANCE PROCEDURES

TRC integrates our Quality Management System (QMS) into every aspect of our testing service. We follow the procedures specified in current published versions of the test Method(s) referenced in this report. Any modifications or deviations are specifically identified in the body of the report. We routinely participate in independent, third-party audits of our activities, and maintain:

- Accreditation from the Louisiana Environmental Laboratory Accreditation Program (LELAP).
- Accreditation from the Stack Testing Accreditation Council (STAC) and the American Association for Laboratory Accreditation (A2LA) that our operations conform with the requirements of ASTM D 7036 as an Air Emission Testing Body (AETB).

These accreditations demonstrate that our systems for training, equipment maintenance and calibration, document control and project management will fully ensure that project objectives are achieved in a timely and efficient manner with a strict commitment to quality.

All calibrations are performed in accordance with the test Method(s) identified in this report. If a Method allows for more than one calibration approach, or if approved alternatives are available, the calibration documentation in the appendices specifies which approach was used. All measurement devices are calibrated or verified at set intervals against standards traceable to the National Institute of Standards and Technology (NIST). NIST traceability information is available upon request.

ASTM D7036-04 specifies that: "*AETBs shall have and shall apply procedures for estimating the uncertainty of measurement. Conformance with this section may be demonstrated by the use of approved test protocols for all tests. When such protocols are used, reference shall be made to published literature, when available, where estimates of uncertainty for test methods may be found.*" TRC conforms with this section by using approved test protocols for all tests.



6.0 TEST RESULTS SUMMARY

Table 6.1 CT Unit 4A- Detailed Summary of Method 320 and Method 10 Results

Client: Georgia Power

Facility: Plant McDonough

Technicians: JSG, WM

Project Number: 499970.0000.0000

SOURCE TEST RUN	Unit 4A Natural Gas							AVERAGE
	1	2	3	4	5	6	7	
Date	10/13/2022	10/13/2022	10/13/2022	10/13/2022	10/13/2022	10/13/2022	10/13/2022	
Start Time	8:33	9:48	11:00	12:21	13:33	14:46	15:58	
Stop Time	9:33	10:48	12:00	13:21	14:33	15:46	16:58	
Process Data								
Unit Load (MW)	380.5	380.5	380.9	379.9	378.5	378.2	379.1	379.6
Fuel Flow (SCFH)	23,668	23,652	23,666	23,611	23,533	23,530	23,599	23,608
Firing Rate (MMBTU/Hr)	2,603.5	2,601.8	2,603.2	2,597.2	2,588.6	2,588.3	2,595.9	2,596.9
Exhaust Volumetric Flow Rate								
Qstd (std ft ³ /min):	1,107,611	1,107,611	1,107,611	1,210,293	1,210,293	1,115,598	1,115,598	1,139,231
Qstd(dry) (dry std ft ³ /min):	1,002,404	1,002,404	1,002,404	1,093,783	1,093,783	1,016,810	1,016,810	1,032,628
Exhaust Concentrations								
O ₂ (vol %, dry)	13.07	13.11	13.12	13.12	13.11	13.13	13.13	13.11
CO ₂ (vol %, wet)	4.55	4.54	4.54	4.54	4.54	4.55	4.53	4.54
CO (ppmv, dry)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
H ₂ O (vol %, wet)	8.99	9.03	8.97	8.93	8.92	8.84	8.70	8.91
Formaldehyde (ppmv, wet)	< 0.0298	< 0.0298	< 0.0298	< 0.0298	< 0.0298	< 0.0298	< 0.0298	< 0.0298
Formaldehyde (ppmv, dry)	< 0.0327	< 0.0328	< 0.0327	< 0.0327	< 0.0327	< 0.0327	< 0.0326	< 0.0327
HCl (ppmv, wet)	0.105	0.113	0.106	0.062	0.054	0.047	0.040	0.075
HCl (ppmv, dry)	0.115	0.124	0.117	0.068	0.060	0.051	0.044	0.083
HF (ppmv, wet)	0.805	0.803	0.779	0.784	0.788	0.781	0.715	0.779
HF (ppmv, dry)	0.885	0.883	0.856	0.861	0.865	0.856	0.783	0.856
Emmission Rates								
CO (ppmv,dry @ 15% O ₂)	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Formaldehyde (ppmv,dry @ 15% O ₂)	< 0.0247	< 0.0248	< 0.0248	< 0.0248	< 0.0248	< 0.0248	< 0.0248	< 0.0248
HCl (ppmv,dry @ 15% O ₂)	0.09	0.09	0.09	0.05	0.05	0.04	0.03	0.06
HF (ppmv,dry @ 15% O ₂)	0.67	0.67	0.65	0.65	0.65	0.65	0.59	0.65
Emmission Rates								
CO (lb/hr)	< 0.00056	< 0.00056	< 0.000558	< 0.000608	< 0.00061	< 0.00057	< 0.00057	< 0.00057
Formaldehyde (lb/hr)	< 0.1535	< 0.1536	< 0.1535	< 0.1674	< 0.1674	< 0.1555	< 0.1552	< 0.1580
HCl (lb/hr)	0.656	0.706	0.666	0.422	0.370	0.295	0.251	0.481
HF (lb/hr)	2.76	2.76	2.68	2.93	2.95	2.71	2.48	2.75

Table 6.2 CT Unit 4A - Detailed Summary of Method 5 and 29 Results
**METALS TEST RESULTS SUMMARY
Unit 4A**

Run No:	1	2	3	4	5	6	7	Average								
Date:	10/12/22	10/12/22	10/13/22	10/13/22	10/13/22	10/14/22	10/14/22									
Start Time:	7:34	11:58	7:30	11:10	14:44	7:17	10:48									
End Time:	11:10	15:29	11:03	14:39	18:18	10:44	14:19									
Run Duration (min):	192.0	192.0	192.0	192.0	192.0	192.0	192.0									
Fixed Gas Content:																
CO ₂ (% vol)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5								
O ₂ (% vol)	13.1	13.1	13.1	13.1	13.1	13.0	13.1	13.1								
Fractional Moisture Content:	0.096	0.100	0.095	0.096	0.089	0.090	0.088	0.093								
Sample Volume, V _{m(std)}																
(dry std ft ³):	146.304	141.889	139.516	157.844	144.167	164.662	153.922	149.757								
(dry std m ³):	4.143	4.018	3.951	4.470	4.082	4.663	4.359	4.241								
Measured Volumetric Flow Rate																
Q _{std} (std ft ³ /min):	1,127,243	1,113,081	1,107,611	1,210,293	1,115,598	1,177,155	1,155,656	1,143,805								
Q _{std(dry)} (dry std ft ³ /min):	1,018,477	1,001,410	1,002,404	1,093,783	1,016,810	1,071,156	1,054,204	1,036,892								
Net Mass Collected (µg)																
Arsenic:	2.221	1	3.66	1	1.976	1	1.96	2	1.96	2	2.24	DLL				
Beryllium:	0.065	1	0.063	2	0.063	2	0.063	2	0.063	2	0.063	DLL				
Cadmium:	0.32	1	0.369	1	0.332	1	4.545		0.298	2	8.228					
Chromium:	1.96		1.128		1.247		1.125		1.02		0.457					
Cobalt:	4.15	1	2.1	2	2.1	2	2.1	2	2.1	2	2.1	2				
Mercury:	0.4888	2	0.49	2	0.4906	2	0.4912	2	0.4904	2	0.495	2				
Manganese:	3.98		3.49		4.58		3.9		3.09		4.03					
Nickel:	1.639		0.937		1.294		1.463		0.285		0.283	1				
Lead:	3.063		2.163		2.35	1	2.308		1.43	1	1.76	1				
Antimony:	0.84	2	0.84	1	0.84	2	0.84	2	0.84	2	0.84	2				
Selenium:	2.385		1.937	1	1.965	1	2.1	1	1.841	1	1.739	1				
Total Metals (µg):	21.11	1	17.18	1	17.24	1	20.90	1	13.42	1	21.96	1				
Total Non-Mercury Metals (µg):	20.62	1	16.69	1	16.75	1	20.40	1	12.93	1	21.46	1				
Metals Emission Rate (lb/hr)																
Arsenic:	2.05E-03	1	3.42E-03	1	1.88E-03	1	1.80E-03	2	1.83E-03	2	1.69E-03	2	1.78E-03	2	2.06E-03	DLL
Beryllium:	5.99E-05	1	5.88E-05	2	5.99E-05	2	5.77E-05	2	5.88E-05	2	5.42E-05	2	5.71E-05	2	5.80E-05	DLL
Cadmium:	2.95E-04	1	3.44E-04	1	3.16E-04	1	4.17E-03		2.78E-04	2	7.08E-03		2.71E-04	1	1.82E-03	DLL
Chromium:	1.80E-03		1.05E-03		1.19E-03		1.03E-03		9.52E-04		3.93E-04		9.51E-04		1.05E-03	ADL
Cobalt:	3.82E-03	1	1.96E-03	2	2.00E-03	2	1.92E-03	2	1.96E-03	2	1.81E-03	2	1.90E-03	2	2.20E-03	DLL
Mercury:	4.50E-04	2	4.57E-04	2	4.66E-04	2	4.50E-04	2	4.58E-04	2	4.26E-04	2	4.46E-04	2	4.50E-04	BDL
Manganese:	3.66E-03		3.26E-03		4.35E-03		3.57E-03		2.88E-03		3.47E-03		2.69E-03		3.41E-03	ADL
Nickel:	1.51E-03		8.75E-04		1.23E-03		1.34E-03		2.66E-04		2.44E-04	1	2.36E-04	1	8.14E-04	ADL
Lead:	2.82E-03		2.02E-03		2.23E-03		2.12E-03		1.33E-03		1.51E-03	1	1.31E-03	1	1.91E-03	DLL
Antimony:	7.73E-04	2	7.84E-04	1	7.98E-04	2	7.70E-04	2	7.84E-04	2	7.23E-04	2	7.61E-04	2	7.70E-04	DLL
Selenium:	2.20E-03		1.81E-03	1	1.87E-03	1	1.92E-03	1	1.72E-03	1	1.50E-03	1	1.73E-03	1	1.82E-03	DLL
Total Metals (lb/hr):	1.94E-02	1	1.60E-02	1	1.64E-02	1	1.92E-02	1	1.25E-02	1	1.89E-02	1	1.21E-02	1	1.64E-02	DLL
Total Non-Mercury Metals (lb/hr):	1.90E-02	1	1.56E-02	1	1.59E-02	1	1.87E-02	1	1.21E-02	1	1.85E-02	1	1.17E-02	1	1.59E-02	DLL
Metals Concentration (mg/dscm @ 15% O ₂)																
Arsenic:	4.07E-04	1	6.93E-04	1	3.78E-04	1	3.32E-04	2	3.65E-04	2	3.14E-04	2	3.39E-04	2	4.04E-04	DLL
Beryllium:	1.19E-05	1	1.19E-05	2	1.21E-05	2	1.07E-05	2	1.17E-05	2	1.01E-05	2	1.09E-05	2	1.13E-05	DLL
Cadmium:	5.86E-05	1	6.99E-05	1	6.35E-05	1	7.71E-04		5.54E-05	2	1.32E-03		5.17E-05	1	3.41E-04	DLL
Chromium:	3.59E-04		2.14E-04		2.39E-04		1.91E-04		1.90E-04		7.32E-05		1.81E-04		2.07E-04	ADL
Cobalt:	7.60E-04	1	3.98E-04	2	4.02E-04	2	3.56E-04	2	3.91E-04	2	3.37E-04	2	3.63E-04	2	4.29E-04	DLL
Mercury:	8.95E-05	2	9.28E-05	2	9.38E-05	2	8.33E-05	2	9.12E-05	2	7.93E-05	2	8.50E-05	2	8.79E-05	BDL
Manganese:	7.28E-04		6.61E-04		8.76E-04		6.62E-04		5.75E-04		6.46E-04		5.13E-04		6.66E-04	ADL
Nickel:	3.00E-04		1.77E-04		2.48E-04		2.48E-04		5.30E-05		4.54E-05	1	4.49E-05	1	1.59E-04	ADL
Lead:	5.61E-04		4.10E-04		4.50E-04	1	3.92E-04		2.66E-04	1	2.82E-04	1	2.50E-04	1	3.73E-04	DLL
Antimony:	1.54E-04	2	1.59E-04	1	1.61E-04	2	1.42E-04	2	1.56E-04	2	1.35E-04	2	1.45E-04	2	1.50E-04	DLL
Selenium:	4.37E-04		3.67E-04	1	3.76E-04	1	3.56E-04	1	3.42E-04	1	2.79E-04	1	3.30E-04	1	3.55E-04	DLL
Total Metals (mg/dscm @ 15% O ₂)	3.86E-03	1	3.25E-03	1	3.30E-03	1	3.54E-03	1	2.50E-03	1	3.52E-03	1	2.31E-03	1	3.18E-03	DLL
Non-Mercury Metals (mg/dscm @ 15% O ₂)	3.77E-03	1	3.16E-03	1	3.20E-03	1	3.46E-03	1	2.40E-03	1	3.44E-03	1	2.23E-03	1	3.10E-03	DLL
Isokinetic Variation (%):	98.0		96.7		95.0		98.5		96.7		104.9		99.6		98.5	

1 - The mass at least one of the sample fractions was below the analytical detection limit

2 - The mass in all of the sample fractions was below the analytical detection limit

ADL - all analytical values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

DLL - at least one, but not all values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

BDL - all analytical values used to calculate and report an in-stack emissions value are less than the laboratory's reported detection level(s)

Run 3 sample volume (dscm) of 3.95 without rounding, was slightly under 4.0 dscm



PARTICULATE TEST RESULTS SUMMARY

Unit 4A

Test Run Number:	1	2	3	4	5	6	7	Average
Source Condition:	Max	Max	Max	Max	Max	Max	Max	
Date:	10/12/2022	10/12/2022	10/13/2022	10/13/2022	10/13/2022	10/14/2022	10/14/2022	
Start Time:	7:34	11:58	7:30	11:10	14:44	7:17	10:48	
End Time:	11:10	15:29	11:03	14:39	18:18	10:44	14:19	
Sample Duration (min):	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0
Average Gas Temp, T_s , ($^{\circ}$ F):	216.3	216.8	217.3	216.0	216.2	216.5	217.6	216.7
Average Gas Temp, T_s , ($^{\circ}$ C):	102.4	102.7	103.0	102.2	102.3	102.5	103.1	102.6
Fractional Gas Moisture Content, B_{ws} :	0.096	0.100	0.095	0.096	0.089	0.090	0.088	0.093
Gas CO ₂ Content (%vol):	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Gas O ₂ Content (%vol):	13.1	13.1	13.1	13.1	13.1	13.0	13.1	13.1
Gas Wet MW, M_s , (lb/lb-mole):	28.16	28.12	28.18	28.16	28.25	28.23	28.26	28.20
Average Gas Velocity, V_s , (ft/sec):	55.60	54.94	55.18	60.18	55.40	58.37	57.21	56.70
Average Gas Velocity V_s , (m/sec):	16.95	16.75	16.82	18.34	16.89	17.79	17.44	17.28
Measured Volumetric Flow Rate:								
Q (actual ft ³ /min):	1,477,964	1,460,365	1,466,807	1,599,632	1,472,591	1,551,537	1,520,598	1,507,071
Q _{std} (std ft ³ /min):	1,127,243	1,113,081	1,107,611	1,210,293	1,115,598	1,177,155	1,155,656	1,143,805
Q _{std(dry)} (dry std ft ³ /min):	1,018,477	1,001,410	1,002,404	1,093,783	1,016,810	1,071,156	1,054,204	1,036,892
Q _m (actual m ³ /min):	41,852	41,353	41,536	45,297	41,699	43,935	43,059	42,676
Q _{stdm} (std. m ³ /min):	31,920	31,515	31,360	34,267	31,590	33,329	32,720	32,386
Q _{stdm(dry)} (dry std. m ³ /min):	28,840	28,353	28,381	30,968	28,793	30,328	29,848	29,359
Sample Volume, $V_{m(std)}$, (dry std ft ³):	146.304	141.889	139.516	157.844	144.167	164.662	153.922	149.757
Sample Volume, $V_{m(std)/metric}$, (dry std. m ³):	4.143	4.018	3.951	4.470	4.082	4.663	4.359	4.241
PM Collected, m_n , (mg):								
Filterable	7.94 ¹	1.00 ²	3.62 ¹	13.00 ¹	1.06	2.60	2.88	4.59 ^{DLL}
PM Concentration, C_s , (gr/dscf):								
Filterable	8.37E-04 ¹	1.09E-04 ¹	4.00E-04 ¹	1.27E-03 ¹	1.13E-04	2.43E-04	2.89E-04	4.66E-04 ^{DLL}
PM Concentration, Ccorr., (gr/dscf corrected to 15% O ₂):								
Filterable	6.35E-04 ¹	8.27E-05 ¹	3.03E-04 ¹	9.64E-04 ¹	8.62E-05	1.82E-04	2.17E-04	3.53E-04 ^{DLL}
Isokinetic Variance (I)	98.0	96.7	95.0	98.5	96.7	104.9	99.6	98.5

1 - The mass at least one of the sample fractions was below the analytical detection limit

2 - The mass in all of the sample fractions was below the analytical detection limit

ADL - all analytical values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

DLL - at least one, but not all values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

BDL - all analytical values used to calculate and report an in-stack emissions value are less than the laboratory's reported detection level(s)



Table 6.3 CT Unit 4B - Detailed Summary of Method 320 and Method 10 Results

Client: Georgia Power

Facility: Plant McDonough

Technicians: JSG, WM

Project Number: 499970.0000.0000

SOURCE TEST RUN	Unit 4B Natural Gas							AVERAGE
	1	2	3	4	5	6	7	
Date	10/17/2022	10/17/2022	10/17/2022	10/17/2022	10/17/2022	10/17/2022	10/17/2022	
Start Time	8:20	9:35	10:45	11:55	13:05	14:20	15:35	
Stop Time	9:20	10:35	11:45	12:55	14:05	15:20	16:35	
Process Data								
Unit Load (MW)	385.6	382.3	381.6	380.4	380.0	379.8	381.1	381.5
Fuel Flow (SCFH)	23,677	23,493	23,469	23,407	23,384	23,373	23,430	23,462
Firing Rate (MMBTU/Hr)	2,605.2	2,584.0	2,581.3	2,575.9	2,571.1	2,570.3	2,577.9	2,580.8
Exhaust Volumetric Flow Rate								
Qstd (std ft3/min):	1,114,445	1,114,445	1,114,445	1,114,445	1,151,371	1,151,371	1,151,371	1,130,271
Qstd(dry) (dry std ft3/min):	1,012,600	1,012,600	1,012,600	1,012,600	1,055,706	1,055,706	1,055,706	1,031,074
Exhaust Concentrations								
O ₂ (vol %, dry)	13.02	13.06	13.07	13.09	13.08	13.07	13.08	13.07
CO ₂ (vol %, wet)	4.52	4.52	4.51	4.52	4.52	4.51	4.51	4.52
CO (ppmv, dry)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
H ₂ O (vol %, wet)	8.96	8.96	8.91	8.90	8.86	8.78	8.68	8.86
Formaldehyde (ppmv, wet)	< 0.0221	< 0.0221	< 0.0221	< 0.0221	< 0.0221	< 0.0221	< 0.0221	< 0.0221
Formaldehyde (ppmv, dry)	< 0.0243	< 0.0243	< 0.0243	< 0.0243	< 0.0242	< 0.0242	< 0.0242	< 0.0242
HCl (ppmv, wet)	0.093	0.065	0.055	0.039	0.032	0.031	0.030	0.049
HCl (ppmv, dry)	0.102	0.072	0.060	0.043	0.035	0.033	0.033	0.054
HF (ppmv, wet)	0.965	0.896	0.897	0.884	0.862	0.819	0.726	0.864
HF (ppmv, dry)	1.060	0.984	0.985	0.971	0.945	0.898	0.795	0.948
Emmission Rates								
CO (ppmv,dry @ 15% O ₂)	< 0.07	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Formaldehyde (ppmv,dry @ 15% O ₂)	< 0.0182	< 0.0183	< 0.0183	< 0.0183	< 0.0183	< 0.0183	< 0.0183	< 0.0183
HCl (ppmv,dry @ 15% O ₂)	0.08	0.05	0.05	0.03	0.03	0.03	0.02	0.04
HF (ppmv,dry @ 15% O ₂)	0.79	0.74	0.74	0.73	0.71	0.68	0.60	0.71
Emmission Rates								
CO (lb/hr)	< 0.00056	< 0.00056	< 0.000563	< 0.000563	< 0.00059	< 0.00059	< 0.00059	< 0.00057
Formaldehyde (lb/hr)	< 0.1150	< 0.1150	< 0.1149	< 0.1149	< 0.1197	< 0.1196	< 0.1195	< 0.1170
HCl (lb/hr)	0.586	0.411	0.345	0.247	0.208	0.201	0.199	0.314
HF (lb/hr)	3.34	3.10	3.11	3.06	3.11	2.96	2.62	3.04

Table 6.4 CT Unit 4B - Detailed Summary of Method 5 and 29 Results
**METALS TEST RESULTS SUMMARY
Unit 4B**

Run No:	1	2	3	4	5	6	7	Average
Date:	10/17/22	10/17/22	10/18/22	10/18/22	10/19/22	10/19/22	10/20/22	
Start Time:	8:43	12:34	7:42	11:30	7:05	10:50	7:33	
End Time:	12:12	16:11	11:17	15:08	10:37	14:24	11:03	
Run Duration (min):	192.0	192.0	192.0	192.0	192.0	192.0	192.0	
Fixed Gas Content:								
CO ₂ (% vol)	4.5	4.5	4.5	4.5	4.5	4.5	5.2	4.6
O ₂ (% vol)	13.1	13.1	13.1	13.1	13.2	13.1	11.9	12.9
Fractional Moisture Content:	0.091	0.083	0.083	0.078	0.084	0.075	0.097	0.085
Sample Volume, V _{m(std)}								
(dry std ft ³):	144.230	152.268	148.341	160.772	166.742	163.775	158.565	156.385
(dry std m ³):	4.084	4.312	4.201	4.553	4.722	4.638	4.490	4.428
Measured Volumetric Flow Rate								
Q _{std} (std ft ³ /min):	1,114,445	1,151,371	1,111,367	1,170,628	1,196,568	1,220,363	1,206,485	1,167,318
Q _{std(dry)} (dry std ft ³ /min):	1,012,600	1,055,706	1,019,488	1,079,180	1,095,582	1,128,354	1,090,056	1,068,709
Net Mass Collected (µg)								
Arsenic:	1.96 ²	2.045 ¹	1.96 ²	1.97 DLL				
Beryllium:	0.063 ²	0.063 DLL						
Cadmium:	4.246	0.316 ¹	2.745	0.298 ²	2.138 ¹	0.298 ²	0.301 ¹	1.48 DLL
Chromium:	0.994	1.096	0.262	0.651	0.932	1.46	1.18	0.94 ADL
Cobalt:	2.1 ²	2.1 ²	2.1 ²	2.1 ²	2.10 ²	2.10 ²	2.1 ²	2.10 DLL
Mercury:	0.4884 ²	0.5 ²	0.4924 ²	0.491 ²	0.485 ²	0.4876 ²	0.497 ²	0.492 BDL
Manganese:	2.95	2.09	2.68	9.08	2.1	1.81	1.91	3.23 ADL
Nickel:	1.122	1.591	0.26 ¹	0.504	0.26 ¹	1.759	3.3	1.26 DLL
Lead:	1.42 ²	1.42 BDL						
Antimony:	1 ¹	1.02 ¹	1 ¹	1.16 ¹	1.1 ¹	1 ¹	1.12 ¹	1.057 DLL
Selenium:	2.064 ¹	1.738 ¹	1.76 ¹	1.71 ²	1.795 ¹	1.71 ²	1.90 ¹	1.81 DLL
Total Metals (µg)	18.41 ¹	13.98 ¹	14.74 ¹	19.44 ¹	14.35 ¹	14.07 ¹	15.75 ¹	15.82 DLL
Total Non-Mercury Metals (µg)	17.92 ¹	13.48 ¹	14.25 ¹	18.95 ¹	13.87 ¹	13.58 ¹	15.26 ¹	15.33 DLL
Metals Emission Rate (lb/hr)								
Arsenic:	1.82E-03 ²	1.88E-03 ¹	1.78E-03 ²	1.74E-03 ²	1.70E-03 ²	1.79E-03 ²	1.78E-03 ²	1.78E-03 DLL
Beryllium:	5.85E-05 ²	5.78E-05 ²	5.73E-05 ²	5.59E-05 ²	5.48E-05 ²	5.74E-05 ²	5.73E-05 ²	5.70E-05 DLL
Cadmium:	3.94E-03	2.90E-04 ¹	2.50E-03	2.65E-04 ²	1.86E-03 ¹	2.72E-04 ²	2.74E-04 ¹	1.34E-03 DLL
Chromium:	9.23E-04	1.01E-03	2.38E-04	5.78E-04	8.10E-04	1.33E-03	1.07E-03	8.51E-04 ADL
Cobalt:	1.95E-03 ²	1.93E-03 ²	1.91E-03 ²	1.86E-03 ²	1.83E-03 ²	1.91E-03 ²	1.91E-03 ²	1.90E-03 DLL
Mercury:	4.54E-04 ²	4.59E-04 ²	4.48E-04 ²	4.36E-04 ²	4.22E-04 ²	4.44E-04 ²	4.52E-04 ²	4.45E-04 BDL
Manganese:	2.74E-03	1.92E-03	2.44E-03	8.06E-03	1.83E-03	1.65E-03	1.73E-03	2.91E-03 ADL
Nickel:	1.04E-03	1.46E-03	2.36E-04 ¹	4.47E-04	2.26E-04 ¹	1.60E-03	3.00E-03	1.14E-03 DLL
Lead:	1.32E-03 ²	1.30E-03 ²	1.29E-03 ²	1.26E-03 ²	1.23E-03 ²	1.29E-03 ²	1.29E-03 ²	1.28E-03 BDL
Antimony:	9.29E-04 ¹	9.35E-04 ¹	9.09E-04 ¹	1.03E-03 ¹	9.56E-04 ¹	9.11E-04 ¹	1.02E-03 ¹	9.56E-04 DLL
Selenium:	1.92E-03 ¹	1.59E-03 ¹	1.60E-03 ¹	1.52E-03 ²	1.56E-03 ¹	1.56E-03 ²	1.73E-03 ¹	1.64E-03 DLL
Total Metals (lb/hr):	1.71E-02 ¹	1.28E-02 ¹	1.34E-02 ¹	1.73E-02 ¹	1.25E-02 ¹	1.28E-02 ¹	1.43E-02 ¹	1.43E-02 DLL
Total Non-Mercury Metals (lb/hr):	1.66E-02 ¹	1.24E-02 ¹	1.30E-02 ¹	1.68E-02 ¹	1.21E-02 ¹	1.24E-02 ¹	1.39E-02 ¹	1.39E-02 DLL
Metals Concentration (mg/dscm @ 15% O ₂)								
Arsenic:	3.61E-04 ²	3.58E-04 ¹	3.53E-04 ²	3.27E-04 ²	3.17E-04 ²	3.21E-04 ²	2.85E-04 ²	3.32E-04 DLL
Beryllium:	1.16E-05 ²	1.10E-05 ²	1.14E-05 ²	1.05E-05 ²	1.02E-05 ²	1.03E-05 ²	9.15E-06 ²	1.06E-05 DLL
Cadmium:	7.81E-04	5.53E-05 ¹	4.95E-04	4.97E-05 ²	3.46E-04 ¹	4.88E-05 ²	4.37E-05 ¹	2.60E-04 DLL
Chromium:	1.83E-04	1.92E-04	4.72E-05	1.08E-04	1.51E-04	2.39E-04	1.72E-04	1.56E-04 ADL
Cobalt:	3.86E-04 ²	3.67E-04 ²	3.79E-04 ²	3.50E-04 ²	3.40E-04 ²	3.44E-04 ²	3.05E-04 ²	3.53E-04 DLL
Mercury:	8.99E-05 ²	8.75E-05 ²	8.88E-05 ²	8.18E-05 ²	7.86E-05 ²	7.99E-05 ²	7.22E-05 ²	8.27E-05 BDL
Manganese:	5.43E-04	3.66E-04	4.83E-04	1.51E-03	3.40E-04	2.97E-04	2.77E-04	5.46E-04 ADL
Nickel:	2.06E-04	2.78E-04	4.69E-05 ¹	8.40E-05	4.21E-05 ¹	2.88E-04	4.79E-04	2.04E-04 DLL
Lead:	2.61E-04 ²	2.48E-04 ²	2.56E-04 ²	2.37E-04 ²	2.30E-04 ²	2.33E-04 ²	2.06E-04 ²	2.39E-04 BDL
Antimony:	1.84E-04 ¹	1.78E-04 ¹	1.80E-04 ¹	1.93E-04 ¹	1.78E-04 ¹	1.64E-04 ¹	1.63E-04 ¹	1.77E-04 DLL
Selenium:	3.80E-04 ¹	3.04E-04 ¹	3.17E-04 ¹	2.85E-04 ²	2.91E-04 ¹	2.80E-04 ²	2.76E-04 ¹	3.05E-04 DLL
Total Metals (mg/dscm @ 15% O ₂)	3.39E-02 ¹	2.45E-02 ¹	2.66E-02 ¹	3.24E-02 ¹	2.33E-03 ¹	2.31E-03 ¹	2.29E-03 ¹	1.77E-02 DLL
I Non-Mercury Metals (mg/dscm @ 15% O ₂)	3.30E-02 ¹	2.36E-02 ¹	2.57E-02 ¹	3.16E-02 ¹	2.25E-03 ¹	2.23E-03 ¹	2.22E-03 ¹	1.72E-02 DLL
Isokinetic Variation (%):	97.2	98.4	99.3	101.6	103.8	99.0	99.3	99.8

1 - The mass at least one of the sample fractions was below the analytical detection limit

2 - The mass in all of the sample fractions was below the analytical detection limit

ADL - all analytical values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

DLL - at least one, but not all values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

BDL - all analytical values used to calculate and report an in-stack emissions value are less than the laboratory's reported detection level(s)



PARTICULATE TEST RESULTS SUMMARY

Unit 4B

Test Run Number:	1	2	3	4	5	6	7	Average							
Source Condition:	Max	Max	Max	Max	Max	Max	Max								
Date:	10/17/2022	10/17/2022	10/18/2022	10/18/2022	10/19/2022	10/19/2022	10/20/2022								
Start Time:	8:43	12:34	7:42	11:30	7:05	10:50	7:33								
End Time:	12:12	16:11	11:17	15:08	10:37	14:24	11:03								
Sample Duration (min):	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0							
Average Gas Temp, T _s , °F:	219.8	218.1	218.5	216.1	216.0	219.0	212.8	217.2							
Average Gas Temp, T _s , °C:	104.4	103.4	103.6	102.3	102.2	103.9	100.5	102.9							
Fractional Gas Moisture Content, B _{ws} :	0.091	0.083	0.083	0.078	0.084	0.075	0.097	0.085							
Gas CO ₂ Content (%vol):	4.5	4.5	4.5	4.5	4.5	4.5	5.2	4.6							
Gas O ₂ Content (%vol):	13.1	13.1	13.1	13.1	13.2	13.1	11.9	12.9							
Gas Wet MW, M _s , (lb/lb-mole):	28.22	28.31	28.32	28.37	28.30	28.40	28.21	28.30							
Average Gas Velocity, V _s , (ft/sec):	55.75	57.53	55.39	58.03	59.11	60.45	59.21	57.92							
Average Gas Velocity V _s , (m/sec):	16.99	17.53	16.88	17.69	18.02	18.42	18.05	17.65							
Measured Volumetric Flow Rate:															
Q (actual ft ³ /min):	1,481,849	1,529,084	1,472,202	1,542,429	1,571,128	1,606,707	1,573,913	1,539,616							
Q _{std} (std ft ³ /min):	1,114,445	1,151,371	1,111,367	1,170,628	1,196,568	1,220,363	1,206,485	1,167,318							
Q _{std(dry)} (dry std ft ³ /min):	1,012,600	1,055,706	1,019,488	1,079,180	1,095,582	1,128,354	1,090,056	1,068,709							
Q _m (actual m ³ /min):	41,962	43,299	41,688	43,677	44,490	45,497	44,569	43,597							
Q _{stdm} (std. m ³ /min):	31,558	32,599	31,466	33,144	33,883	34,552	34,159	33,052							
Q _{stdm(dry)} (dry std. m ³ /min):	28,674	29,890	28,865	30,555	31,024	31,947	30,863	30,260							
Sample Volume, V _{m(std)} , (dry std ft ³):	144.230	152.268	148.341	160.772	166.742	163.775	158.565	156.385							
Sample Volume, V _{m(std)(metric)} , (dry std. m ³):	4.084	4.312	4.201	4.553	4.722	4.638	4.490	4.428							
PM Collected, m _n , (mg):															
Filterable	3.43	¹	3.16	¹	2.08	2.16	2.10	1.41	1.55	¹	2.27	DLL			
PM Concentration, C _s , (gr/dscf):															
Filterable	3.66E-04	¹	3.20E-04	¹	2.16E-04	2.07E-04	1.94E-04	1.32E-04	1.51E-04	¹	2.27E-04	DLL			
PM Concentration, Ccorr., (gr/dscf corrected to 15% O ₂):															
Filterable	2.75E-04	¹	2.42E-04	¹	1.63E-04	1.57E-04	1.49E-04	1.01E-04	9.84E-05	¹	1.69E-04	DLL			
Isokinetic Variance (I)	97.2		98.4		99.3		101.6		103.8		99.0		99.3		99.8

1 - The mass at least one of the sample fractions was below the analytical detection limit

2 - The mass in all of the sample fractions was below the analytical detection limit

ADL - all analytical values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

DLL - at least one, but not all values used to calculate and report an in-stack emissions value are greater than the laboratory's reported detection level(s)

BDL - all analytical values used to calculate and report an in-stack emissions value are less than the laboratory's reported detection level(s)

APPENDIX

Qualified Individual Certificate(s)



American Association for Laboratory Accreditation

Accredited Air Emission Testing Body

A2LA has accredited

TRC ENVIRONMENTAL CORPORATION

In recognition of the successful completion of the joint A2LA and Stack Testing Accreditation Council (STAC) evaluation process, this laboratory is accredited to perform testing activities in compliance with ASTM D7036:2004 - Standard Practice for Competence of Air Emission Testing Bodies.

Presented this 26th day of March 2021.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3711.01
Valid to May 31, 2023



This accreditation program is not included under the A2LA ILAC Mutual Recognition Arrangement.

This is to Certify that:

Jason Grizzle

Is a Qualified Individual as defined in Section 8.3 of ASTM D7036-04 for the following test methods:

EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 2H, 3, 3B, 4, 5, 5A, 5B, 5D, 5E, 5F, 5i, 17, 19, 201A, and 202.

The individual has met the minimum experience requirements defined in Section 8.3.4.2 of ASTM D7036-04 and has successfully passed a comprehensive examination for the test methods designated above.

This certification is effective until: 07-22-2027



Edward J MacKinnon
Air Measurements Practice Quality Manager

Date of Issue: 07-26-2022

Certificate Number: 01856



This certificate is the exclusive property of TRC and is non-transferable.

This is to Certify that:

Jason Grizzle

Is a Qualified Individual as defined in Section 8.3 of ASTM D7036-04 for the following test methods:

EPA Methods 3A, 6C, 7E, 10, 10B, 19, 20, 25A.

CEM Performance Specifications PS2, PS3, PS4, PS4A, PS5, PS6, PS7, PS8, and PS15

The individual has met the minimum experience requirements defined in Section 8.3.4.2 of ASTM D7036-04 and has successfully passed a comprehensive examination for the test methods designated above.

This certification is effective until: 11-24-2026



Date of Issue: 11-29-2021

Certificate Number: 01751



This certificate is the exclusive property of TRC and is non-transferable.

Edward J MacKinnon
Air Measurements Practice Quality Manager

This is to Certify that:

Jason Grizzle

Is a Qualified Individual as defined in Section 8.3 of ASTM D7036-04 for the following test methods:

EPA Methods 320 and 321

The individual has met the minimum experience requirements defined in Section 8.3.4.2 of ASTM D7036-04 and has successfully passed an internal comprehensive examination for the test methods designated above.

This certification is effective until:

01-31-2025

Date of Issue: 02-04-2020
Certificate Number: 01538



This certificate is the exclusive property of TRC and is non-transferable.


Edward Mackinnon
Air Measurements Practice Quality Manager

This is to Certify that:

William McKibben

Is a Qualified Individual as defined in Section 8.3 of ASTM D7036-04 for the following test methods:

EPA Methods 1, 2, 3, 4, 12, 19, 29, 30B, 101, 101A, 102, and ASTM D6784-02.

The individual has met the minimum experience requirements defined in Section 8.3.4.2 of ASTM D7036-04 and has successfully passed a comprehensive examination for the test methods designated above.

This certification is effective until: 03-23-2026



Date of Issue: 03-26-2021

Certificate Number: 01694

Edward J MacKinnon
Air Measurements Practice Quality Manager



This certificate is the exclusive property of TRC and is non-transferable.

Process and Pollution Control Equipment Operating Data

Unit 4A

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
Run 1					
10/13/22 08:33	896.3	23606.5	2596.7	NG	380.0
10/13/22 08:34	896.3	23674.7	2604.2	NG	380.1
10/13/22 08:35	896.3	23667.8	2603.5	NG	380.0
10/13/22 08:36	896.3	23653.7	2601.9	NG	379.9
10/13/22 08:37	896.4	23668.2	2603.5	NG	380.2
10/13/22 08:38	896.3	23684.9	2605.3	NG	380.3
10/13/22 08:39	896.2	23685.3	2605.4	NG	380.4
10/13/22 08:40	896.1	23681.0	2604.9	NG	380.1
10/13/22 08:41	896.0	23646.1	2601.1	NG	380.1
10/13/22 08:42	896.2	23682.4	2605.1	NG	380.3
10/13/22 08:43	896.1	23653.9	2601.9	NG	380.3
10/13/22 08:44	896.1	23681.2	2604.9	NG	380.2
10/13/22 08:45	896.2	23665.6	2603.2	NG	380.1
10/13/22 08:46	896.3	23666.1	2603.3	NG	380.3
10/13/22 08:47	896.3	23677.0	2604.5	NG	380.3
10/13/22 08:48	896.3	23707.4	2607.8	NG	380.2
10/13/22 08:49	896.3	23673.5	2604.1	NG	380.2
10/13/22 08:50	896.8	23660.3	2602.6	NG	380.4
10/13/22 08:51	896.2	23645.9	2601.0	NG	380.4
10/13/22 08:52	896.1	23700.3	2607.0	NG	380.2
10/13/22 08:53	896.2	23690.6	2606.0	NG	380.2
10/13/22 08:54	896.2	23691.3	2606.0	NG	380.2
10/13/22 08:55	896.2	23671.4	2603.9	NG	380.0
10/13/22 08:56	896.2	23650.3	2601.5	NG	379.8
10/13/22 08:57	896.2	23669.3	2603.6	NG	380.1
10/13/22 08:58	896.3	23668.0	2603.5	NG	380.3
10/13/22 08:59	896.3	23666.9	2603.4	NG	380.5
10/13/22 09:00	896.2	23669.1	2603.6	NG	380.8
10/13/22 09:01	896.1	23667.7	2603.4	NG	380.7
10/13/22 09:02	896.0	23680.1	2604.8	NG	381.2
10/13/22 09:03	895.9	23687.7	2605.7	NG	380.7
10/13/22 09:04	895.9	23685.4	2605.4	NG	380.6
10/13/22 09:05	896.1	23695.3	2606.5	NG	380.9
10/13/22 09:06	896.2	23648.0	2601.3	NG	380.7
10/13/22 09:07	896.2	23671.2	2603.8	NG	380.8
10/13/22 09:08	896.1	23719.0	2609.1	NG	380.8
10/13/22 09:09	896.8	23691.9	2606.1	NG	381.0
10/13/22 09:10	896.8	23720.6	2609.3	NG	381.0
10/13/22 09:11	896.1	23704.4	2607.5	NG	380.9
10/13/22 09:12	896.1	23684.2	2605.3	NG	381.2
10/13/22 09:13	896.2	23638.8	2600.3	NG	380.9
10/13/22 09:14	896.2	23666.0	2603.3	NG	381.1

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 09:15	896.2	23674.0	2604.1	NG	380.9
10/13/22 09:16	896.2	23674.3	2604.2	NG	381.0
10/13/22 09:17	896.3	23636.1	2600.0	NG	380.9
10/13/22 09:18	896.4	23652.4	2601.8	NG	380.9
10/13/22 09:19	896.3	23635.1	2599.9	NG	380.8
10/13/22 09:20	896.2	23676.7	2604.4	NG	380.8
10/13/22 09:21	896.1	23635.3	2599.9	NG	380.5
10/13/22 09:22	896.0	23641.9	2600.6	NG	380.4
10/13/22 09:23	896.0	23661.0	2602.7	NG	380.4
10/13/22 09:24	896.0	23683.8	2605.2	NG	380.7
10/13/22 09:25	895.9	23659.7	2602.6	NG	380.6
10/13/22 09:26	896.0	23699.5	2606.9	NG	380.8
10/13/22 09:27	896.4	23635.7	2599.9	NG	380.6
10/13/22 09:28	896.7	23610.7	2597.2	NG	380.7
10/13/22 09:29	896.1	23640.6	2600.5	NG	380.2
10/13/22 09:30	896.0	23681.0	2604.9	NG	380.4
10/13/22 09:31	896.1	23651.3	2601.6	NG	380.0
10/13/22 09:32	896.1	23654.1	2601.9	NG	380.3
10/13/22 09:33	896.0	23644.8	2600.9	NG	380.3
Run 1 Average	896.2	23668.3	2603.5	NG	380.5
<hr/>					
Run 2					
10/13/22 09:48	895.8	23673.2	2604.1	NG	381.2
10/13/22 09:49	895.8	23621.5	2598.4	NG	381.2
10/13/22 09:50	895.8	23684.3	2605.3	NG	381.1
10/13/22 09:51	895.9	23669.4	2603.6	NG	380.9
10/13/22 09:52	896.0	23629.5	2599.2	NG	380.4
10/13/22 09:53	896.0	23639.3	2600.3	NG	380.4
10/13/22 09:54	895.9	23650.7	2601.6	NG	380.5
10/13/22 09:55	895.9	23649.2	2601.4	NG	380.7
10/13/22 09:56	895.9	23675.2	2604.3	NG	380.5
10/13/22 09:57	895.9	23697.4	2606.7	NG	380.6
10/13/22 09:58	895.8	23690.2	2605.9	NG	380.5
10/13/22 09:59	895.8	23645.4	2601.0	NG	380.6
10/13/22 10:00	895.8	23644.4	2600.9	NG	380.4
10/13/22 10:01	895.8	23615.0	2597.7	NG	380.3
10/13/22 10:02	895.8	23659.6	2602.6	NG	380.2
10/13/22 10:03	895.8	23671.4	2603.9	NG	380.4
10/13/22 10:04	896.4	23636.8	2600.0	NG	380.2
10/13/22 10:05	896.5	23590.4	2594.9	NG	380.4
10/13/22 10:06	895.9	23646.4	2601.1	NG	380.4
10/13/22 10:07	895.8	23635.7	2599.9	NG	380.4
10/13/22 10:08	895.8	23673.5	2604.1	NG	380.5

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 10:09	895.8	23652.0	2601.7	NG	380.5
10/13/22 10:10	895.8	23583.4	2594.2	NG	380.2
10/13/22 10:11	895.7	23642.3	2600.7	NG	380.6
10/13/22 10:12	895.7	23637.5	2600.1	NG	380.4
10/13/22 10:13	895.8	23656.5	2602.2	NG	380.1
10/13/22 10:14	895.7	23619.4	2598.1	NG	380.3
10/13/22 10:15	895.8	23609.0	2597.0	NG	380.3
10/13/22 10:16	895.8	23611.1	2597.2	NG	380.1
10/13/22 10:17	895.7	23629.5	2599.2	NG	380.0
10/13/22 10:18	895.7	23626.4	2598.9	NG	380.2
10/13/22 10:19	895.8	23638.2	2600.2	NG	380.3
10/13/22 10:20	895.7	23620.4	2598.2	NG	380.3
10/13/22 10:21	895.7	23635.3	2599.9	NG	380.2
10/13/22 10:22	895.9	23637.5	2600.1	NG	380.4
10/13/22 10:23	896.4	23684.3	2605.3	NG	380.5
10/13/22 10:24	896.2	23686.4	2605.5	NG	380.5
10/13/22 10:25	895.8	23667.3	2603.4	NG	380.7
10/13/22 10:26	895.8	23675.6	2604.3	NG	380.6
10/13/22 10:27	895.8	23678.0	2604.6	NG	380.5
10/13/22 10:28	895.8	23684.2	2605.3	NG	380.8
10/13/22 10:29	895.8	23656.3	2602.2	NG	380.7
10/13/22 10:30	895.8	23660.9	2602.7	NG	380.5
10/13/22 10:31	895.7	23646.2	2601.1	NG	380.3
10/13/22 10:32	895.7	23657.6	2602.3	NG	380.5
10/13/22 10:33	895.7	23662.2	2602.8	NG	380.3
10/13/22 10:34	895.7	23728.3	2610.1	NG	380.4
10/13/22 10:35	895.7	23684.0	2605.2	NG	380.4
10/13/22 10:36	895.7	23639.8	2600.4	NG	380.5
10/13/22 10:37	895.7	23690.1	2605.9	NG	380.2
10/13/22 10:38	895.7	23670.7	2603.8	NG	380.3
10/13/22 10:39	895.5	23653.4	2601.9	NG	380.8
10/13/22 10:40	895.4	23632.0	2599.5	NG	380.4
10/13/22 10:41	895.4	23648.9	2601.4	NG	380.7
10/13/22 10:42	895.4	23652.3	2601.7	NG	380.2
10/13/22 10:43	895.4	23625.7	2598.8	NG	380.5
10/13/22 10:44	895.4	23647.8	2601.3	NG	380.5
10/13/22 10:45	895.5	23692.9	2606.2	NG	380.5
10/13/22 10:46	895.4	23658.9	2602.5	NG	380.6
10/13/22 10:47	895.4	23705.0	2607.6	NG	380.5
10/13/22 10:48	895.4	23608.3	2596.9	NG	380.5
Run 2 Average	895.8	23652.4	2601.8	NG	380.5
Run 3					

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 11:00	895.4	23640.8	2600.5	NG	380.6
10/13/22 11:01	895.4	23681.3	2604.9	NG	380.9
10/13/22 11:02	895.3	23671.1	2603.8	NG	380.8
10/13/22 11:03	895.3	23631.9	2599.5	NG	380.6
10/13/22 11:04	895.2	23676.7	2604.4	NG	380.3
10/13/22 11:05	895.2	23697.1	2606.7	NG	380.5
10/13/22 11:06	895.3	23688.8	2605.8	NG	380.6
10/13/22 11:07	895.4	23647.1	2601.2	NG	380.7
10/13/22 11:08	895.4	23712.5	2608.4	NG	380.7
10/13/22 11:09	895.4	23652.0	2601.7	NG	380.8
10/13/22 11:10	895.4	23676.0	2604.4	NG	380.8
10/13/22 11:11	895.3	23671.0	2603.8	NG	380.8
10/13/22 11:12	895.4	23676.9	2604.5	NG	380.9
10/13/22 11:13	895.3	23670.7	2603.8	NG	380.8
10/13/22 11:14	895.2	23620.8	2598.3	NG	380.7
10/13/22 11:15	895.2	23645.1	2601.0	NG	380.8
10/13/22 11:16	895.2	23658.4	2602.4	NG	381.1
10/13/22 11:17	895.2	23635.4	2599.9	NG	381.0
10/13/22 11:18	895.2	23663.9	2603.0	NG	380.9
10/13/22 11:19	895.2	23667.7	2603.4	NG	380.8
10/13/22 11:20	895.3	23693.9	2606.3	NG	380.7
10/13/22 11:21	895.4	23647.9	2601.3	NG	380.6
10/13/22 11:22	895.4	23616.7	2597.8	NG	380.8
10/13/22 11:23	895.4	23695.4	2606.5	NG	380.9
10/13/22 11:24	895.4	23645.5	2601.0	NG	380.8
10/13/22 11:25	895.5	23662.8	2602.9	NG	380.8
10/13/22 11:26	895.4	23691.5	2606.1	NG	381.1
10/13/22 11:27	895.4	23665.3	2603.2	NG	380.8
10/13/22 11:28	895.3	23661.0	2602.7	NG	380.9
10/13/22 11:29	895.3	23687.3	2605.6	NG	380.8
10/13/22 11:30	895.3	23666.5	2603.3	NG	380.9
10/13/22 11:31	895.3	23668.3	2603.5	NG	380.9
10/13/22 11:32	895.3	23666.3	2603.3	NG	380.9
10/13/22 11:33	895.4	23716.6	2608.8	NG	381.3
10/13/22 11:34	895.3	23686.1	2605.5	NG	381.3
10/13/22 11:35	895.4	23671.8	2603.9	NG	380.9
10/13/22 11:36	895.3	23667.9	2603.5	NG	380.8
10/13/22 11:37	895.4	23712.6	2608.4	NG	380.6
10/13/22 11:38	895.5	23672.8	2604.0	NG	380.7
10/13/22 11:39	895.7	23658.6	2602.5	NG	380.8
10/13/22 11:40	895.7	23672.2	2603.9	NG	381.1
10/13/22 11:41	895.7	23692.9	2606.2	NG	380.8
10/13/22 11:42	895.7	23645.7	2601.0	NG	381.1

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 11:43	895.6	23635.0	2599.8	NG	381.0
10/13/22 11:44	895.4	23630.1	2599.3	NG	381.0
10/13/22 11:45	895.4	23668.3	2603.5	NG	381.3
10/13/22 11:46	895.4	23645.8	2601.0	NG	381.0
10/13/22 11:47	895.3	23691.5	2606.1	NG	381.0
10/13/22 11:48	895.3	23655.4	2602.1	NG	380.8
10/13/22 11:49	895.4	23663.0	2602.9	NG	380.5
10/13/22 11:50	895.4	23685.9	2605.4	NG	381.2
10/13/22 11:51	895.5	23682.2	2605.0	NG	381.1
10/13/22 11:52	895.5	23672.8	2604.0	NG	381.2
10/13/22 11:53	895.5	23629.1	2599.2	NG	381.0
10/13/22 11:54	895.6	23629.4	2599.2	NG	381.1
10/13/22 11:55	895.5	23679.4	2604.7	NG	381.1
10/13/22 11:56	895.6	23651.0	2601.6	NG	380.9
10/13/22 11:57	895.5	23668.4	2603.5	NG	380.9
10/13/22 11:58	895.7	23633.2	2599.7	NG	381.0
10/13/22 11:59	895.4	23659.7	2602.6	NG	380.8
10/13/22 12:00	895.4	23671.2	2603.8	NG	380.9
Run 3 Average	895.4	23665.6	2603.2	NG	380.9
<hr/>					
Run 4					
10/13/22 12:21	895.2	23666.6	2603.3	NG	380.5
10/13/22 12:22	895.3	23664.2	2603.1	NG	380.5
10/13/22 12:23	895.3	23651.7	2601.7	NG	380.2
10/13/22 12:24	895.4	23607.3	2596.8	NG	380.1
10/13/22 12:25	895.4	23639.2	2600.3	NG	380.5
10/13/22 12:26	895.4	23630.2	2599.3	NG	380.1
10/13/22 12:27	895.4	23593.3	2595.3	NG	379.9
10/13/22 12:28	895.4	23641.3	2600.5	NG	380.1
10/13/22 12:29	895.4	23582.6	2594.1	NG	379.9
10/13/22 12:30	895.3	23607.9	2596.9	NG	379.8
10/13/22 12:31	895.4	23628.2	2599.1	NG	379.5
10/13/22 12:32	895.4	23598.4	2595.8	NG	379.7
10/13/22 12:33	895.3	23637.5	2600.1	NG	379.9
10/13/22 12:34	895.2	23600.1	2596.0	NG	380.0
10/13/22 12:35	895.2	23613.9	2597.5	NG	380.0
10/13/22 12:36	895.2	23648.2	2601.3	NG	380.3
10/13/22 12:37	895.1	23606.7	2596.7	NG	380.1
10/13/22 12:38	895.1	23588.3	2594.7	NG	380.3
10/13/22 12:39	895.2	23605.5	2596.6	NG	380.3
10/13/22 12:40	895.2	23636.9	2600.1	NG	380.3
10/13/22 12:41	895.2	23664.5	2603.1	NG	380.2
10/13/22 12:42	895.3	23617.8	2598.0	NG	380.0

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 12:43	895.2	23599.4	2595.9	NG	379.9
10/13/22 12:44	895.8	23614.8	2597.6	NG	380.1
10/13/22 12:45	895.3	23628.5	2599.1	NG	380.1
10/13/22 12:46	895.3	23606.0	2596.7	NG	379.7
10/13/22 12:47	895.4	23569.5	2592.6	NG	379.9
10/13/22 12:48	895.3	23652.4	2601.8	NG	380.2
10/13/22 12:49	895.3	23644.1	2600.9	NG	380.2
10/13/22 12:50	895.2	23615.7	2597.7	NG	380.2
10/13/22 12:51	895.2	23620.9	2598.3	NG	380.0
10/13/22 12:52	895.2	23626.7	2598.9	NG	380.2
10/13/22 12:53	895.2	23626.4	2598.9	NG	380.2
10/13/22 12:54	895.2	23607.7	2596.8	NG	380.4
10/13/22 12:55	895.3	23651.7	2601.7	NG	380.6
10/13/22 12:56	895.4	23640.2	2600.4	NG	380.2
10/13/22 12:57	895.4	23667.6	2603.4	NG	380.1
10/13/22 12:58	895.3	23639.4	2600.3	NG	380.4
10/13/22 12:59	895.3	23658.3	2602.4	NG	380.2
10/13/22 13:00	895.3	23614.6	2597.6	NG	380.2
10/13/22 13:01	896.0	23591.8	2595.1	NG	379.9
10/13/22 13:02	895.3	23650.3	2601.5	NG	380.0
10/13/22 13:03	895.4	23615.2	2597.7	NG	380.1
10/13/22 13:04	895.3	23614.7	2597.6	NG	379.9
10/13/22 13:05	895.3	23587.2	2594.6	NG	379.9
10/13/22 13:06	895.3	23575.5	2593.3	NG	379.5
10/13/22 13:07	895.3	23603.5	2596.4	NG	379.5
10/13/22 13:08	895.2	23561.1	2591.7	NG	379.4
10/13/22 13:09	895.2	23613.9	2597.5	NG	379.6
10/13/22 13:10	895.2	23590.0	2594.9	NG	379.4
10/13/22 13:11	895.2	23586.4	2594.5	NG	379.4
10/13/22 13:12	895.2	23538.4	2589.2	NG	378.9
10/13/22 13:13	895.1	23593.7	2595.3	NG	378.9
10/13/22 13:14	895.1	23531.9	2588.5	NG	378.7
10/13/22 13:15	895.1	23553.3	2590.9	NG	379.2
10/13/22 13:16	895.0	23516.1	2586.8	NG	378.6
10/13/22 13:17	895.6	23604.9	2596.5	NG	379.0
10/13/22 13:18	895.6	23547.2	2590.2	NG	379.2
10/13/22 13:19	895.1	23599.0	2595.9	NG	379.3
10/13/22 13:20	895.1	23613.9	2597.5	NG	379.5
10/13/22 13:21	895.1	23574.8	2593.2	NG	379.5
Run 4 Average	895.3	23611.1	2597.2	NG	379.9
Run 5					
10/13/22 13:33	895.5	23533.4	2588.7	NG	378.7

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 13:34	895.8	23532.3	2588.5	NG	379.1
10/13/22 13:35	895.3	23544.9	2589.9	NG	379.0
10/13/22 13:36	895.2	23545.8	2590.0	NG	379.4
10/13/22 13:37	895.1	23566.5	2592.3	NG	379.1
10/13/22 13:38	895.2	23552.0	2590.7	NG	378.9
10/13/22 13:39	895.2	23530.0	2588.3	NG	378.2
10/13/22 13:40	895.1	23520.0	2587.2	NG	378.4
10/13/22 13:41	895.0	23558.5	2591.4	NG	378.5
10/13/22 13:42	895.1	23530.5	2588.4	NG	378.3
10/13/22 13:43	895.0	23555.1	2591.1	NG	378.5
10/13/22 13:44	894.9	23531.3	2588.4	NG	378.1
10/13/22 13:45	894.9	23495.3	2584.5	NG	378.3
10/13/22 13:46	894.9	23494.4	2584.4	NG	378.1
10/13/22 13:47	894.9	23553.2	2590.9	NG	378.1
10/13/22 13:48	895.2	23571.0	2592.8	NG	378.6
10/13/22 13:49	895.7	23599.7	2596.0	NG	379.1
10/13/22 13:50	895.1	23557.5	2591.3	NG	378.4
10/13/22 13:51	895.0	23471.5	2581.9	NG	378.0
10/13/22 13:52	895.1	23546.0	2590.1	NG	378.2
10/13/22 13:53	895.1	23590.7	2595.0	NG	378.5
10/13/22 13:54	895.1	23590.0	2594.9	NG	378.8
10/13/22 13:55	894.9	23580.0	2593.8	NG	379.0
10/13/22 13:56	895.0	23572.9	2593.0	NG	378.9
10/13/22 13:57	895.1	23534.3	2588.8	NG	378.3
10/13/22 13:58	895.2	23552.5	2590.8	NG	378.3
10/13/22 13:59	895.0	23486.7	2583.5	NG	378.3
10/13/22 14:00	895.1	23509.3	2586.0	NG	378.6
10/13/22 14:01	895.0	23544.7	2589.9	NG	379.1
10/13/22 14:02	895.0	23567.9	2592.5	NG	379.1
10/13/22 14:03	895.5	23568.3	2592.5	NG	379.1
10/13/22 14:04	895.7	23528.6	2588.1	NG	378.9
10/13/22 14:05	895.5	23556.5	2591.2	NG	378.9
10/13/22 14:06	894.8	23537.5	2589.1	NG	378.5
10/13/22 14:07	894.9	23543.5	2589.8	NG	378.7
10/13/22 14:08	894.9	23527.4	2588.0	NG	378.6
10/13/22 14:09	895.1	23533.4	2588.7	NG	379.2
10/13/22 14:10	895.2	23551.8	2590.7	NG	379.0
10/13/22 14:11	895.2	23583.8	2594.2	NG	378.6
10/13/22 14:12	895.2	23506.7	2585.7	NG	378.6
10/13/22 14:13	895.1	23525.0	2587.7	NG	378.4
10/13/22 14:14	894.9	23515.1	2586.7	NG	378.9
10/13/22 14:15	894.9	23581.7	2594.0	NG	378.9
10/13/22 14:16	895.1	23473.2	2582.1	NG	378.3

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 14:17	895.5	23521.7	2587.4	NG	378.4
10/13/22 14:18	895.4	23535.7	2588.9	NG	378.2
10/13/22 14:19	895.4	23489.9	2583.9	NG	378.2
10/13/22 14:20	895.4	23527.7	2588.0	NG	378.1
10/13/22 14:21	895.0	23503.8	2585.4	NG	378.2
10/13/22 14:22	894.8	23486.1	2583.5	NG	377.8
10/13/22 14:23	894.9	23518.1	2587.0	NG	378.2
10/13/22 14:24	894.9	23512.8	2586.4	NG	378.2
10/13/22 14:25	894.9	23504.5	2585.5	NG	377.6
10/13/22 14:26	894.9	23492.7	2584.2	NG	378.1
10/13/22 14:27	894.8	23512.8	2586.4	NG	377.9
10/13/22 14:28	894.8	23500.0	2585.0	NG	377.9
10/13/22 14:29	894.8	23478.9	2582.7	NG	377.7
10/13/22 14:30	895.2	23484.3	2583.3	NG	377.9
10/13/22 14:31	895.3	23576.7	2593.4	NG	378.1
10/13/22 14:32	895.3	23522.7	2587.5	NG	377.8
10/13/22 14:33	895.3	23479.2	2582.7	NG	378.0
Run 5 Average	895.1	23532.7	2588.6	NG	378.5
<hr/>					
Run 6					
10/13/22 14:46	895.3	23534.9	2588.8	NG	378.5
10/13/22 14:47	895.3	23548.2	2590.3	NG	378.7
10/13/22 14:48	895.3	23559.1	2591.5	NG	378.7
10/13/22 14:49	895.4	23531.0	2588.4	NG	378.3
10/13/22 14:50	895.3	23557.7	2591.3	NG	378.3
10/13/22 14:51	895.0	23505.4	2585.6	NG	378.4
10/13/22 14:52	894.7	23491.6	2584.1	NG	378.4
10/13/22 14:53	895.0	23558.0	2591.4	NG	378.5
10/13/22 14:54	895.4	23513.8	2586.5	NG	378.2
10/13/22 14:55	895.3	23563.0	2591.9	NG	378.5
10/13/22 14:56	895.3	23515.9	2586.7	NG	378.5
10/13/22 14:57	895.4	23512.9	2586.4	NG	377.8
10/13/22 14:58	895.4	23551.3	2590.6	NG	378.2
10/13/22 14:59	895.2	23534.9	2588.8	NG	377.8
10/13/22 15:00	895.2	23486.1	2583.5	NG	377.6
10/13/22 15:01	895.2	23516.0	2586.8	NG	378.1
10/13/22 15:02	895.2	23526.5	2587.9	NG	378.2
10/13/22 15:03	895.2	23545.3	2590.0	NG	377.9
10/13/22 15:04	895.3	23506.9	2585.8	NG	377.9
10/13/22 15:05	895.3	23532.1	2588.5	NG	378.0
10/13/22 15:06	895.4	23384.4	2572.3	NG	376.8
10/13/22 15:07	895.4	23501.7	2585.2	NG	377.9
10/13/22 15:08	895.3	23541.5	2589.6	NG	378.8

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 15:09	895.2	23474.7	2582.2	NG	378.2
10/13/22 15:10	895.1	23493.8	2584.3	NG	378.2
10/13/22 15:11	895.1	23506.2	2585.7	NG	377.9
10/13/22 15:12	895.1	23528.2	2588.1	NG	378.4
10/13/22 15:13	895.2	23505.1	2585.6	NG	377.8
10/13/22 15:14	895.2	23555.1	2591.1	NG	378.5
10/13/22 15:15	895.2	23526.5	2587.9	NG	378.5
10/13/22 15:16	895.2	23501.9	2585.2	NG	378.3
10/13/22 15:17	895.3	23523.3	2587.6	NG	377.9
10/13/22 15:18	895.3	23496.9	2584.7	NG	378.2
10/13/22 15:19	895.2	23531.3	2588.4	NG	378.2
10/13/22 15:20	895.3	23487.8	2583.7	NG	377.9
10/13/22 15:21	895.3	23462.7	2580.9	NG	377.2
10/13/22 15:22	895.2	23516.6	2586.8	NG	378.2
10/13/22 15:23	895.2	23495.9	2584.5	NG	378.1
10/13/22 15:24	895.1	23491.7	2584.1	NG	377.7
10/13/22 15:25	895.1	23539.1	2589.3	NG	378.2
10/13/22 15:26	895.0	23513.4	2586.5	NG	377.9
10/13/22 15:27	895.2	23509.2	2586.0	NG	377.9
10/13/22 15:28	895.1	23491.9	2584.1	NG	378.1
10/13/22 15:29	895.5	23573.4	2593.1	NG	378.1
10/13/22 15:30	895.3	23549.5	2590.4	NG	378.2
10/13/22 15:31	895.1	23528.1	2588.1	NG	378.1
10/13/22 15:32	895.2	23543.2	2589.7	NG	378.3
10/13/22 15:33	895.2	23537.7	2589.2	NG	378.2
10/13/22 15:34	895.3	23508.3	2585.9	NG	378.4
10/13/22 15:35	895.2	23589.6	2594.9	NG	378.6
10/13/22 15:36	895.1	23607.8	2596.9	NG	378.5
10/13/22 15:37	895.2	23574.5	2593.2	NG	378.7
10/13/22 15:38	895.2	23539.9	2589.4	NG	378.3
10/13/22 15:39	895.2	23506.0	2585.7	NG	378.2
10/13/22 15:40	895.2	23539.8	2589.4	NG	378.4
10/13/22 15:41	895.2	23594.8	2595.4	NG	378.4
10/13/22 15:42	895.2	23599.7	2596.0	NG	378.7
10/13/22 15:43	895.8	23614.3	2597.6	NG	379.0
10/13/22 15:44	895.2	23584.3	2594.3	NG	379.0
10/13/22 15:45	895.2	23590.7	2595.0	NG	379.1
10/13/22 15:46	895.2	23578.9	2593.7	NG	379.1
Run 6 Average	895.2	23530.0	2588.3	NG	378.2
Run 7					
10/13/22 15:58	895.3	23569.3	2592.6	NG	379.0
10/13/22 15:59	895.3	23575.9	2593.3	NG	379.0

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 16:00	895.3	23598.2	2595.8	NG	379.4
10/13/22 16:01	895.3	23544.6	2589.9	NG	379.1
10/13/22 16:02	895.3	23590.0	2594.9	NG	378.9
10/13/22 16:03	895.3	23607.1	2596.8	NG	379.2
10/13/22 16:04	895.3	23612.6	2597.4	NG	379.3
10/13/22 16:05	895.2	23609.7	2597.1	NG	379.3
10/13/22 16:06	895.2	23610.4	2597.1	NG	379.3
10/13/22 16:07	895.2	23564.4	2592.1	NG	379.2
10/13/22 16:08	895.2	23584.8	2594.3	NG	379.0
10/13/22 16:09	895.5	23531.9	2588.5	NG	379.1
10/13/22 16:10	895.8	23601.4	2596.2	NG	379.0
10/13/22 16:11	895.4	23556.3	2591.2	NG	378.9
10/13/22 16:12	895.2	23592.8	2595.2	NG	379.1
10/13/22 16:13	895.2	23603.8	2596.4	NG	378.8
10/13/22 16:14	895.1	23563.6	2592.0	NG	379.1
10/13/22 16:15	895.1	23571.3	2592.8	NG	379.2
10/13/22 16:16	895.2	23588.5	2594.7	NG	379.3
10/13/22 16:17	895.2	23586.5	2594.5	NG	379.0
10/13/22 16:18	895.2	23635.4	2599.9	NG	379.2
10/13/22 16:19	895.2	23572.1	2592.9	NG	379.0
10/13/22 16:20	895.2	23560.0	2591.6	NG	378.8
10/13/22 16:21	895.2	23541.4	2589.6	NG	379.3
10/13/22 16:22	895.4	23571.7	2592.9	NG	379.1
10/13/22 16:23	895.9	23534.7	2588.8	NG	379.1
10/13/22 16:24	895.6	23613.5	2597.5	NG	379.2
10/13/22 16:25	895.2	23589.0	2594.8	NG	379.1
10/13/22 16:26	895.3	23563.9	2592.0	NG	379.0
10/13/22 16:27	895.3	23593.5	2595.3	NG	379.1
10/13/22 16:28	895.3	23585.2	2594.4	NG	379.3
10/13/22 16:29	895.2	23577.1	2593.5	NG	379.2
10/13/22 16:30	895.2	23590.7	2595.0	NG	379.4
10/13/22 16:31	895.2	23590.8	2595.0	NG	379.1
10/13/22 16:32	895.2	23639.1	2600.3	NG	379.3
10/13/22 16:33	895.1	23558.8	2591.5	NG	379.4
10/13/22 16:34	895.1	23557.0	2591.3	NG	379.5
10/13/22 16:35	895.1	23585.8	2594.4	NG	379.4
10/13/22 16:36	895.7	23577.9	2593.6	NG	379.3
10/13/22 16:37	895.8	23572.5	2593.0	NG	379.3
10/13/22 16:38	895.2	23599.3	2595.9	NG	379.3
10/13/22 16:39	895.2	23618.9	2598.1	NG	379.0
10/13/22 16:40	895.2	23609.0	2597.0	NG	378.9
10/13/22 16:41	895.2	23594.8	2595.4	NG	378.9
10/13/22 16:42	895.2	23603.9	2596.4	NG	378.8

McDonough 4A ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 16:43	895.2	23639.1	2600.3	NG	378.9
10/13/22 16:44	895.2	23627.7	2599.0	NG	379.0
10/13/22 16:45	895.2	23657.2	2602.3	NG	379.1
10/13/22 16:46	895.2	23621.5	2598.4	NG	378.7
10/13/22 16:47	895.2	23642.8	2600.7	NG	379.0
10/13/22 16:48	895.2	23640.3	2600.4	NG	379.1
10/13/22 16:49	895.8	23607.3	2596.8	NG	379.1
10/13/22 16:50	896.0	23631.1	2599.4	NG	378.8
10/13/22 16:51	895.7	23603.1	2596.3	NG	379.0
10/13/22 16:52	895.4	23628.4	2599.1	NG	379.0
10/13/22 16:53	895.4	23702.0	2607.2	NG	379.2
10/13/22 16:54	895.4	23635.1	2599.9	NG	379.2
10/13/22 16:55	895.3	23699.5	2606.9	NG	379.3
10/13/22 16:56	895.3	23626.0	2598.9	NG	379.0
10/13/22 16:57	895.4	23618.1	2598.0	NG	379.1
10/13/22 16:58	895.4	23659.6	2602.6	NG	379.4
Run 7 Avergae	895.3	23599.0	2595.9	NG	379.1

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
Run 1					
10/12/22 07:34	897.4	23691.6	2606.1	NG	381.3
10/12/22 07:35	897.8	23691.2	2606.0	NG	381.5
10/12/22 07:36	898.0	23738.4	2611.2	NG	381.8
10/12/22 07:37	897.7	23719.7	2609.2	NG	381.6
10/12/22 07:38	897.4	23748.4	2612.3	NG	381.4
10/12/22 07:39	897.5	23758.2	2613.4	NG	381.5
10/12/22 07:40	897.5	23730.1	2610.3	NG	381.3
10/12/22 07:41	897.5	23737.4	2611.1	NG	381.0
10/12/22 07:42	897.5	23748.6	2612.3	NG	381.5
10/12/22 07:43	897.5	23741.7	2611.6	NG	381.4
10/12/22 07:44	897.5	23722.5	2609.5	NG	381.2
10/12/22 07:45	897.5	23744.7	2611.9	NG	381.4
10/12/22 07:46	897.4	23688.1	2605.7	NG	381.7
10/12/22 07:47	897.4	23743.3	2611.8	NG	381.6
10/12/22 07:48	897.5	23750.5	2612.6	NG	381.3
10/12/22 07:49	898.0	23732.2	2610.5	NG	381.4
10/12/22 07:50	898.0	23753.7	2612.9	NG	381.5
10/12/22 07:51	897.4	23768.4	2614.5	NG	381.4
10/12/22 07:52	897.4	23759.5	2613.5	NG	381.3
10/12/22 07:53	897.4	23701.0	2607.1	NG	381.3
10/12/22 07:54	897.5	23693.8	2606.3	NG	381.5
10/12/22 07:55	897.5	23720.0	2609.2	NG	381.5
10/12/22 07:56	897.4	23731.1	2610.4	NG	381.5
10/12/22 07:57	897.3	23707.6	2607.8	NG	381.6
10/12/22 07:58	897.2	23762.4	2613.9	NG	381.5
10/12/22 07:59	897.2	23752.3	2612.8	NG	381.2
10/12/22 08:00	897.2	23710.0	2608.1	NG	381.3
10/12/22 08:01	897.4	23738.8	2611.3	NG	381.4
10/12/22 08:02	898.0	23738.8	2611.3	NG	381.4
10/12/22 08:03	897.9	23733.9	2610.7	NG	381.5
10/12/22 08:04	897.4	23749.8	2612.5	NG	381.3
10/12/22 08:05	897.4	23722.2	2609.4	NG	381.4
10/12/22 08:06	897.6	23708.0	2607.9	NG	381.4
10/12/22 08:07	897.5	23719.0	2609.1	NG	381.6
10/12/22 08:08	897.5	23736.2	2611.0	NG	381.8
10/12/22 08:09	897.3	23729.4	2610.2	NG	381.9
10/12/22 08:10	897.3	23698.2	2606.8	NG	381.5
10/12/22 08:11	897.3	23731.1	2610.4	NG	381.5
10/12/22 08:12	897.3	23727.7	2610.0	NG	381.4
10/12/22 08:13	897.4	23731.0	2610.4	NG	381.5
10/12/22 08:14	897.6	23740.4	2611.4	NG	381.5
10/12/22 08:15	898.1	23724.8	2609.7	NG	381.6

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 08:16	898.1	23764.5	2614.1	NG	381.3
10/12/22 08:17	897.6	23732.8	2610.6	NG	380.9
10/12/22 08:18	897.6	23740.1	2611.4	NG	381.4
10/12/22 08:19	897.6	23662.5	2602.9	NG	381.0
10/12/22 08:20	897.6	23714.7	2608.6	NG	381.1
10/12/22 08:21	897.6	23732.8	2610.6	NG	381.6
10/12/22 08:22	897.5	23730.1	2610.3	NG	381.4
10/12/22 08:23	897.4	23736.6	2611.0	NG	381.4
10/12/22 08:24	897.4	23742.2	2611.6	NG	381.5
10/12/22 08:25	897.4	23689.1	2605.8	NG	381.7
10/12/22 08:26	897.5	23760.9	2613.7	NG	381.7
10/12/22 08:27	897.5	23684.2	2605.3	NG	381.4
10/12/22 08:28	898.0	23747.2	2612.2	NG	381.3
10/12/22 08:29	898.1	23744.6	2611.9	NG	381.5
10/12/22 08:30	897.6	23712.0	2608.3	NG	381.0
10/12/22 08:31	897.5	23718.9	2609.1	NG	380.9
10/12/22 08:32	897.5	23698.1	2606.8	NG	380.9
10/12/22 08:33	897.5	23731.0	2610.4	NG	381.0
10/12/22 08:34	897.5	23715.8	2608.7	NG	381.0
10/12/22 08:35	897.5	23743.2	2611.8	NG	381.0
10/12/22 08:36	897.5	23706.4	2607.7	NG	381.1
10/12/22 08:37	897.5	23693.9	2606.3	NG	380.9
10/12/22 08:38	897.4	23721.7	2609.4	NG	380.9
10/12/22 08:39	897.3	23746.4	2612.1	NG	380.8
10/12/22 08:40	897.6	23725.9	2609.8	NG	380.8
10/12/22 08:41	898.1	23691.5	2606.1	NG	380.9
10/12/22 08:42	897.8	23718.2	2609.0	NG	381.0
10/12/22 08:43	897.5	23744.3	2611.9	NG	381.1
10/12/22 08:44	897.5	23702.2	2607.2	NG	381.3
10/12/22 08:45	897.5	23681.4	2605.0	NG	381.1
10/12/22 08:46	897.5	23684.5	2605.3	NG	381.0
10/12/22 08:47	897.4	23706.4	2607.7	NG	380.9
10/12/22 08:48	897.3	23709.9	2608.1	NG	381.0
10/12/22 08:49	897.3	23748.4	2612.3	NG	380.9
10/12/22 08:50	897.2	23729.4	2610.2	NG	380.6
10/12/22 08:51	897.3	23706.1	2607.7	NG	381.2
10/12/22 08:52	897.4	23745.3	2612.0	NG	381.2
10/12/22 08:53	898.0	23710.6	2608.2	NG	380.7
10/12/22 08:54	898.1	23688.8	2605.8	NG	381.1
10/12/22 08:55	897.8	23711.1	2608.2	NG	380.9
10/12/22 08:56	897.2	23690.5	2606.0	NG	380.8
10/12/22 08:57	897.2	23724.9	2609.7	NG	380.8
10/12/22 08:58	897.3	23714.1	2608.5	NG	380.8

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 08:59	897.3	23674.2	2604.2	NG	380.8
10/12/22 09:00	897.4	23690.5	2606.0	NG	380.7
10/12/22 09:01	897.3	23756.9	2613.3	NG	380.5
10/12/22 09:02	897.4	23702.3	2607.2	NG	380.8
10/12/22 09:03	897.4	23730.7	2610.4	NG	381.0
10/12/22 09:04	897.4	23677.9	2604.6	NG	381.0
10/12/22 09:05	897.3	23701.7	2607.2	NG	380.4
10/12/22 09:06	898.0	23705.1	2607.6	NG	380.4
10/12/22 09:07	898.0	23667.3	2603.4	NG	380.0
10/12/22 09:08	897.3	23754.8	2613.0	NG	380.6
10/12/22 09:09	897.3	23712.4	2608.4	NG	380.3
10/12/22 09:10	897.2	23707.5	2607.8	NG	380.7
10/12/22 09:11	897.2	23716.6	2608.8	NG	380.8
10/12/22 09:12	897.2	23667.6	2603.4	NG	380.4
10/12/22 09:13	897.4	23710.2	2608.1	NG	380.5
10/12/22 09:14	897.4	23671.1	2603.8	NG	380.2
10/12/22 09:15	897.4	23702.0	2607.2	NG	380.5
10/12/22 09:16	897.4	23724.5	2609.7	NG	381.0
10/12/22 09:17	897.3	23723.9	2609.6	NG	380.8
10/12/22 09:18	897.9	23679.4	2604.7	NG	381.1
10/12/22 09:19	898.1	23709.5	2608.0	NG	380.7
10/12/22 09:20	897.8	23688.5	2605.7	NG	380.6
10/12/22 09:21	897.1	23746.0	2612.1	NG	380.8
10/12/22 09:22	897.2	23720.1	2609.2	NG	380.3
10/12/22 09:23	897.2	23713.5	2608.5	NG	380.3
10/12/22 09:24	897.2	23718.3	2609.0	NG	380.2
10/12/22 09:25	897.4	23689.5	2605.8	NG	380.3
10/12/22 09:26	897.3	23685.0	2605.3	NG	380.4
10/12/22 09:27	897.4	23678.6	2604.7	NG	380.4
10/12/22 09:28	897.3	23708.9	2608.0	NG	380.7
10/12/22 09:29	897.1	23697.1	2606.7	NG	380.5
10/12/22 09:30	897.7	23682.5	2605.1	NG	380.5
10/12/22 09:31	897.8	23668.0	2603.5	NG	380.3
10/12/22 09:32	897.7	23683.5	2605.2	NG	380.3
10/12/22 09:33	897.1	23692.6	2606.2	NG	380.3
10/12/22 09:34	897.2	23707.5	2607.8	NG	379.8
10/12/22 09:35	897.2	23654.5	2602.0	NG	380.3
10/12/22 09:36	897.3	23710.3	2608.1	NG	380.2
10/12/22 09:37	897.2	23673.2	2604.1	NG	380.3
10/12/22 09:38	897.1	23660.6	2602.7	NG	380.1
10/12/22 09:39	897.0	23668.8	2603.6	NG	380.0
10/12/22 09:40	897.0	23676.4	2604.4	NG	379.9
10/12/22 09:41	897.1	23666.2	2603.3	NG	379.6

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 09:42	897.6	23653.5	2601.9	NG	379.7
10/12/22 09:43	897.9	23672.6	2604.0	NG	379.7
10/12/22 09:44	897.9	23673.5	2604.1	NG	380.1
10/12/22 09:45	897.1	23661.3	2602.7	NG	380.1
10/12/22 09:46	897.2	23686.0	2605.5	NG	380.0
10/12/22 09:47	897.2	23691.0	2606.0	NG	380.3
10/12/22 09:48	897.3	23678.7	2604.7	NG	380.2
10/12/22 09:49	897.2	23672.9	2604.0	NG	380.2
10/12/22 09:50	897.2	23652.7	2601.8	NG	380.1
10/12/22 09:51	897.2	23666.3	2603.3	NG	380.1
10/12/22 09:52	897.1	23676.4	2604.4	NG	380.3
10/12/22 09:53	897.1	23646.1	2601.1	NG	380.3
10/12/22 09:54	897.5	23691.0	2606.0	NG	380.2
10/12/22 09:55	897.8	23672.2	2603.9	NG	379.6
10/12/22 09:56	897.9	23687.8	2605.7	NG	379.6
10/12/22 09:57	897.5	23693.5	2606.3	NG	380.0
10/12/22 09:58	897.3	23679.8	2604.8	NG	380.3
10/12/22 09:59	897.3	23615.8	2597.7	NG	379.7
10/12/22 10:00	897.1	23689.4	2605.8	NG	380.2
10/12/22 10:01	897.1	23654.1	2602.0	NG	380.1
10/12/22 10:02	897.2	23628.0	2599.1	NG	379.4
10/12/22 10:03	897.1	23659.3	2602.5	NG	380.0
10/12/22 10:04	897.0	23737.1	2611.1	NG	381.0
10/12/22 10:05	897.0	23611.8	2597.3	NG	379.9
10/12/22 10:06	897.4	23666.2	2603.3	NG	379.5
10/12/22 10:07	897.8	23682.2	2605.0	NG	380.5
10/12/22 10:08	898.0	23687.7	2605.6	NG	380.3
10/12/22 10:09	897.6	23672.8	2604.0	NG	380.2
10/12/22 10:10	897.3	23669.0	2603.6	NG	380.4
10/12/22 10:11	897.2	23647.0	2601.2	NG	379.9
10/12/22 10:12	897.1	23607.0	2596.8	NG	378.9
10/12/22 10:13	897.1	23711.1	2608.2	NG	379.6
10/12/22 10:14	897.2	23659.2	2602.5	NG	379.4
10/12/22 10:15	897.1	23600.9	2596.1	NG	379.5
10/12/22 10:16	897.0	23618.9	2598.1	NG	379.4
10/12/22 10:17	897.0	23660.0	2602.6	NG	379.6
10/12/22 10:18	897.6	23657.3	2602.3	NG	380.1
10/12/22 10:19	897.8	23639.9	2600.4	NG	379.6
10/12/22 10:20	897.9	23650.5	2601.6	NG	379.4
10/12/22 10:21	897.5	23630.5	2599.4	NG	379.9
10/12/22 10:22	897.2	23646.1	2601.1	NG	379.8
10/12/22 10:23	897.1	23662.1	2602.8	NG	379.7
10/12/22 10:24	897.2	23615.2	2597.7	NG	379.7

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 10:25	897.1	23663.5	2603.0	NG	379.8
10/12/22 10:26	897.1	23660.7	2602.7	NG	379.6
10/12/22 10:27	897.0	23661.8	2602.8	NG	379.8
10/12/22 10:28	897.0	23681.1	2604.9	NG	380.0
10/12/22 10:29	897.1	23586.6	2594.5	NG	379.7
10/12/22 10:30	897.1	23597.2	2595.7	NG	379.6
10/12/22 10:31	897.3	23660.4	2602.6	NG	380.1
10/12/22 10:32	897.8	23610.9	2597.2	NG	379.8
10/12/22 10:33	897.9	23616.6	2597.8	NG	379.4
10/12/22 10:34	897.5	23645.8	2601.0	NG	379.4
10/12/22 10:35	897.1	23643.7	2600.8	NG	379.7
10/12/22 10:36	897.1	23599.3	2595.9	NG	379.8
10/12/22 10:37	897.0	23643.7	2600.8	NG	379.4
10/12/22 10:38	897.0	23672.8	2604.0	NG	379.8
10/12/22 10:39	897.1	23660.6	2602.7	NG	379.7
10/12/22 10:40	897.2	23611.7	2597.3	NG	379.7
10/12/22 10:41	897.1	23635.9	2599.9	NG	379.8
10/12/22 10:42	897.0	23656.3	2602.2	NG	379.8
10/12/22 10:43	897.1	23675.0	2604.2	NG	379.6
10/12/22 10:44	897.8	23626.9	2599.0	NG	379.5
10/12/22 10:45	897.8	23648.9	2601.4	NG	379.3
10/12/22 10:46	897.7	23653.2	2601.9	NG	379.4
10/12/22 10:47	897.0	23624.1	2598.6	NG	379.2
10/12/22 10:48	897.0	23627.4	2599.0	NG	379.1
10/12/22 10:49	897.0	23663.5	2603.0	NG	379.0
10/12/22 10:50	897.0	23653.5	2601.9	NG	379.2
10/12/22 10:51	897.1	23597.6	2595.7	NG	379.3
10/12/22 10:52	897.2	23667.2	2603.4	NG	379.7
10/12/22 10:53	897.2	23614.7	2597.6	NG	379.8
10/12/22 10:54	897.3	23625.7	2598.8	NG	379.5
10/12/22 10:55	897.2	23613.0	2597.4	NG	379.6
10/12/22 10:56	897.3	23654.8	2602.0	NG	379.5
10/12/22 10:57	897.8	23586.0	2594.5	NG	379.3
10/12/22 10:58	897.8	23615.7	2597.7	NG	379.3
10/12/22 10:59	897.8	23610.2	2597.1	NG	379.6
10/12/22 11:00	897.2	23634.7	2599.8	NG	379.2
10/12/22 11:01	897.1	23629.9	2599.3	NG	379.0
10/12/22 11:02	897.1	23619.0	2598.1	NG	379.1
10/12/22 11:03	897.1	23580.9	2593.9	NG	379.3
10/12/22 11:04	897.1	23662.8	2602.9	NG	379.5
10/12/22 11:05	897.1	23639.3	2600.3	NG	379.5
10/12/22 11:06	897.0	23613.7	2597.5	NG	379.6
10/12/22 11:07	897.1	23611.1	2597.2	NG	379.5

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 11:08	897.0	23605.9	2596.6	NG	379.8
10/12/22 11:09	897.2	23696.1	2606.6	NG	380.1
10/12/22 11:10	897.6	23593.1	2595.2	NG	379.4
Run 1 Average	897.4	23687.3	2605.6	NG	380.5
Run 2					
10/12/22 11:58	897.1	23585.3	2594.4	NG	379.2
10/12/22 11:59	897.1	23608.0	2596.9	NG	379.2
10/12/22 12:00	897.1	23579.4	2593.7	NG	379.0
10/12/22 12:01	897.3	23609.1	2597.0	NG	379.3
10/12/22 12:02	897.8	23624.0	2598.6	NG	379.0
10/12/22 12:03	897.8	23564.3	2592.1	NG	379.1
10/12/22 12:04	897.8	23555.0	2591.1	NG	378.7
10/12/22 12:05	897.2	23566.8	2592.3	NG	378.8
10/12/22 12:06	897.0	23604.1	2596.5	NG	378.8
10/12/22 12:07	897.1	23576.2	2593.4	NG	378.4
10/12/22 12:08	897.1	23569.6	2592.7	NG	378.9
10/12/22 12:09	897.0	23597.2	2595.7	NG	379.0
10/12/22 12:10	897.0	23591.6	2595.1	NG	379.1
10/12/22 12:11	897.0	23576.9	2593.5	NG	379.0
10/12/22 12:12	897.0	23574.0	2593.1	NG	379.1
10/12/22 12:13	897.1	23581.3	2593.9	NG	378.6
10/12/22 12:14	897.2	23589.9	2594.9	NG	379.0
10/12/22 12:15	897.6	23572.5	2593.0	NG	378.6
10/12/22 12:16	897.9	23556.2	2591.2	NG	378.6
10/12/22 12:17	897.9	23550.9	2590.6	NG	378.6
10/12/22 12:18	897.6	23549.5	2590.4	NG	378.4
10/12/22 12:19	897.1	23512.5	2586.4	NG	378.2
10/12/22 12:20	897.0	23581.1	2593.9	NG	378.7
10/12/22 12:21	897.0	23525.5	2587.8	NG	378.3
10/12/22 12:22	896.9	23583.5	2594.2	NG	378.0
10/12/22 12:23	897.0	23532.0	2588.5	NG	378.2
10/12/22 12:24	897.0	23536.5	2589.0	NG	378.0
10/12/22 12:25	897.1	23559.5	2591.5	NG	377.9
10/12/22 12:26	897.1	23553.9	2590.9	NG	377.8
10/12/22 12:27	897.1	23575.7	2593.3	NG	378.1
10/12/22 12:28	897.6	23520.3	2587.2	NG	378.2
10/12/22 12:29	897.8	23550.1	2590.5	NG	378.7
10/12/22 12:30	897.8	23539.8	2589.4	NG	378.8
10/12/22 12:31	897.8	23539.2	2589.3	NG	378.4
10/12/22 12:32	897.1	23559.3	2591.5	NG	378.6
10/12/22 12:33	897.0	23530.2	2588.3	NG	378.4
10/12/22 12:34	897.0	23560.0	2591.6	NG	378.1

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 12:35	897.1	23537.1	2589.1	NG	378.3
10/12/22 12:36	897.1	23565.5	2592.2	NG	378.1
10/12/22 12:37	897.1	23543.4	2589.8	NG	378.0
10/12/22 12:38	897.1	23524.5	2587.7	NG	378.3
10/12/22 12:39	897.1	23524.9	2587.7	NG	378.2
10/12/22 12:40	897.1	23502.0	2585.2	NG	378.3
10/12/22 12:41	897.4	23500.7	2585.1	NG	378.5
10/12/22 12:42	897.6	23526.8	2587.9	NG	378.1
10/12/22 12:43	897.6	23535.9	2588.9	NG	377.8
10/12/22 12:44	897.7	23507.5	2585.8	NG	377.9
10/12/22 12:45	897.0	23454.7	2580.0	NG	377.6
10/12/22 12:46	897.0	23555.0	2591.0	NG	378.0
10/12/22 12:47	896.9	23496.3	2584.6	NG	377.5
10/12/22 12:48	896.9	23482.1	2583.0	NG	377.6
10/12/22 12:49	896.9	23476.2	2582.4	NG	377.8
10/12/22 12:50	896.9	23512.3	2586.4	NG	377.9
10/12/22 12:51	896.8	23496.6	2584.6	NG	378.2
10/12/22 12:52	896.9	23525.5	2587.8	NG	377.8
10/12/22 12:53	897.2	23513.5	2586.5	NG	377.9
10/12/22 12:54	897.6	23553.4	2590.9	NG	378.0
10/12/22 12:55	897.6	23523.5	2587.6	NG	378.2
10/12/22 12:56	897.5	23491.7	2584.1	NG	377.2
10/12/22 12:57	897.6	23540.7	2589.5	NG	377.6
10/12/22 12:58	896.9	23531.9	2588.5	NG	377.1
10/12/22 12:59	896.8	23527.9	2588.1	NG	376.9
10/12/22 13:00	896.9	23500.4	2585.0	NG	377.0
10/12/22 13:01	897.0	23528.8	2588.2	NG	377.9
10/12/22 13:02	897.0	23448.1	2579.3	NG	377.5
10/12/22 13:03	897.0	23501.7	2585.2	NG	378.0
10/12/22 13:04	897.1	23500.7	2585.1	NG	378.0
10/12/22 13:05	897.0	23466.8	2581.3	NG	377.4
10/12/22 13:06	897.6	23501.1	2585.1	NG	377.5
10/12/22 13:07	897.7	23518.9	2587.1	NG	377.8
10/12/22 13:08	897.6	23512.6	2586.4	NG	377.9
10/12/22 13:09	897.6	23487.8	2583.7	NG	377.6
10/12/22 13:10	896.9	23498.1	2584.8	NG	377.6
10/12/22 13:11	896.9	23427.5	2577.0	NG	377.2
10/12/22 13:12	896.8	23478.0	2582.6	NG	377.2
10/12/22 13:13	896.8	23520.2	2587.2	NG	377.6
10/12/22 13:14	896.8	23458.1	2580.4	NG	377.6
10/12/22 13:15	896.9	23487.5	2583.6	NG	377.5
10/12/22 13:16	896.9	23501.5	2585.2	NG	378.2
10/12/22 13:17	897.0	23496.7	2584.6	NG	377.8

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 13:18	897.7	23500.3	2585.0	NG	377.9
10/12/22 13:19	897.8	23512.1	2586.3	NG	377.8
10/12/22 13:20	897.6	23491.2	2584.0	NG	377.5
10/12/22 13:21	897.6	23503.4	2585.4	NG	377.4
10/12/22 13:22	897.0	23529.2	2588.2	NG	378.0
10/12/22 13:23	896.8	23490.3	2583.9	NG	377.6
10/12/22 13:24	896.9	23526.1	2587.9	NG	377.5
10/12/22 13:25	896.9	23551.3	2590.6	NG	377.6
10/12/22 13:26	897.0	23469.5	2581.6	NG	377.8
10/12/22 13:27	897.0	23494.0	2584.3	NG	377.6
10/12/22 13:28	897.1	23502.6	2585.3	NG	377.5
10/12/22 13:29	897.0	23498.5	2584.8	NG	377.2
10/12/22 13:30	897.4	23517.3	2586.9	NG	377.2
10/12/22 13:31	897.8	23510.7	2586.2	NG	376.7
10/12/22 13:32	897.8	23479.6	2582.8	NG	377.5
10/12/22 13:33	897.8	23525.6	2587.8	NG	377.6
10/12/22 13:34	897.4	23504.8	2585.5	NG	377.5
10/12/22 13:35	897.0	23510.7	2586.2	NG	377.6
10/12/22 13:36	896.9	23522.1	2587.4	NG	377.6
10/12/22 13:37	896.9	23499.3	2584.9	NG	377.2
10/12/22 13:38	896.9	23495.8	2584.5	NG	377.4
10/12/22 13:39	897.0	23500.7	2585.1	NG	377.4
10/12/22 13:40	897.1	23535.7	2588.9	NG	377.6
10/12/22 13:41	897.0	23499.1	2584.9	NG	377.5
10/12/22 13:42	897.0	23519.3	2587.1	NG	377.7
10/12/22 13:43	897.5	23504.0	2585.4	NG	377.6
10/12/22 13:44	897.7	23501.1	2585.1	NG	377.4
10/12/22 13:45	897.8	23483.7	2583.2	NG	377.7
10/12/22 13:46	897.7	23477.7	2582.6	NG	377.5
10/12/22 13:47	896.9	23521.5	2587.4	NG	377.9
10/12/22 13:48	896.9	23452.0	2579.7	NG	377.2
10/12/22 13:49	896.9	23467.2	2581.4	NG	377.3
10/12/22 13:50	896.9	23459.8	2580.6	NG	377.2
10/12/22 13:51	897.0	23500.7	2585.1	NG	377.5
10/12/22 13:52	897.0	23481.7	2583.0	NG	377.1
10/12/22 13:53	897.0	23504.5	2585.5	NG	377.5
10/12/22 13:54	897.0	23483.9	2583.2	NG	377.6
10/12/22 13:55	897.2	23496.3	2584.6	NG	377.7
10/12/22 13:56	897.8	23512.0	2586.3	NG	377.6
10/12/22 13:57	897.7	23487.7	2583.6	NG	377.3
10/12/22 13:58	897.8	23454.9	2580.0	NG	376.7
10/12/22 13:59	897.6	23511.0	2586.2	NG	377.2
10/12/22 14:00	897.1	23484.1	2583.2	NG	376.6

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 14:01	897.0	23475.9	2582.3	NG	376.8
10/12/22 14:02	896.9	23480.3	2582.8	NG	376.9
10/12/22 14:03	897.0	23461.8	2580.8	NG	377.0
10/12/22 14:04	896.9	23514.3	2586.6	NG	376.7
10/12/22 14:05	896.9	23531.6	2588.5	NG	377.2
10/12/22 14:06	897.0	23474.8	2582.2	NG	377.3
10/12/22 14:07	897.0	23471.0	2581.8	NG	377.7
10/12/22 14:08	897.0	23430.8	2577.4	NG	377.3
10/12/22 14:09	897.1	23487.3	2583.6	NG	377.7
10/12/22 14:10	897.5	23485.3	2583.4	NG	377.7
10/12/22 14:11	897.5	23482.5	2583.1	NG	377.5
10/12/22 14:12	897.5	23489.3	2583.8	NG	377.3
10/12/22 14:13	897.1	23475.2	2582.3	NG	377.4
10/12/22 14:14	897.0	23494.3	2584.4	NG	377.3
10/12/22 14:15	897.0	23489.6	2583.9	NG	376.9
10/12/22 14:16	896.9	23455.4	2580.1	NG	376.5
10/12/22 14:17	897.0	23470.2	2581.7	NG	377.2
10/12/22 14:18	897.0	23477.0	2582.5	NG	376.9
10/12/22 14:19	897.0	23449.8	2579.5	NG	377.0
10/12/22 14:20	897.0	23482.3	2583.1	NG	377.6
10/12/22 14:21	897.0	23496.3	2584.6	NG	377.4
10/12/22 14:22	897.0	23489.9	2583.9	NG	377.5
10/12/22 14:23	896.9	23484.2	2583.3	NG	377.7
10/12/22 14:24	897.6	23541.4	2589.6	NG	377.8
10/12/22 14:25	897.7	23484.9	2583.3	NG	378.0
10/12/22 14:26	897.8	23549.7	2590.5	NG	377.4
10/12/22 14:27	897.2	23524.1	2587.6	NG	377.8
10/12/22 14:28	897.1	23498.9	2584.9	NG	377.2
10/12/22 14:29	897.1	23504.7	2585.5	NG	377.2
10/12/22 14:30	897.1	23460.9	2580.7	NG	377.4
10/12/22 14:31	897.0	23481.1	2582.9	NG	377.2
10/12/22 14:32	897.0	23496.8	2584.6	NG	377.1
10/12/22 14:33	897.1	23490.4	2583.9	NG	377.1
10/12/22 14:34	897.1	23515.9	2586.8	NG	377.3
10/12/22 14:35	897.3	23502.4	2585.3	NG	377.6
10/12/22 14:36	897.2	23510.0	2586.1	NG	377.2
10/12/22 14:37	897.8	23481.1	2582.9	NG	377.2
10/12/22 14:38	897.8	23493.9	2584.3	NG	376.9
10/12/22 14:39	897.9	23473.7	2582.1	NG	376.9
10/12/22 14:40	897.5	23518.8	2587.1	NG	377.5
10/12/22 14:41	897.2	23528.1	2588.1	NG	377.2
10/12/22 14:42	897.1	23496.7	2584.6	NG	377.0
10/12/22 14:43	897.0	23475.5	2582.3	NG	377.2

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 14:44	897.1	23444.8	2578.9	NG	377.2
10/12/22 14:45	897.1	23495.0	2584.4	NG	377.3
10/12/22 14:46	897.1	23507.9	2585.9	NG	377.2
10/12/22 14:47	897.0	23482.4	2583.1	NG	377.2
10/12/22 14:48	897.0	23500.8	2585.1	NG	377.5
10/12/22 14:49	897.1	23507.8	2585.9	NG	377.5
10/12/22 14:50	897.0	23519.0	2587.1	NG	377.4
10/12/22 14:51	897.2	23509.3	2586.0	NG	377.5
10/12/22 14:52	897.8	23510.5	2586.2	NG	377.5
10/12/22 14:53	897.9	23516.2	2586.8	NG	377.8
10/12/22 14:54	897.1	23469.3	2581.6	NG	377.2
10/12/22 14:55	897.1	23482.7	2583.1	NG	377.7
10/12/22 14:56	897.0	23495.0	2584.5	NG	377.8
10/12/22 14:57	897.1	23525.6	2587.8	NG	377.5
10/12/22 14:58	897.1	23485.2	2583.4	NG	377.7
10/12/22 14:59	897.1	23523.1	2587.5	NG	377.4
10/12/22 15:00	897.1	23476.6	2582.4	NG	377.7
10/12/22 15:01	897.0	23520.1	2587.2	NG	377.7
10/12/22 15:02	897.1	23488.6	2583.7	NG	377.5
10/12/22 15:03	897.2	23491.8	2584.1	NG	377.7
10/12/22 15:04	897.1	23534.1	2588.7	NG	377.6
10/12/22 15:05	897.0	23495.6	2584.5	NG	377.1
10/12/22 15:06	897.8	23490.1	2583.9	NG	376.9
10/12/22 15:07	897.9	23491.8	2584.1	NG	376.9
10/12/22 15:08	897.4	23470.3	2581.7	NG	376.9
10/12/22 15:09	897.2	23500.3	2585.0	NG	376.6
10/12/22 15:10	897.1	23444.0	2578.8	NG	376.7
10/12/22 15:11	897.1	23479.0	2582.7	NG	376.9
10/12/22 15:12	897.2	23500.5	2585.1	NG	377.1
10/12/22 15:13	897.1	23497.4	2584.7	NG	377.2
10/12/22 15:14	897.2	23508.0	2585.9	NG	377.3
10/12/22 15:15	897.1	23457.5	2580.3	NG	377.1
10/12/22 15:16	897.2	23497.4	2584.7	NG	377.2
10/12/22 15:17	897.2	23491.8	2584.1	NG	376.8
10/12/22 15:18	897.3	23470.0	2581.7	NG	376.8
10/12/22 15:19	897.3	23449.6	2579.5	NG	376.6
10/12/22 15:20	897.1	23494.2	2584.4	NG	377.0
10/12/22 15:21	897.5	23507.4	2585.8	NG	377.2
10/12/22 15:22	898.0	23469.0	2581.6	NG	376.9
10/12/22 15:23	897.8	23463.3	2581.0	NG	377.3
10/12/22 15:24	897.4	23514.9	2586.6	NG	377.2
10/12/22 15:25	897.4	23470.1	2581.7	NG	377.0
10/12/22 15:26	897.4	23487.8	2583.7	NG	377.1

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/12/22 15:27	897.4	23477.1	2582.5	NG	377.2
10/12/22 15:28	897.3	23486.0	2583.5	NG	377.4
10/12/22 15:29	897.4	23518.1	2587.0	NG	377.3
Run 2 Average	897.2	23508.9	2586.0	NG	377.6
Run 3					
10/13/22 07:30	896.7	23681.9	2605.0	NG	380.7
10/13/22 07:31	896.7	23661.4	2602.8	NG	380.8
10/13/22 07:32	896.8	23680.4	2604.8	NG	380.8
10/13/22 07:33	896.7	23691.7	2606.1	NG	380.7
10/13/22 07:34	896.7	23685.6	2605.4	NG	380.5
10/13/22 07:35	896.7	23659.3	2602.5	NG	380.6
10/13/22 07:36	896.7	23707.8	2607.9	NG	380.8
10/13/22 07:37	896.7	23685.0	2605.3	NG	380.9
10/13/22 07:38	896.7	23674.8	2604.2	NG	380.9
10/13/22 07:39	896.6	23683.9	2605.2	NG	380.9
10/13/22 07:40	896.6	23683.2	2605.2	NG	380.7
10/13/22 07:41	896.7	23720.8	2609.3	NG	380.5
10/13/22 07:42	896.5	23648.6	2601.3	NG	380.7
10/13/22 07:43	896.6	23670.4	2603.7	NG	380.8
10/13/22 07:44	896.4	23668.7	2603.6	NG	380.9
10/13/22 07:45	896.7	23671.4	2603.9	NG	380.6
10/13/22 07:46	896.5	23704.8	2607.5	NG	380.9
10/13/22 07:47	896.5	23718.9	2609.1	NG	380.7
10/13/22 07:48	896.4	23669.7	2603.7	NG	380.7
10/13/22 07:49	896.4	23658.3	2602.4	NG	380.5
10/13/22 07:50	896.7	23650.4	2601.5	NG	380.7
10/13/22 07:51	896.5	23649.3	2601.4	NG	380.7
10/13/22 07:52	896.5	23652.7	2601.8	NG	380.5
10/13/22 07:53	896.5	23644.0	2600.8	NG	380.4
10/13/22 07:54	896.5	23647.8	2601.3	NG	380.4
10/13/22 07:55	896.5	23692.9	2606.2	NG	380.4
10/13/22 07:56	896.5	23653.3	2601.9	NG	380.4
10/13/22 07:57	896.5	23629.4	2599.2	NG	380.5
10/13/22 07:58	896.4	23641.1	2600.5	NG	380.5
10/13/22 07:59	896.6	23616.6	2597.8	NG	380.3
10/13/22 08:00	896.6	23651.7	2601.7	NG	380.4
10/13/22 08:01	896.7	23645.5	2601.0	NG	380.4
10/13/22 08:02	896.5	23678.1	2604.6	NG	380.2
10/13/22 08:03	896.5	23648.5	2601.3	NG	380.1
10/13/22 08:04	896.5	23623.5	2598.6	NG	379.9
10/13/22 08:05	896.4	23657.3	2602.3	NG	380.0
10/13/22 08:06	896.5	23644.5	2600.9	NG	380.0

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 08:07	896.4	23652.7	2601.8	NG	380.1
10/13/22 08:08	896.4	23670.9	2603.8	NG	379.9
10/13/22 08:09	896.4	23640.6	2600.5	NG	379.9
10/13/22 08:10	896.7	23625.6	2598.8	NG	379.7
10/13/22 08:11	896.4	23632.9	2599.6	NG	379.9
10/13/22 08:12	896.4	23666.2	2603.3	NG	379.9
10/13/22 08:13	896.4	23675.3	2604.3	NG	379.5
10/13/22 08:14	896.4	23638.8	2600.3	NG	379.7
10/13/22 08:15	896.4	23661.5	2602.8	NG	379.5
10/13/22 08:16	896.4	23659.7	2602.6	NG	380.0
10/13/22 08:17	896.4	23624.9	2598.7	NG	380.0
10/13/22 08:18	896.5	23675.9	2604.3	NG	380.0
10/13/22 08:19	896.4	23618.4	2598.0	NG	379.7
10/13/22 08:20	896.4	23634.3	2599.8	NG	379.6
10/13/22 08:21	896.5	23623.5	2598.6	NG	379.8
10/13/22 08:22	896.4	23650.6	2601.6	NG	379.8
10/13/22 08:23	896.3	23636.7	2600.0	NG	379.9
10/13/22 08:24	896.3	23690.0	2605.9	NG	379.8
10/13/22 08:25	896.3	23678.7	2604.7	NG	380.3
10/13/22 08:26	896.3	23627.4	2599.0	NG	380.1
10/13/22 08:27	896.3	23611.1	2597.2	NG	379.6
10/13/22 08:28	896.3	23669.9	2603.7	NG	380.0
10/13/22 08:29	896.2	23675.4	2604.3	NG	379.9
10/13/22 08:30	896.6	23655.0	2602.0	NG	380.1
10/13/22 08:31	896.3	23697.6	2606.7	NG	380.1
10/13/22 08:32	896.3	23695.6	2606.5	NG	380.0
10/13/22 08:33	896.3	23606.5	2596.7	NG	380.0
10/13/22 08:34	896.3	23674.7	2604.2	NG	380.1
10/13/22 08:35	896.3	23667.8	2603.5	NG	380.0
10/13/22 08:36	896.3	23653.7	2601.9	NG	379.9
10/13/22 08:37	896.4	23668.2	2603.5	NG	380.2
10/13/22 08:38	896.3	23684.9	2605.3	NG	380.3
10/13/22 08:39	896.2	23685.3	2605.4	NG	380.4
10/13/22 08:40	896.1	23681.0	2604.9	NG	380.1
10/13/22 08:41	896.0	23646.1	2601.1	NG	380.1
10/13/22 08:42	896.2	23682.4	2605.1	NG	380.3
10/13/22 08:43	896.1	23653.9	2601.9	NG	380.3
10/13/22 08:44	896.1	23681.2	2604.9	NG	380.2
10/13/22 08:45	896.2	23665.6	2603.2	NG	380.1
10/13/22 08:46	896.3	23666.1	2603.3	NG	380.3
10/13/22 08:47	896.3	23677.0	2604.5	NG	380.3
10/13/22 08:48	896.3	23707.4	2607.8	NG	380.2
10/13/22 08:49	896.3	23673.5	2604.1	NG	380.2

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 08:50	896.8	23660.3	2602.6	NG	380.4
10/13/22 08:51	896.2	23645.9	2601.0	NG	380.4
10/13/22 08:52	896.1	23700.3	2607.0	NG	380.2
10/13/22 08:53	896.2	23690.6	2606.0	NG	380.2
10/13/22 08:54	896.2	23691.3	2606.0	NG	380.2
10/13/22 08:55	896.2	23671.4	2603.9	NG	380.0
10/13/22 08:56	896.2	23650.3	2601.5	NG	379.8
10/13/22 08:57	896.2	23669.3	2603.6	NG	380.1
10/13/22 08:58	896.3	23668.0	2603.5	NG	380.3
10/13/22 08:59	896.3	23666.9	2603.4	NG	380.5
10/13/22 09:00	896.2	23669.1	2603.6	NG	380.8
10/13/22 09:01	896.1	23667.7	2603.4	NG	380.7
10/13/22 09:02	896.0	23680.1	2604.8	NG	381.2
10/13/22 09:03	895.9	23687.7	2605.7	NG	380.7
10/13/22 09:04	895.9	23685.4	2605.4	NG	380.6
10/13/22 09:05	896.1	23695.3	2606.5	NG	380.9
10/13/22 09:06	896.2	23648.0	2601.3	NG	380.7
10/13/22 09:07	896.2	23671.2	2603.8	NG	380.8
10/13/22 09:08	896.1	23719.0	2609.1	NG	380.8
10/13/22 09:09	896.8	23691.9	2606.1	NG	381.0
10/13/22 09:10	896.8	23720.6	2609.3	NG	381.0
10/13/22 09:11	896.1	23704.4	2607.5	NG	380.9
10/13/22 09:12	896.1	23684.2	2605.3	NG	381.2
10/13/22 09:13	896.2	23638.8	2600.3	NG	380.9
10/13/22 09:14	896.2	23666.0	2603.3	NG	381.1
10/13/22 09:15	896.2	23674.0	2604.1	NG	380.9
10/13/22 09:16	896.2	23674.3	2604.2	NG	381.0
10/13/22 09:17	896.3	23636.1	2600.0	NG	380.9
10/13/22 09:18	896.4	23652.4	2601.8	NG	380.9
10/13/22 09:19	896.3	23635.1	2599.9	NG	380.8
10/13/22 09:20	896.2	23676.7	2604.4	NG	380.8
10/13/22 09:21	896.1	23635.3	2599.9	NG	380.5
10/13/22 09:22	896.0	23641.9	2600.6	NG	380.4
10/13/22 09:23	896.0	23661.0	2602.7	NG	380.4
10/13/22 09:24	896.0	23683.8	2605.2	NG	380.7
10/13/22 09:25	895.9	23659.7	2602.6	NG	380.6
10/13/22 09:26	896.0	23699.5	2606.9	NG	380.8
10/13/22 09:27	896.4	23635.7	2599.9	NG	380.6
10/13/22 09:28	896.7	23610.7	2597.2	NG	380.7
10/13/22 09:29	896.1	23640.6	2600.5	NG	380.2
10/13/22 09:30	896.0	23681.0	2604.9	NG	380.4
10/13/22 09:31	896.1	23651.3	2601.6	NG	380.0
10/13/22 09:32	896.1	23654.1	2601.9	NG	380.3

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 09:33	896.0	23644.8	2600.9	NG	380.3
10/13/22 09:34	896.0	23648.5	2601.3	NG	380.5
10/13/22 09:35	896.0	23677.7	2604.5	NG	380.4
10/13/22 09:36	896.0	23678.5	2604.6	NG	380.5
10/13/22 09:37	895.9	23681.1	2604.9	NG	380.6
10/13/22 09:38	895.9	23667.2	2603.4	NG	380.8
10/13/22 09:39	895.8	23637.4	2600.1	NG	380.6
10/13/22 09:40	895.9	23645.5	2601.0	NG	380.6
10/13/22 09:41	895.8	23665.3	2603.2	NG	380.7
10/13/22 09:42	895.8	23702.5	2607.3	NG	380.7
10/13/22 09:43	895.8	23633.7	2599.7	NG	380.9
10/13/22 09:44	895.9	23656.2	2602.2	NG	380.9
10/13/22 09:45	896.5	23634.0	2599.7	NG	380.9
10/13/22 09:46	896.3	23672.5	2604.0	NG	380.9
10/13/22 09:47	895.8	23623.9	2598.6	NG	380.8
10/13/22 09:48	895.8	23673.2	2604.1	NG	381.2
10/13/22 09:49	895.8	23621.5	2598.4	NG	381.2
10/13/22 09:50	895.8	23684.3	2605.3	NG	381.1
10/13/22 09:51	895.9	23669.4	2603.6	NG	380.9
10/13/22 09:52	896.0	23629.5	2599.2	NG	380.4
10/13/22 09:53	896.0	23639.3	2600.3	NG	380.4
10/13/22 09:54	895.9	23650.7	2601.6	NG	380.5
10/13/22 09:55	895.9	23649.2	2601.4	NG	380.7
10/13/22 09:56	895.9	23675.2	2604.3	NG	380.5
10/13/22 09:57	895.9	23697.4	2606.7	NG	380.6
10/13/22 09:58	895.8	23690.2	2605.9	NG	380.5
10/13/22 09:59	895.8	23645.4	2601.0	NG	380.6
10/13/22 10:00	895.8	23644.4	2600.9	NG	380.4
10/13/22 10:01	895.8	23615.0	2597.7	NG	380.3
10/13/22 10:02	895.8	23659.6	2602.6	NG	380.2
10/13/22 10:03	895.8	23671.4	2603.9	NG	380.4
10/13/22 10:04	896.4	23636.8	2600.0	NG	380.2
10/13/22 10:05	896.5	23590.4	2594.9	NG	380.4
10/13/22 10:06	895.9	23646.4	2601.1	NG	380.4
10/13/22 10:07	895.8	23635.7	2599.9	NG	380.4
10/13/22 10:08	895.8	23673.5	2604.1	NG	380.5
10/13/22 10:09	895.8	23652.0	2601.7	NG	380.5
10/13/22 10:10	895.8	23583.4	2594.2	NG	380.2
10/13/22 10:11	895.7	23642.3	2600.7	NG	380.6
10/13/22 10:12	895.7	23637.5	2600.1	NG	380.4
10/13/22 10:13	895.8	23656.5	2602.2	NG	380.1
10/13/22 10:14	895.7	23619.4	2598.1	NG	380.3
10/13/22 10:15	895.8	23609.0	2597.0	NG	380.3

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 10:16	895.8	23611.1	2597.2	NG	380.1
10/13/22 10:17	895.7	23629.5	2599.2	NG	380.0
10/13/22 10:18	895.7	23626.4	2598.9	NG	380.2
10/13/22 10:19	895.8	23638.2	2600.2	NG	380.3
10/13/22 10:20	895.7	23620.4	2598.2	NG	380.3
10/13/22 10:21	895.7	23635.3	2599.9	NG	380.2
10/13/22 10:22	895.9	23637.5	2600.1	NG	380.4
10/13/22 10:23	896.4	23684.3	2605.3	NG	380.5
10/13/22 10:24	896.2	23686.4	2605.5	NG	380.5
10/13/22 10:25	895.8	23667.3	2603.4	NG	380.7
10/13/22 10:26	895.8	23675.6	2604.3	NG	380.6
10/13/22 10:27	895.8	23678.0	2604.6	NG	380.5
10/13/22 10:28	895.8	23684.2	2605.3	NG	380.8
10/13/22 10:29	895.8	23656.3	2602.2	NG	380.7
10/13/22 10:30	895.8	23660.9	2602.7	NG	380.5
10/13/22 10:31	895.7	23646.2	2601.1	NG	380.3
10/13/22 10:32	895.7	23657.6	2602.3	NG	380.5
10/13/22 10:33	895.7	23662.2	2602.8	NG	380.3
10/13/22 10:34	895.7	23728.3	2610.1	NG	380.4
10/13/22 10:35	895.7	23684.0	2605.2	NG	380.4
10/13/22 10:36	895.7	23639.8	2600.4	NG	380.5
10/13/22 10:37	895.7	23690.1	2605.9	NG	380.2
10/13/22 10:38	895.7	23670.7	2603.8	NG	380.3
10/13/22 10:39	895.5	23653.4	2601.9	NG	380.8
10/13/22 10:40	895.4	23632.0	2599.5	NG	380.4
10/13/22 10:41	895.4	23648.9	2601.4	NG	380.7
10/13/22 10:42	895.4	23652.3	2601.7	NG	380.2
10/13/22 10:43	895.4	23625.7	2598.8	NG	380.5
10/13/22 10:44	895.4	23647.8	2601.3	NG	380.5
10/13/22 10:45	895.5	23692.9	2606.2	NG	380.5
10/13/22 10:46	895.4	23658.9	2602.5	NG	380.6
10/13/22 10:47	895.4	23705.0	2607.6	NG	380.5
10/13/22 10:48	895.4	23608.3	2596.9	NG	380.5
10/13/22 10:49	895.4	23689.8	2605.9	NG	380.5
10/13/22 10:50	895.4	23674.8	2604.2	NG	380.4
10/13/22 10:51	895.3	23647.6	2601.2	NG	380.7
10/13/22 10:52	895.3	23715.1	2608.7	NG	380.7
10/13/22 10:53	895.2	23670.8	2603.8	NG	380.3
10/13/22 10:54	895.2	23657.9	2602.4	NG	380.6
10/13/22 10:55	895.2	23663.6	2603.0	NG	380.6
10/13/22 10:56	895.2	23657.2	2602.3	NG	380.5
10/13/22 10:57	895.3	23651.0	2601.6	NG	380.6
10/13/22 10:58	895.3	23655.2	2602.1	NG	380.5

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 10:59	895.4	23717.6	2608.9	NG	380.7
10/13/22 11:00	895.4	23640.8	2600.5	NG	380.6
10/13/22 11:01	895.4	23681.3	2604.9	NG	380.9
10/13/22 11:02	895.3	23671.1	2603.8	NG	380.8
10/13/22 11:03	895.3	23631.9	2599.5	NG	380.6
Run 3 Average	896.1	23661.0	2602.7	NG	380.4
Run 4					
10/13/22 11:10	895.4	23676.0	2604.4	NG	380.8
10/13/22 11:11	895.3	23671.0	2603.8	NG	380.8
10/13/22 11:12	895.4	23676.9	2604.5	NG	380.9
10/13/22 11:13	895.3	23670.7	2603.8	NG	380.8
10/13/22 11:14	895.2	23620.8	2598.3	NG	380.7
10/13/22 11:15	895.2	23645.1	2601.0	NG	380.8
10/13/22 11:16	895.2	23658.4	2602.4	NG	381.1
10/13/22 11:17	895.2	23635.4	2599.9	NG	381.0
10/13/22 11:18	895.2	23663.9	2603.0	NG	380.9
10/13/22 11:19	895.2	23667.7	2603.4	NG	380.8
10/13/22 11:20	895.3	23693.9	2606.3	NG	380.7
10/13/22 11:21	895.4	23647.9	2601.3	NG	380.6
10/13/22 11:22	895.4	23616.7	2597.8	NG	380.8
10/13/22 11:23	895.4	23695.4	2606.5	NG	380.9
10/13/22 11:24	895.4	23645.5	2601.0	NG	380.8
10/13/22 11:25	895.5	23662.8	2602.9	NG	380.8
10/13/22 11:26	895.4	23691.5	2606.1	NG	381.1
10/13/22 11:27	895.4	23665.3	2603.2	NG	380.8
10/13/22 11:28	895.3	23661.0	2602.7	NG	380.9
10/13/22 11:29	895.3	23687.3	2605.6	NG	380.8
10/13/22 11:30	895.3	23666.5	2603.3	NG	380.9
10/13/22 11:31	895.3	23668.3	2603.5	NG	380.9
10/13/22 11:32	895.3	23666.3	2603.3	NG	380.9
10/13/22 11:33	895.4	23716.6	2608.8	NG	381.3
10/13/22 11:34	895.3	23686.1	2605.5	NG	381.3
10/13/22 11:35	895.4	23671.8	2603.9	NG	380.9
10/13/22 11:36	895.3	23667.9	2603.5	NG	380.8
10/13/22 11:37	895.4	23712.6	2608.4	NG	380.6
10/13/22 11:38	895.5	23672.8	2604.0	NG	380.7
10/13/22 11:39	895.7	23658.6	2602.5	NG	380.8
10/13/22 11:40	895.7	23672.2	2603.9	NG	381.1
10/13/22 11:41	895.7	23692.9	2606.2	NG	380.8
10/13/22 11:42	895.7	23645.7	2601.0	NG	381.1
10/13/22 11:43	895.6	23635.0	2599.8	NG	381.0
10/13/22 11:44	895.4	23630.1	2599.3	NG	381.0

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 11:45	895.4	23668.3	2603.5	NG	381.3
10/13/22 11:46	895.4	23645.8	2601.0	NG	381.0
10/13/22 11:47	895.3	23691.5	2606.1	NG	381.0
10/13/22 11:48	895.3	23655.4	2602.1	NG	380.8
10/13/22 11:49	895.4	23663.0	2602.9	NG	380.5
10/13/22 11:50	895.4	23685.9	2605.4	NG	381.2
10/13/22 11:51	895.5	23682.2	2605.0	NG	381.1
10/13/22 11:52	895.5	23672.8	2604.0	NG	381.2
10/13/22 11:53	895.5	23629.1	2599.2	NG	381.0
10/13/22 11:54	895.6	23629.4	2599.2	NG	381.1
10/13/22 11:55	895.5	23679.4	2604.7	NG	381.1
10/13/22 11:56	895.6	23651.0	2601.6	NG	380.9
10/13/22 11:57	895.5	23668.4	2603.5	NG	380.9
10/13/22 11:58	895.7	23633.2	2599.7	NG	381.0
10/13/22 11:59	895.4	23659.7	2602.6	NG	380.8
10/13/22 12:00	895.4	23671.2	2603.8	NG	380.9
10/13/22 12:01	895.5	23657.6	2602.3	NG	381.2
10/13/22 12:02	895.5	23639.9	2600.4	NG	381.2
10/13/22 12:03	895.5	23621.5	2598.4	NG	380.9
10/13/22 12:04	895.4	23677.0	2604.5	NG	381.0
10/13/22 12:05	895.6	23649.5	2601.4	NG	381.0
10/13/22 12:06	895.6	23618.4	2598.0	NG	381.2
10/13/22 12:07	895.4	23641.3	2600.5	NG	381.2
10/13/22 12:08	895.6	23677.0	2604.5	NG	381.0
10/13/22 12:09	895.5	23673.2	2604.1	NG	380.5
10/13/22 12:10	895.4	23669.0	2603.6	NG	380.5
10/13/22 12:11	895.5	23667.0	2603.4	NG	380.2
10/13/22 12:12	895.5	23656.5	2602.2	NG	380.5
10/13/22 12:13	895.5	23648.1	2601.3	NG	380.2
10/13/22 12:14	895.4	23626.8	2598.9	NG	380.2
10/13/22 12:15	895.4	23615.3	2597.7	NG	380.5
10/13/22 12:16	895.4	23668.4	2603.5	NG	380.9
10/13/22 12:17	895.3	23643.3	2600.8	NG	380.7
10/13/22 12:18	895.2	23614.2	2597.6	NG	380.7
10/13/22 12:19	895.2	23683.6	2605.2	NG	380.5
10/13/22 12:20	895.2	23596.2	2595.6	NG	380.7
10/13/22 12:21	895.2	23666.6	2603.3	NG	380.5
10/13/22 12:22	895.3	23664.2	2603.1	NG	380.5
10/13/22 12:23	895.3	23651.7	2601.7	NG	380.2
10/13/22 12:24	895.4	23607.3	2596.8	NG	380.1
10/13/22 12:25	895.4	23639.2	2600.3	NG	380.5
10/13/22 12:26	895.4	23630.2	2599.3	NG	380.1
10/13/22 12:27	895.4	23593.3	2595.3	NG	379.9

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 12:28	895.4	23641.3	2600.5	NG	380.1
10/13/22 12:29	895.4	23582.6	2594.1	NG	379.9
10/13/22 12:30	895.3	23607.9	2596.9	NG	379.8
10/13/22 12:31	895.4	23628.2	2599.1	NG	379.5
10/13/22 12:32	895.4	23598.4	2595.8	NG	379.7
10/13/22 12:33	895.3	23637.5	2600.1	NG	379.9
10/13/22 12:34	895.2	23600.1	2596.0	NG	380.0
10/13/22 12:35	895.2	23613.9	2597.5	NG	380.0
10/13/22 12:36	895.2	23648.2	2601.3	NG	380.3
10/13/22 12:37	895.1	23606.7	2596.7	NG	380.1
10/13/22 12:38	895.1	23588.3	2594.7	NG	380.3
10/13/22 12:39	895.2	23605.5	2596.6	NG	380.3
10/13/22 12:40	895.2	23636.9	2600.1	NG	380.3
10/13/22 12:41	895.2	23664.5	2603.1	NG	380.2
10/13/22 12:42	895.3	23617.8	2598.0	NG	380.0
10/13/22 12:43	895.2	23599.4	2595.9	NG	379.9
10/13/22 12:44	895.8	23614.8	2597.6	NG	380.1
10/13/22 12:45	895.3	23628.5	2599.1	NG	380.1
10/13/22 12:46	895.3	23606.0	2596.7	NG	379.7
10/13/22 12:47	895.4	23569.5	2592.6	NG	379.9
10/13/22 12:48	895.3	23652.4	2601.8	NG	380.2
10/13/22 12:49	895.3	23644.1	2600.9	NG	380.2
10/13/22 12:50	895.2	23615.7	2597.7	NG	380.2
10/13/22 12:51	895.2	23620.9	2598.3	NG	380.0
10/13/22 12:52	895.2	23626.7	2598.9	NG	380.2
10/13/22 12:53	895.2	23626.4	2598.9	NG	380.2
10/13/22 12:54	895.2	23607.7	2596.8	NG	380.4
10/13/22 12:55	895.3	23651.7	2601.7	NG	380.6
10/13/22 12:56	895.4	23640.2	2600.4	NG	380.2
10/13/22 12:57	895.4	23667.6	2603.4	NG	380.1
10/13/22 12:58	895.3	23639.4	2600.3	NG	380.4
10/13/22 12:59	895.3	23658.3	2602.4	NG	380.2
10/13/22 13:00	895.3	23614.6	2597.6	NG	380.2
10/13/22 13:01	896.0	23591.8	2595.1	NG	379.9
10/13/22 13:02	895.3	23650.3	2601.5	NG	380.0
10/13/22 13:03	895.4	23615.2	2597.7	NG	380.1
10/13/22 13:04	895.3	23614.7	2597.6	NG	379.9
10/13/22 13:05	895.3	23587.2	2594.6	NG	379.9
10/13/22 13:06	895.3	23575.5	2593.3	NG	379.5
10/13/22 13:07	895.3	23603.5	2596.4	NG	379.5
10/13/22 13:08	895.2	23561.1	2591.7	NG	379.4
10/13/22 13:09	895.2	23613.9	2597.5	NG	379.6
10/13/22 13:10	895.2	23590.0	2594.9	NG	379.4

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 13:11	895.2	23586.4	2594.5	NG	379.4
10/13/22 13:12	895.2	23538.4	2589.2	NG	378.9
10/13/22 13:13	895.1	23593.7	2595.3	NG	378.9
10/13/22 13:14	895.1	23531.9	2588.5	NG	378.7
10/13/22 13:15	895.1	23553.3	2590.9	NG	379.2
10/13/22 13:16	895.0	23516.1	2586.8	NG	378.6
10/13/22 13:17	895.6	23604.9	2596.5	NG	379.0
10/13/22 13:18	895.6	23547.2	2590.2	NG	379.2
10/13/22 13:19	895.1	23599.0	2595.9	NG	379.3
10/13/22 13:20	895.1	23613.9	2597.5	NG	379.5
10/13/22 13:21	895.1	23574.8	2593.2	NG	379.5
10/13/22 13:22	895.2	23571.9	2592.9	NG	379.3
10/13/22 13:23	895.2	23576.9	2593.5	NG	379.1
10/13/22 13:24	895.2	23547.1	2590.2	NG	379.4
10/13/22 13:25	895.2	23556.5	2591.2	NG	379.5
10/13/22 13:26	895.2	23568.7	2592.6	NG	379.2
10/13/22 13:27	895.2	23526.2	2587.9	NG	379.2
10/13/22 13:28	895.2	23534.9	2588.8	NG	378.8
10/13/22 13:29	895.1	23595.4	2595.5	NG	379.3
10/13/22 13:30	895.0	23538.3	2589.2	NG	378.9
10/13/22 13:31	895.1	23552.4	2590.8	NG	379.1
10/13/22 13:32	895.1	23608.7	2597.0	NG	379.1
10/13/22 13:33	895.5	23533.4	2588.7	NG	378.7
10/13/22 13:34	895.8	23532.3	2588.5	NG	379.1
10/13/22 13:35	895.3	23544.9	2589.9	NG	379.0
10/13/22 13:36	895.2	23545.8	2590.0	NG	379.4
10/13/22 13:37	895.1	23566.5	2592.3	NG	379.1
10/13/22 13:38	895.2	23552.0	2590.7	NG	378.9
10/13/22 13:39	895.2	23530.0	2588.3	NG	378.2
10/13/22 13:40	895.1	23520.0	2587.2	NG	378.4
10/13/22 13:41	895.0	23558.5	2591.4	NG	378.5
10/13/22 13:42	895.1	23530.5	2588.4	NG	378.3
10/13/22 13:43	895.0	23555.1	2591.1	NG	378.5
10/13/22 13:44	894.9	23531.3	2588.4	NG	378.1
10/13/22 13:45	894.9	23495.3	2584.5	NG	378.3
10/13/22 13:46	894.9	23494.4	2584.4	NG	378.1
10/13/22 13:47	894.9	23553.2	2590.9	NG	378.1
10/13/22 13:48	895.2	23571.0	2592.8	NG	378.6
10/13/22 13:49	895.7	23599.7	2596.0	NG	379.1
10/13/22 13:50	895.1	23557.5	2591.3	NG	378.4
10/13/22 13:51	895.0	23471.5	2581.9	NG	378.0
10/13/22 13:52	895.1	23546.0	2590.1	NG	378.2
10/13/22 13:53	895.1	23590.7	2595.0	NG	378.5

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 13:54	895.1	23590.0	2594.9	NG	378.8
10/13/22 13:55	894.9	23580.0	2593.8	NG	379.0
10/13/22 13:56	895.0	23572.9	2593.0	NG	378.9
10/13/22 13:57	895.1	23534.3	2588.8	NG	378.3
10/13/22 13:58	895.2	23552.5	2590.8	NG	378.3
10/13/22 13:59	895.0	23486.7	2583.5	NG	378.3
10/13/22 14:00	895.1	23509.3	2586.0	NG	378.6
10/13/22 14:01	895.0	23544.7	2589.9	NG	379.1
10/13/22 14:02	895.0	23567.9	2592.5	NG	379.1
10/13/22 14:03	895.5	23568.3	2592.5	NG	379.1
10/13/22 14:04	895.7	23528.6	2588.1	NG	378.9
10/13/22 14:05	895.5	23556.5	2591.2	NG	378.9
10/13/22 14:06	894.8	23537.5	2589.1	NG	378.5
10/13/22 14:07	894.9	23543.5	2589.8	NG	378.7
10/13/22 14:08	894.9	23527.4	2588.0	NG	378.6
10/13/22 14:09	895.1	23533.4	2588.7	NG	379.2
10/13/22 14:10	895.2	23551.8	2590.7	NG	379.0
10/13/22 14:11	895.2	23583.8	2594.2	NG	378.6
10/13/22 14:12	895.2	23506.7	2585.7	NG	378.6
10/13/22 14:13	895.1	23525.0	2587.7	NG	378.4
10/13/22 14:14	894.9	23515.1	2586.7	NG	378.9
10/13/22 14:15	894.9	23581.7	2594.0	NG	378.9
10/13/22 14:16	895.1	23473.2	2582.1	NG	378.3
10/13/22 14:17	895.5	23521.7	2587.4	NG	378.4
10/13/22 14:18	895.4	23535.7	2588.9	NG	378.2
10/13/22 14:19	895.4	23489.9	2583.9	NG	378.2
10/13/22 14:20	895.4	23527.7	2588.0	NG	378.1
10/13/22 14:21	895.0	23503.8	2585.4	NG	378.2
10/13/22 14:22	894.8	23486.1	2583.5	NG	377.8
10/13/22 14:23	894.9	23518.1	2587.0	NG	378.2
10/13/22 14:24	894.9	23512.8	2586.4	NG	378.2
10/13/22 14:25	894.9	23504.5	2585.5	NG	377.6
10/13/22 14:26	894.9	23492.7	2584.2	NG	378.1
10/13/22 14:27	894.8	23512.8	2586.4	NG	377.9
10/13/22 14:28	894.8	23500.0	2585.0	NG	377.9
10/13/22 14:29	894.8	23478.9	2582.7	NG	377.7
10/13/22 14:30	895.2	23484.3	2583.3	NG	377.9
10/13/22 14:31	895.3	23576.7	2593.4	NG	378.1
10/13/22 14:32	895.3	23522.7	2587.5	NG	377.8
10/13/22 14:33	895.3	23479.2	2582.7	NG	378.0
10/13/22 14:34	895.4	23522.6	2587.5	NG	378.5
10/13/22 14:35	894.6	23549.7	2590.5	NG	378.6
10/13/22 14:36	894.7	23501.0	2585.1	NG	377.9

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 14:37	894.8	23510.3	2586.1	NG	377.8
10/13/22 14:38	894.8	23522.4	2587.5	NG	378.3
10/13/22 14:39	894.8	23583.3	2594.2	NG	378.5
Run 4 Average	895.3	23599.9	2596.0	NG	379.7
Run 5					
10/13/22 14:44	895.4	23533.8	2588.7	NG	378.7
10/13/22 14:45	895.3	23530.1	2588.3	NG	378.3
10/13/22 14:46	895.3	23534.9	2588.8	NG	378.5
10/13/22 14:47	895.3	23548.2	2590.3	NG	378.7
10/13/22 14:48	895.3	23559.1	2591.5	NG	378.7
10/13/22 14:49	895.4	23531.0	2588.4	NG	378.3
10/13/22 14:50	895.3	23557.7	2591.3	NG	378.3
10/13/22 14:51	895.0	23505.4	2585.6	NG	378.4
10/13/22 14:52	894.7	23491.6	2584.1	NG	378.4
10/13/22 14:53	895.0	23558.0	2591.4	NG	378.5
10/13/22 14:54	895.4	23513.8	2586.5	NG	378.2
10/13/22 14:55	895.3	23563.0	2591.9	NG	378.5
10/13/22 14:56	895.3	23515.9	2586.7	NG	378.5
10/13/22 14:57	895.4	23512.9	2586.4	NG	377.8
10/13/22 14:58	895.4	23551.3	2590.6	NG	378.2
10/13/22 14:59	895.2	23534.9	2588.8	NG	377.8
10/13/22 15:00	895.2	23486.1	2583.5	NG	377.6
10/13/22 15:01	895.2	23516.0	2586.8	NG	378.1
10/13/22 15:02	895.2	23526.5	2587.9	NG	378.2
10/13/22 15:03	895.2	23545.3	2590.0	NG	377.9
10/13/22 15:04	895.3	23506.9	2585.8	NG	377.9
10/13/22 15:05	895.3	23532.1	2588.5	NG	378.0
10/13/22 15:06	895.4	23384.4	2572.3	NG	376.8
10/13/22 15:07	895.4	23501.7	2585.2	NG	377.9
10/13/22 15:08	895.3	23541.5	2589.6	NG	378.8
10/13/22 15:09	895.2	23474.7	2582.2	NG	378.2
10/13/22 15:10	895.1	23493.8	2584.3	NG	378.2
10/13/22 15:11	895.1	23506.2	2585.7	NG	377.9
10/13/22 15:12	895.1	23528.2	2588.1	NG	378.4
10/13/22 15:13	895.2	23505.1	2585.6	NG	377.8
10/13/22 15:14	895.2	23555.1	2591.1	NG	378.5
10/13/22 15:15	895.2	23526.5	2587.9	NG	378.5
10/13/22 15:16	895.2	23501.9	2585.2	NG	378.3
10/13/22 15:17	895.3	23523.3	2587.6	NG	377.9
10/13/22 15:18	895.3	23496.9	2584.7	NG	378.2
10/13/22 15:19	895.2	23531.3	2588.4	NG	378.2
10/13/22 15:20	895.3	23487.8	2583.7	NG	377.9

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 15:21	895.3	23462.7	2580.9	NG	377.2
10/13/22 15:22	895.2	23516.6	2586.8	NG	378.2
10/13/22 15:23	895.2	23495.9	2584.5	NG	378.1
10/13/22 15:24	895.1	23491.7	2584.1	NG	377.7
10/13/22 15:25	895.1	23539.1	2589.3	NG	378.2
10/13/22 15:26	895.0	23513.4	2586.5	NG	377.9
10/13/22 15:27	895.2	23509.2	2586.0	NG	377.9
10/13/22 15:28	895.1	23491.9	2584.1	NG	378.1
10/13/22 15:29	895.5	23573.4	2593.1	NG	378.1
10/13/22 15:30	895.3	23549.5	2590.4	NG	378.2
10/13/22 15:31	895.1	23528.1	2588.1	NG	378.1
10/13/22 15:32	895.2	23543.2	2589.7	NG	378.3
10/13/22 15:33	895.2	23537.7	2589.2	NG	378.2
10/13/22 15:34	895.3	23508.3	2585.9	NG	378.4
10/13/22 15:35	895.2	23589.6	2594.9	NG	378.6
10/13/22 15:36	895.1	23607.8	2596.9	NG	378.5
10/13/22 15:37	895.2	23574.5	2593.2	NG	378.7
10/13/22 15:38	895.2	23539.9	2589.4	NG	378.3
10/13/22 15:39	895.2	23506.0	2585.7	NG	378.2
10/13/22 15:40	895.2	23539.8	2589.4	NG	378.4
10/13/22 15:41	895.2	23594.8	2595.4	NG	378.4
10/13/22 15:42	895.2	23599.7	2596.0	NG	378.7
10/13/22 15:43	895.8	23614.3	2597.6	NG	379.0
10/13/22 15:44	895.2	23584.3	2594.3	NG	379.0
10/13/22 15:45	895.2	23590.7	2595.0	NG	379.1
10/13/22 15:46	895.2	23578.9	2593.7	NG	379.1
10/13/22 15:47	895.3	23598.6	2595.9	NG	378.8
10/13/22 15:48	895.3	23588.3	2594.7	NG	378.9
10/13/22 15:49	895.2	23608.3	2596.9	NG	379.3
10/13/22 15:50	895.2	23580.6	2593.9	NG	379.2
10/13/22 15:51	895.2	23599.0	2595.9	NG	379.2
10/13/22 15:52	895.2	23558.1	2591.4	NG	378.8
10/13/22 15:53	895.3	23579.3	2593.7	NG	379.4
10/13/22 15:54	895.3	23625.7	2598.8	NG	379.2
10/13/22 15:55	895.3	23610.8	2597.2	NG	378.8
10/13/22 15:56	895.8	23570.6	2592.8	NG	379.0
10/13/22 15:57	895.8	23564.7	2592.1	NG	378.9
10/13/22 15:58	895.3	23569.3	2592.6	NG	379.0
10/13/22 15:59	895.3	23575.9	2593.3	NG	379.0
10/13/22 16:00	895.3	23598.2	2595.8	NG	379.4
10/13/22 16:01	895.3	23544.6	2589.9	NG	379.1
10/13/22 16:02	895.3	23590.0	2594.9	NG	378.9
10/13/22 16:03	895.3	23607.1	2596.8	NG	379.2

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 16:04	895.3	23612.6	2597.4	NG	379.3
10/13/22 16:05	895.2	23609.7	2597.1	NG	379.3
10/13/22 16:06	895.2	23610.4	2597.1	NG	379.3
10/13/22 16:07	895.2	23564.4	2592.1	NG	379.2
10/13/22 16:08	895.2	23584.8	2594.3	NG	379.0
10/13/22 16:09	895.5	23531.9	2588.5	NG	379.1
10/13/22 16:10	895.8	23601.4	2596.2	NG	379.0
10/13/22 16:11	895.4	23556.3	2591.2	NG	378.9
10/13/22 16:12	895.2	23592.8	2595.2	NG	379.1
10/13/22 16:13	895.2	23603.8	2596.4	NG	378.8
10/13/22 16:14	895.1	23563.6	2592.0	NG	379.1
10/13/22 16:15	895.1	23571.3	2592.8	NG	379.2
10/13/22 16:16	895.2	23588.5	2594.7	NG	379.3
10/13/22 16:17	895.2	23586.5	2594.5	NG	379.0
10/13/22 16:18	895.2	23635.4	2599.9	NG	379.2
10/13/22 16:19	895.2	23572.1	2592.9	NG	379.0
10/13/22 16:20	895.2	23560.0	2591.6	NG	378.8
10/13/22 16:21	895.2	23541.4	2589.6	NG	379.3
10/13/22 16:22	895.4	23571.7	2592.9	NG	379.1
10/13/22 16:23	895.9	23534.7	2588.8	NG	379.1
10/13/22 16:24	895.6	23613.5	2597.5	NG	379.2
10/13/22 16:25	895.2	23589.0	2594.8	NG	379.1
10/13/22 16:26	895.3	23563.9	2592.0	NG	379.0
10/13/22 16:27	895.3	23593.5	2595.3	NG	379.1
10/13/22 16:28	895.3	23585.2	2594.4	NG	379.3
10/13/22 16:29	895.2	23577.1	2593.5	NG	379.2
10/13/22 16:30	895.2	23590.7	2595.0	NG	379.4
10/13/22 16:31	895.2	23590.8	2595.0	NG	379.1
10/13/22 16:32	895.2	23639.1	2600.3	NG	379.3
10/13/22 16:33	895.1	23558.8	2591.5	NG	379.4
10/13/22 16:34	895.1	23557.0	2591.3	NG	379.5
10/13/22 16:35	895.1	23585.8	2594.4	NG	379.4
10/13/22 16:36	895.7	23577.9	2593.6	NG	379.3
10/13/22 16:37	895.8	23572.5	2593.0	NG	379.3
10/13/22 16:38	895.2	23599.3	2595.9	NG	379.3
10/13/22 16:39	895.2	23618.9	2598.1	NG	379.0
10/13/22 16:40	895.2	23609.0	2597.0	NG	378.9
10/13/22 16:41	895.2	23594.8	2595.4	NG	378.9
10/13/22 16:42	895.2	23603.9	2596.4	NG	378.8
10/13/22 16:43	895.2	23639.1	2600.3	NG	378.9
10/13/22 16:44	895.2	23627.7	2599.0	NG	379.0
10/13/22 16:45	895.2	23657.2	2602.3	NG	379.1
10/13/22 16:46	895.2	23621.5	2598.4	NG	378.7

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 16:47	895.2	23642.8	2600.7	NG	379.0
10/13/22 16:48	895.2	23640.3	2600.4	NG	379.1
10/13/22 16:49	895.8	23607.3	2596.8	NG	379.1
10/13/22 16:50	896.0	23631.1	2599.4	NG	378.8
10/13/22 16:51	895.7	23603.1	2596.3	NG	379.0
10/13/22 16:52	895.4	23628.4	2599.1	NG	379.0
10/13/22 16:53	895.4	23702.0	2607.2	NG	379.2
10/13/22 16:54	895.4	23635.1	2599.9	NG	379.2
10/13/22 16:55	895.3	23699.5	2606.9	NG	379.3
10/13/22 16:56	895.3	23626.0	2598.9	NG	379.0
10/13/22 16:57	895.4	23618.1	2598.0	NG	379.1
10/13/22 16:58	895.4	23659.6	2602.6	NG	379.4
10/13/22 16:59	895.3	23663.8	2603.0	NG	379.3
10/13/22 17:00	895.2	23655.9	2602.2	NG	379.4
10/13/22 17:01	895.2	23699.7	2607.0	NG	380.2
10/13/22 17:02	895.7	23689.5	2605.8	NG	379.6
10/13/22 17:03	896.1	23622.3	2598.5	NG	379.3
10/13/22 17:04	896.0	23714.1	2608.6	NG	380.0
10/13/22 17:05	895.4	23694.0	2606.3	NG	379.9
10/13/22 17:06	895.4	23621.8	2598.4	NG	379.4
10/13/22 17:07	895.4	23669.8	2603.7	NG	379.9
10/13/22 17:08	895.4	23694.6	2606.4	NG	379.9
10/13/22 17:09	895.4	23592.4	2595.2	NG	379.0
10/13/22 17:10	895.4	23726.9	2610.0	NG	379.8
10/13/22 17:11	895.3	23642.7	2600.7	NG	379.4
10/13/22 17:12	895.2	23623.0	2598.5	NG	379.3
10/13/22 17:13	895.2	23671.5	2603.9	NG	380.0
10/13/22 17:14	895.3	23657.6	2602.3	NG	379.7
10/13/22 17:15	895.3	23621.7	2598.4	NG	379.0
10/13/22 17:16	895.8	23677.7	2604.5	NG	379.9
10/13/22 17:17	895.8	23653.9	2601.9	NG	379.6
10/13/22 17:18	895.3	23642.0	2600.6	NG	379.7
10/13/22 17:19	895.4	23670.1	2603.7	NG	379.5
10/13/22 17:20	895.4	23693.7	2606.3	NG	380.0
10/13/22 17:21	895.4	23634.2	2599.8	NG	379.6
10/13/22 17:22	895.4	23698.2	2606.8	NG	379.8
10/13/22 17:23	895.4	23671.7	2603.9	NG	379.7
10/13/22 17:24	895.3	23675.3	2604.3	NG	379.9
10/13/22 17:25	895.3	23655.4	2602.1	NG	379.8
10/13/22 17:26	895.3	23680.5	2604.9	NG	379.9
10/13/22 17:27	895.3	23691.8	2606.1	NG	379.7
10/13/22 17:28	895.3	23697.2	2606.7	NG	379.8
10/13/22 17:29	895.4	23642.1	2600.6	NG	379.6

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 17:30	895.8	23644.8	2600.9	NG	379.6
10/13/22 17:31	895.6	23693.3	2606.3	NG	379.7
10/13/22 17:32	895.3	23686.4	2605.5	NG	379.8
10/13/22 17:33	895.4	23699.6	2607.0	NG	379.9
10/13/22 17:34	895.3	23682.3	2605.0	NG	380.1
10/13/22 17:35	895.2	23608.1	2596.9	NG	379.8
10/13/22 17:36	895.2	23670.1	2603.7	NG	379.8
10/13/22 17:37	895.1	23672.5	2604.0	NG	379.8
10/13/22 17:38	895.1	23693.9	2606.3	NG	379.8
10/13/22 17:39	895.2	23666.6	2603.3	NG	379.7
10/13/22 17:40	895.1	23689.6	2605.9	NG	379.6
10/13/22 17:41	895.0	23676.7	2604.4	NG	379.8
10/13/22 17:42	894.9	23671.8	2603.9	NG	379.7
10/13/22 17:43	895.0	23650.3	2601.5	NG	379.5
10/13/22 17:44	895.5	23717.3	2608.9	NG	379.6
10/13/22 17:45	894.8	23664.9	2603.1	NG	379.6
10/13/22 17:46	894.9	23672.6	2604.0	NG	379.7
10/13/22 17:47	894.9	23686.6	2605.5	NG	379.7
10/13/22 17:48	894.9	23668.8	2603.6	NG	379.8
10/13/22 17:49	894.8	23678.8	2604.7	NG	380.0
10/13/22 17:50	894.7	23656.8	2602.3	NG	379.8
10/13/22 17:51	894.6	23645.2	2601.0	NG	379.8
10/13/22 17:52	894.7	23673.3	2604.1	NG	379.8
10/13/22 17:53	894.6	23668.0	2603.5	NG	379.7
10/13/22 17:54	894.5	23645.2	2601.0	NG	379.5
10/13/22 17:55	894.4	23684.0	2605.2	NG	379.5
10/13/22 17:56	894.3	23705.8	2607.6	NG	379.6
10/13/22 17:57	894.3	23671.5	2603.9	NG	379.6
10/13/22 17:58	894.7	23694.3	2606.4	NG	379.7
10/13/22 17:59	894.5	23715.2	2608.7	NG	379.5
10/13/22 18:00	894.3	23673.9	2604.1	NG	379.8
10/13/22 18:01	894.3	23604.3	2596.5	NG	379.6
10/13/22 18:02	894.2	23688.5	2605.7	NG	379.5
10/13/22 18:03	894.3	23707.2	2607.8	NG	379.8
10/13/22 18:04	894.4	23658.6	2602.4	NG	379.8
10/13/22 18:05	894.3	23645.9	2601.0	NG	379.5
10/13/22 18:06	894.4	23668.8	2603.6	NG	379.3
10/13/22 18:07	894.3	23706.4	2607.7	NG	379.6
10/13/22 18:08	894.3	23655.2	2602.1	NG	379.6
10/13/22 18:09	894.3	23694.0	2606.3	NG	379.4
10/13/22 18:10	894.2	23678.8	2604.7	NG	379.6
10/13/22 18:11	894.2	23655.9	2602.1	NG	379.6
10/13/22 18:12	894.2	23673.3	2604.1	NG	379.8

McDonough 4A ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/13/22 18:13	894.2	23694.4	2606.4	NG	379.7
10/13/22 18:14	894.1	23694.7	2606.4	NG	379.5
10/13/22 18:15	894.2	23699.9	2607.0	NG	379.6
10/13/22 18:16	894.2	23698.6	2606.8	NG	379.4
10/13/22 18:17	894.2	23647.2	2601.2	NG	379.4
10/13/22 18:18	893.9	23690.6	2606.0	NG	379.8
Run 5 Average	895.2	23605.3	2596.6	NG	379.1
Run 6					
10/14/22 07:17	899.6	24775.3	2725.3	NG	400.3
10/14/22 07:18	899.7	24783.0	2726.1	NG	400.1
10/14/22 07:19	899.6	24790.5	2727.0	NG	400.1
10/14/22 07:20	899.6	24780.0	2725.8	NG	399.9
10/14/22 07:21	899.7	24773.5	2725.1	NG	399.8
10/14/22 07:22	899.7	24705.8	2717.6	NG	399.6
10/14/22 07:23	899.7	24790.3	2726.9	NG	400.0
10/14/22 07:24	899.6	24780.9	2725.9	NG	400.1
10/14/22 07:25	899.6	24744.5	2721.9	NG	399.5
10/14/22 07:26	899.6	24818.4	2730.0	NG	400.5
10/14/22 07:27	899.7	24748.9	2722.4	NG	400.0
10/14/22 07:28	899.8	24758.8	2723.5	NG	399.8
10/14/22 07:29	899.8	24851.7	2733.7	NG	400.3
10/14/22 07:30	899.9	24839.4	2732.3	NG	400.4
10/14/22 07:31	899.9	24776.6	2725.4	NG	399.9
10/14/22 07:32	899.9	24745.1	2722.0	NG	399.8
10/14/22 07:33	899.9	24744.6	2721.9	NG	399.9
10/14/22 07:34	899.9	24743.3	2721.8	NG	399.8
10/14/22 07:35	899.8	24822.6	2730.5	NG	400.5
10/14/22 07:36	899.9	24738.1	2721.2	NG	400.0
10/14/22 07:37	899.8	24778.7	2725.7	NG	399.8
10/14/22 07:38	899.8	24784.6	2726.3	NG	400.1
10/14/22 07:39	899.7	24761.5	2723.8	NG	400.0
10/14/22 07:40	899.8	24735.9	2720.9	NG	399.7
10/14/22 07:41	899.8	24767.8	2724.5	NG	399.9
10/14/22 07:42	899.7	24785.7	2726.4	NG	399.9
10/14/22 07:43	899.8	24769.5	2724.6	NG	399.9
10/14/22 07:44	899.9	24755.5	2723.1	NG	399.7
10/14/22 07:45	899.9	24724.7	2719.7	NG	399.7
10/14/22 07:46	899.9	24760.1	2723.6	NG	399.7
10/14/22 07:47	899.9	24760.1	2723.6	NG	399.7
10/14/22 07:48	899.9	24735.2	2720.9	NG	399.5
10/14/22 07:49	899.9	24740.4	2721.4	NG	399.2
10/14/22 07:50	899.9	24700.8	2717.1	NG	399.5

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 07:51	899.9	24730.3	2720.3	NG	399.3
10/14/22 07:52	899.9	24752.7	2722.8	NG	399.3
10/14/22 07:53	899.8	24726.8	2719.9	NG	399.6
10/14/22 07:54	899.9	24715.9	2718.7	NG	399.5
10/14/22 07:55	899.9	24750.0	2722.5	NG	399.5
10/14/22 07:56	899.9	24723.5	2719.6	NG	399.5
10/14/22 07:57	899.8	24769.5	2724.6	NG	399.1
10/14/22 07:58	899.8	24736.9	2721.1	NG	398.8
10/14/22 07:59	899.9	24699.5	2716.9	NG	399.5
10/14/22 08:00	899.8	24685.5	2715.4	NG	398.9
10/14/22 08:01	899.9	24732.8	2720.6	NG	399.1
10/14/22 08:02	899.9	24741.9	2721.6	NG	399.1
10/14/22 08:03	900.0	24709.3	2718.0	NG	399.1
10/14/22 08:04	899.9	24720.5	2719.3	NG	399.1
10/14/22 08:05	900.0	24681.9	2715.0	NG	398.9
10/14/22 08:06	899.9	24747.1	2722.2	NG	399.5
10/14/22 08:07	900.0	24688.1	2715.7	NG	398.4
10/14/22 08:08	899.9	24726.7	2719.9	NG	398.8
10/14/22 08:09	900.0	24701.4	2717.2	NG	398.6
10/14/22 08:10	899.9	24691.1	2716.0	NG	398.7
10/14/22 08:11	900.1	24676.0	2714.4	NG	398.4
10/14/22 08:12	900.1	24707.9	2717.9	NG	398.4
10/14/22 08:13	900.1	24653.2	2711.9	NG	398.4
10/14/22 08:14	900.1	24684.0	2715.2	NG	398.5
10/14/22 08:15	900.0	24648.7	2711.4	NG	398.5
10/14/22 08:16	900.0	24674.6	2714.2	NG	398.4
10/14/22 08:17	900.0	24644.4	2710.9	NG	398.3
10/14/22 08:18	900.1	24681.9	2715.0	NG	398.5
10/14/22 08:19	900.1	24655.7	2712.1	NG	398.5
10/14/22 08:20	900.1	24665.8	2713.2	NG	398.2
10/14/22 08:21	900.0	24650.5	2711.6	NG	398.4
10/14/22 08:22	900.0	24669.0	2713.6	NG	398.1
10/14/22 08:23	900.0	24661.2	2712.7	NG	398.2
10/14/22 08:24	900.0	24686.8	2715.5	NG	398.1
10/14/22 08:25	900.0	24640.2	2710.4	NG	398.2
10/14/22 08:26	900.0	24696.7	2716.6	NG	398.2
10/14/22 08:27	900.0	24641.2	2710.5	NG	397.8
10/14/22 08:28	900.0	24597.6	2705.7	NG	397.5
10/14/22 08:29	899.9	24688.6	2715.7	NG	397.7
10/14/22 08:30	900.0	24636.1	2710.0	NG	398.0
10/14/22 08:31	899.9	24598.6	2705.8	NG	397.7
10/14/22 08:32	899.9	24645.9	2711.1	NG	397.8
10/14/22 08:33	900.0	24629.8	2709.3	NG	397.4

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 08:34	900.0	24665.2	2713.2	NG	397.5
10/14/22 08:35	899.9	24705.0	2717.5	NG	398.1
10/14/22 08:36	900.0	24606.7	2706.7	NG	397.1
10/14/22 08:37	899.9	24646.2	2711.1	NG	397.8
10/14/22 08:38	900.0	24573.4	2703.1	NG	396.9
10/14/22 08:39	900.0	24589.6	2704.9	NG	397.7
10/14/22 08:40	899.9	24603.2	2706.4	NG	397.0
10/14/22 08:41	899.9	24639.2	2710.3	NG	397.5
10/14/22 08:42	899.9	24606.0	2706.7	NG	397.3
10/14/22 08:43	900.0	24585.2	2704.4	NG	397.1
10/14/22 08:44	900.0	24575.8	2703.3	NG	397.3
10/14/22 08:45	900.0	24629.7	2709.3	NG	397.4
10/14/22 08:46	900.0	24611.5	2707.3	NG	397.1
10/14/22 08:47	900.0	24588.8	2704.8	NG	396.5
10/14/22 08:48	900.0	24580.8	2703.9	NG	396.6
10/14/22 08:49	899.9	24525.6	2697.8	NG	396.6
10/14/22 08:50	899.9	24619.5	2708.1	NG	397.3
10/14/22 08:51	899.9	24552.1	2700.7	NG	397.0
10/14/22 08:52	899.9	24547.6	2700.2	NG	396.8
10/14/22 08:53	900.0	24618.9	2708.1	NG	397.4
10/14/22 08:54	900.0	24595.7	2705.5	NG	397.1
10/14/22 08:55	900.1	24594.3	2705.4	NG	397.0
10/14/22 08:56	900.0	24494.7	2694.4	NG	396.0
10/14/22 08:57	900.0	24605.3	2706.6	NG	397.1
10/14/22 08:58	900.0	24525.1	2697.8	NG	396.4
10/14/22 08:59	900.0	24539.0	2699.3	NG	396.6
10/14/22 09:00	899.9	24639.2	2710.3	NG	397.5
10/14/22 09:01	900.0	24518.6	2697.0	NG	396.2
10/14/22 09:02	900.0	24606.2	2706.7	NG	397.2
10/14/22 09:03	900.0	24541.9	2699.6	NG	396.3
10/14/22 09:04	900.0	24649.6	2711.5	NG	396.8
10/14/22 09:05	899.9	24596.8	2705.7	NG	396.4
10/14/22 09:06	899.9	24623.5	2708.6	NG	397.1
10/14/22 09:07	900.0	24476.5	2692.4	NG	395.9
10/14/22 09:08	900.0	24622.5	2708.5	NG	396.8
10/14/22 09:09	899.9	24509.1	2696.0	NG	396.3
10/14/22 09:10	899.9	24470.9	2691.8	NG	396.0
10/14/22 09:11	899.9	24646.1	2711.1	NG	397.1
10/14/22 09:12	899.8	24515.7	2696.7	NG	396.0
10/14/22 09:13	899.8	24575.2	2703.3	NG	396.4
10/14/22 09:14	899.8	24582.5	2704.1	NG	396.4
10/14/22 09:15	899.9	24546.5	2700.1	NG	396.3
10/14/22 09:16	899.9	24460.4	2690.6	NG	395.5

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 09:17	899.8	24531.4	2698.4	NG	396.2
10/14/22 09:18	899.7	24484.4	2693.3	NG	395.0
10/14/22 09:19	899.7	24524.1	2697.7	NG	395.8
10/14/22 09:20	899.5	24507.4	2695.8	NG	395.5
10/14/22 09:21	899.5	24400.5	2684.1	NG	394.6
10/14/22 09:22	899.5	24518.5	2697.0	NG	395.7
10/14/22 09:23	899.5	24431.3	2687.4	NG	394.4
10/14/22 09:24	899.5	24444.7	2688.9	NG	395.1
10/14/22 09:25	899.6	24425.4	2686.8	NG	394.5
10/14/22 09:26	899.6	24449.1	2689.4	NG	394.9
10/14/22 09:27	899.6	24496.9	2694.7	NG	395.1
10/14/22 09:28	899.5	24448.3	2689.3	NG	394.7
10/14/22 09:29	899.5	24442.8	2688.7	NG	394.9
10/14/22 09:30	899.5	24433.4	2687.7	NG	394.6
10/14/22 09:31	899.5	24391.1	2683.0	NG	394.2
10/14/22 09:32	899.5	24383.4	2682.2	NG	393.9
10/14/22 09:33	899.5	24421.9	2686.4	NG	394.1
10/14/22 09:34	899.4	24403.3	2684.4	NG	394.2
10/14/22 09:35	899.3	24437.4	2688.1	NG	394.2
10/14/22 09:36	899.3	24430.6	2687.4	NG	394.2
10/14/22 09:37	899.3	24407.9	2684.9	NG	394.0
10/14/22 09:38	899.3	24437.3	2688.1	NG	393.9
10/14/22 09:39	899.3	24392.9	2683.2	NG	394.2
10/14/22 09:40	899.5	24398.5	2683.8	NG	394.1
10/14/22 09:41	899.5	24444.7	2688.9	NG	394.4
10/14/22 09:42	900.2	24430.0	2687.3	NG	394.3
10/14/22 09:43	900.2	24352.6	2678.8	NG	393.1
10/14/22 09:44	900.2	24391.7	2683.1	NG	394.1
10/14/22 09:45	900.1	24372.6	2681.0	NG	393.6
10/14/22 09:46	900.0	24369.9	2680.7	NG	393.6
10/14/22 09:47	899.9	24366.7	2680.3	NG	393.2
10/14/22 09:48	899.9	24411.1	2685.2	NG	393.9
10/14/22 09:49	899.9	24339.0	2677.3	NG	393.2
10/14/22 09:50	900.0	24424.4	2686.7	NG	393.8
10/14/22 09:51	900.0	24342.1	2677.6	NG	393.2
10/14/22 09:52	900.1	24368.4	2680.5	NG	393.3
10/14/22 09:53	900.0	24457.4	2690.3	NG	393.9
10/14/22 09:54	900.1	24294.9	2672.4	NG	392.1
10/14/22 09:55	900.0	24445.4	2689.0	NG	393.9
10/14/22 09:56	900.0	24349.6	2678.5	NG	392.8
10/14/22 09:57	900.0	24415.6	2685.7	NG	393.7
10/14/22 09:58	900.0	24320.2	2675.2	NG	393.1
10/14/22 09:59	899.8	24399.2	2683.9	NG	393.6

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 10:00	899.8	24455.5	2690.1	NG	394.4
10/14/22 10:01	899.9	24245.4	2667.0	NG	392.8
10/14/22 10:02	900.0	24377.5	2681.5	NG	393.4
10/14/22 10:03	899.7	24427.9	2687.1	NG	394.4
10/14/22 10:04	899.7	24424.8	2686.7	NG	394.2
10/14/22 10:05	899.7	24363.2	2680.0	NG	393.7
10/14/22 10:06	899.9	24384.8	2682.3	NG	393.5
10/14/22 10:07	899.7	24362.5	2679.9	NG	393.6
10/14/22 10:08	899.7	24416.5	2685.8	NG	393.7
10/14/22 10:09	899.6	24353.5	2678.9	NG	393.2
10/14/22 10:10	899.6	24343.5	2677.8	NG	393.5
10/14/22 10:11	899.6	24352.6	2678.8	NG	393.4
10/14/22 10:12	899.7	24309.8	2674.1	NG	392.9
10/14/22 10:13	899.6	24342.5	2677.7	NG	392.9
10/14/22 10:14	899.6	24365.2	2680.2	NG	393.0
10/14/22 10:15	899.6	24315.0	2674.6	NG	393.0
10/14/22 10:16	899.6	24259.8	2668.6	NG	392.1
10/14/22 10:17	899.7	24355.0	2679.0	NG	393.5
10/14/22 10:18	899.6	24330.0	2676.3	NG	392.8
10/14/22 10:19	899.5	24357.1	2679.3	NG	393.6
10/14/22 10:20	899.4	24334.2	2676.8	NG	392.6
10/14/22 10:21	899.5	24342.2	2677.6	NG	393.1
10/14/22 10:22	899.4	24350.9	2678.6	NG	392.6
10/14/22 10:23	899.4	24277.9	2670.6	NG	392.5
10/14/22 10:24	899.3	24331.2	2676.4	NG	393.0
10/14/22 10:25	899.3	24408.4	2684.9	NG	393.2
10/14/22 10:26	899.9	24305.8	2673.6	NG	392.2
10/14/22 10:27	899.6	24326.0	2675.9	NG	392.2
10/14/22 10:28	899.9	24366.3	2680.3	NG	392.9
10/14/22 10:29	900.0	24338.2	2677.2	NG	393.0
10/14/22 10:30	900.0	24348.8	2678.4	NG	392.8
10/14/22 10:31	900.0	24310.5	2674.2	NG	393.0
10/14/22 10:32	900.0	24309.2	2674.0	NG	392.4
10/14/22 10:33	900.0	24356.2	2679.2	NG	393.1
10/14/22 10:34	899.9	24356.8	2679.2	NG	392.8
10/14/22 10:35	899.8	24333.7	2676.7	NG	392.8
10/14/22 10:36	899.9	24314.2	2674.6	NG	392.7
10/14/22 10:37	899.9	24314.1	2674.6	NG	392.7
10/14/22 10:38	899.9	24298.8	2672.9	NG	392.9
10/14/22 10:39	899.8	24291.0	2672.0	NG	392.6
10/14/22 10:40	899.8	24347.4	2678.2	NG	392.7
10/14/22 10:41	899.6	24303.3	2673.4	NG	392.5
10/14/22 10:42	899.6	24347.6	2678.2	NG	392.7

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 10:43	899.6	24317.9	2675.0	NG	392.5
10/14/22 10:44	899.6	24273.3	2670.1	NG	392.5
Run 6 Average	899.8	24547.7	2700.2	NG	396.3
Run 7					
10/14/22 10:48	899.5	24294.2	2672.4	NG	392.6
10/14/22 10:49	899.5	24227.5	2665.0	NG	392.4
10/14/22 10:50	899.5	24320.4	2675.2	NG	392.7
10/14/22 10:51	899.4	24259.7	2668.6	NG	392.6
10/14/22 10:52	899.4	24298.8	2672.9	NG	392.5
10/14/22 10:53	899.4	24371.5	2680.9	NG	393.1
10/14/22 10:54	899.5	24359.2	2679.5	NG	393.0
10/14/22 10:55	899.6	24300.6	2673.1	NG	392.7
10/14/22 10:56	899.9	24263.2	2669.0	NG	392.2
10/14/22 10:57	899.8	24266.7	2669.3	NG	392.4
10/14/22 10:58	899.7	24312.4	2674.4	NG	392.5
10/14/22 10:59	899.6	24307.8	2673.9	NG	392.7
10/14/22 11:00	899.6	24302.3	2673.2	NG	392.2
10/14/22 11:01	899.6	24311.5	2674.3	NG	392.4
10/14/22 11:02	899.6	24324.6	2675.7	NG	392.3
10/14/22 11:03	899.6	24313.0	2674.4	NG	392.4
10/14/22 11:04	899.7	24320.5	2675.3	NG	392.2
10/14/22 11:05	899.8	24278.6	2670.6	NG	392.2
10/14/22 11:06	899.7	24256.1	2668.2	NG	392.0
10/14/22 11:07	899.8	24298.8	2672.9	NG	392.5
10/14/22 11:08	899.7	24305.1	2673.6	NG	392.4
10/14/22 11:09	899.7	24331.4	2676.4	NG	392.4
10/14/22 11:10	899.6	24276.1	2670.4	NG	392.0
10/14/22 11:11	899.6	24283.0	2671.1	NG	392.0
10/14/22 11:12	899.6	24245.5	2667.0	NG	392.3
10/14/22 11:13	899.6	24287.3	2671.6	NG	392.6
10/14/22 11:14	899.6	24323.9	2675.6	NG	392.7
10/14/22 11:15	899.6	24296.3	2672.6	NG	392.3
10/14/22 11:16	899.6	24251.0	2667.6	NG	392.2
10/14/22 11:17	899.6	24276.1	2670.4	NG	392.0
10/14/22 11:18	899.6	24282.1	2671.0	NG	392.1
10/14/22 11:19	899.6	24226.5	2664.9	NG	391.4
10/14/22 11:20	899.5	24257.9	2668.4	NG	391.5
10/14/22 11:21	899.4	24322.6	2675.5	NG	391.8
10/14/22 11:22	899.5	24313.4	2674.5	NG	392.2
10/14/22 11:23	899.4	24279.3	2670.7	NG	392.0
10/14/22 11:24	899.4	24229.0	2665.2	NG	391.6
10/14/22 11:25	899.4	24268.1	2669.5	NG	392.2

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 11:26	899.3	24300.6	2673.1	NG	392.2
10/14/22 11:27	899.1	24233.2	2665.7	NG	391.8
10/14/22 11:28	899.6	24188.5	2660.7	NG	391.2
10/14/22 11:29	899.7	24165.6	2658.2	NG	391.1
10/14/22 11:30	899.0	24311.8	2674.3	NG	392.2
10/14/22 11:31	899.1	24222.6	2664.5	NG	391.8
10/14/22 11:32	899.1	24209.4	2663.0	NG	391.1
10/14/22 11:33	899.1	24249.5	2667.4	NG	391.9
10/14/22 11:34	899.1	24181.8	2660.0	NG	390.7
10/14/22 11:35	899.1	24282.1	2671.0	NG	391.9
10/14/22 11:36	899.1	24238.8	2666.3	NG	391.3
10/14/22 11:37	899.1	24143.2	2655.8	NG	390.8
10/14/22 11:38	899.1	24256.2	2668.2	NG	391.5
10/14/22 11:39	899.0	24296.0	2672.6	NG	391.6
10/14/22 11:40	899.0	24212.2	2663.3	NG	391.1
10/14/22 11:41	898.9	24157.9	2657.4	NG	390.8
10/14/22 11:42	898.9	24244.7	2666.9	NG	391.8
10/14/22 11:43	898.9	24093.4	2650.3	NG	390.2
10/14/22 11:44	898.9	24254.4	2668.0	NG	391.5
10/14/22 11:45	898.9	24216.4	2663.8	NG	391.4
10/14/22 11:46	898.9	24253.8	2667.9	NG	391.8
10/14/22 11:47	899.1	24207.7	2662.8	NG	391.1
10/14/22 11:48	899.4	24240.1	2666.4	NG	391.9
10/14/22 11:49	899.2	24178.4	2659.6	NG	390.8
10/14/22 11:50	899.1	24227.9	2665.1	NG	391.7
10/14/22 11:51	898.9	24200.3	2662.0	NG	390.5
10/14/22 11:52	898.4	24207.1	2662.8	NG	390.9
10/14/22 11:53	898.5	24164.1	2658.1	NG	390.9
10/14/22 11:54	898.5	24168.2	2658.5	NG	390.7
10/14/22 11:55	898.5	24152.9	2656.8	NG	390.7
10/14/22 11:56	898.6	24190.7	2661.0	NG	390.8
10/14/22 11:57	898.5	24208.8	2663.0	NG	391.0
10/14/22 11:58	898.5	24179.7	2659.8	NG	391.2
10/14/22 11:59	898.5	24193.3	2661.3	NG	391.5
10/14/22 12:00	898.3	24264.5	2669.1	NG	391.1
10/14/22 12:01	898.2	24184.3	2660.3	NG	391.1
10/14/22 12:02	898.5	24236.6	2666.0	NG	391.2
10/14/22 12:03	898.8	24160.5	2657.7	NG	390.7
10/14/22 12:04	898.7	24210.7	2663.2	NG	391.0
10/14/22 12:05	898.7	24242.3	2666.6	NG	391.5
10/14/22 12:06	898.8	24295.6	2672.5	NG	391.5
10/14/22 12:07	898.8	24220.3	2664.2	NG	391.0
10/14/22 12:08	898.8	24255.8	2668.1	NG	391.4

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 12:09	898.9	24202.9	2662.3	NG	390.7
10/14/22 12:10	898.9	24171.3	2658.8	NG	390.8
10/14/22 12:11	898.9	24213.3	2663.5	NG	391.0
10/14/22 12:12	898.4	24162.0	2657.8	NG	390.2
10/14/22 12:13	898.2	24167.4	2658.4	NG	390.4
10/14/22 12:14	898.1	24141.4	2655.6	NG	390.6
10/14/22 12:15	898.5	24276.1	2670.4	NG	391.2
10/14/22 12:16	898.6	24177.7	2659.5	NG	390.5
10/14/22 12:17	898.6	24153.6	2656.9	NG	389.8
10/14/22 12:18	898.5	24265.3	2669.2	NG	391.0
10/14/22 12:19	898.5	24246.0	2667.1	NG	390.9
10/14/22 12:20	898.5	24121.6	2653.4	NG	389.9
10/14/22 12:21	898.5	24286.0	2671.5	NG	391.7
10/14/22 12:22	898.5	24109.4	2652.0	NG	389.6
10/14/22 12:23	898.5	24183.3	2660.2	NG	390.2
10/14/22 12:24	898.5	24106.3	2651.7	NG	389.6
10/14/22 12:25	898.5	24155.8	2657.1	NG	389.9
10/14/22 12:26	898.4	24197.9	2661.8	NG	390.4
10/14/22 12:27	898.4	24132.4	2654.6	NG	389.9
10/14/22 12:28	898.5	24119.5	2653.1	NG	389.7
10/14/22 12:29	898.5	24148.1	2656.3	NG	390.0
10/14/22 12:30	898.4	24179.4	2659.7	NG	390.4
10/14/22 12:31	898.3	24161.3	2657.7	NG	390.3
10/14/22 12:32	898.2	24223.0	2664.5	NG	390.5
10/14/22 12:33	898.3	24151.9	2656.7	NG	390.3
10/14/22 12:34	898.2	24170.4	2658.7	NG	390.0
10/14/22 12:35	898.1	24170.7	2658.8	NG	390.0
10/14/22 12:36	898.1	24145.9	2656.0	NG	389.9
10/14/22 12:37	898.1	24163.3	2658.0	NG	389.7
10/14/22 12:38	898.1	24170.6	2658.8	NG	389.6
10/14/22 12:39	898.1	24154.0	2656.9	NG	389.6
10/14/22 12:40	898.5	24167.2	2658.4	NG	389.8
10/14/22 12:41	898.6	24115.6	2652.7	NG	389.6
10/14/22 12:42	898.3	24199.6	2662.0	NG	389.9
10/14/22 12:43	898.2	24148.5	2656.3	NG	390.1
10/14/22 12:44	898.1	24216.8	2663.8	NG	390.3
10/14/22 12:45	898.0	24169.6	2658.7	NG	389.9
10/14/22 12:46	898.0	24099.7	2651.0	NG	389.6
10/14/22 12:47	898.0	24089.5	2649.8	NG	389.3
10/14/22 12:48	897.9	24114.6	2652.6	NG	389.6
10/14/22 12:49	897.9	24058.2	2646.4	NG	388.9
10/14/22 12:50	897.8	24090.6	2650.0	NG	389.1
10/14/22 12:51	897.8	24123.3	2653.6	NG	389.3

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 12:52	897.9	24142.1	2655.6	NG	389.3
10/14/22 12:53	897.8	24161.2	2657.7	NG	389.4
10/14/22 12:54	897.7	24148.4	2656.3	NG	389.5
10/14/22 12:55	897.6	24139.0	2655.3	NG	389.5
10/14/22 12:56	897.9	24159.6	2657.6	NG	389.6
10/14/22 12:57	898.4	24125.8	2653.8	NG	389.4
10/14/22 12:58	897.8	24163.7	2658.0	NG	389.3
10/14/22 12:59	897.9	24052.9	2645.8	NG	388.5
10/14/22 13:00	897.9	24112.6	2652.4	NG	389.3
10/14/22 13:01	897.9	24106.7	2651.7	NG	389.1
10/14/22 13:02	897.9	24126.8	2654.0	NG	389.5
10/14/22 13:03	897.8	24124.1	2653.7	NG	389.7
10/14/22 13:04	897.8	24058.9	2646.5	NG	388.9
10/14/22 13:05	897.6	24178.7	2659.7	NG	389.9
10/14/22 13:06	897.6	24057.4	2646.3	NG	388.9
10/14/22 13:07	897.5	24149.9	2656.5	NG	389.9
10/14/22 13:08	897.5	24118.1	2653.0	NG	388.9
10/14/22 13:09	897.6	24156.8	2657.2	NG	389.7
10/14/22 13:10	897.7	24193.1	2661.2	NG	389.7
10/14/22 13:11	897.6	24090.6	2650.0	NG	389.2
10/14/22 13:12	897.6	24091.3	2650.0	NG	388.8
10/14/22 13:13	898.3	24067.6	2647.4	NG	388.2
10/14/22 13:14	897.6	24029.7	2643.3	NG	388.5
10/14/22 13:15	897.6	24098.1	2650.8	NG	389.6
10/14/22 13:16	897.5	24021.4	2642.4	NG	388.2
10/14/22 13:17	897.6	24036.7	2644.0	NG	388.3
10/14/22 13:18	897.6	24119.8	2653.2	NG	389.0
10/14/22 13:19	897.6	24139.7	2655.4	NG	389.2
10/14/22 13:20	897.5	24091.2	2650.0	NG	389.0
10/14/22 13:21	897.5	24099.0	2650.9	NG	388.7
10/14/22 13:22	897.5	24089.6	2649.9	NG	389.3
10/14/22 13:23	897.5	24020.1	2642.2	NG	388.1
10/14/22 13:24	897.5	24121.9	2653.4	NG	389.4
10/14/22 13:25	897.4	24137.0	2655.1	NG	389.4
10/14/22 13:26	897.5	24028.2	2643.1	NG	388.3
10/14/22 13:27	897.4	24154.0	2656.9	NG	389.6
10/14/22 13:28	898.0	24044.9	2644.9	NG	388.4
10/14/22 13:29	898.1	24108.7	2652.0	NG	388.9
10/14/22 13:30	897.6	24047.4	2645.2	NG	388.5
10/14/22 13:31	897.5	24049.2	2645.4	NG	388.4
10/14/22 13:32	897.6	24133.8	2654.7	NG	389.2
10/14/22 13:33	897.7	24122.7	2653.5	NG	389.1
10/14/22 13:34	897.6	24094.4	2650.4	NG	389.0

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 13:35	897.5	23980.9	2637.9	NG	387.9
10/14/22 13:36	897.5	24102.5	2651.3	NG	388.8
10/14/22 13:37	897.4	24113.9	2652.5	NG	389.2
10/14/22 13:38	897.5	24074.7	2648.2	NG	388.4
10/14/22 13:39	897.4	23956.6	2635.2	NG	387.3
10/14/22 13:40	897.4	24134.9	2654.8	NG	389.0
10/14/22 13:41	897.4	24130.9	2654.4	NG	388.6
10/14/22 13:42	897.4	24044.6	2644.9	NG	388.5
10/14/22 13:43	897.9	24040.7	2644.5	NG	388.3
10/14/22 13:44	898.0	24073.9	2648.1	NG	388.3
10/14/22 13:45	898.0	24066.9	2647.4	NG	388.8
10/14/22 13:46	897.5	24117.3	2652.9	NG	389.1
10/14/22 13:47	897.3	24107.9	2651.9	NG	389.1
10/14/22 13:48	897.3	24070.1	2647.7	NG	388.8
10/14/22 13:49	897.3	24123.0	2653.5	NG	388.7
10/14/22 13:50	897.4	24121.5	2653.4	NG	388.5
10/14/22 13:51	897.4	24020.8	2642.3	NG	388.2
10/14/22 13:52	897.4	24040.9	2644.5	NG	388.4
10/14/22 13:53	897.4	24045.4	2645.0	NG	388.4
10/14/22 13:54	897.4	24062.7	2646.9	NG	388.6
10/14/22 13:55	897.4	24095.1	2650.5	NG	388.7
10/14/22 13:56	897.4	24035.2	2643.9	NG	388.3
10/14/22 13:57	897.6	24037.7	2644.1	NG	388.0
10/14/22 13:58	897.9	24014.7	2641.6	NG	388.3
10/14/22 13:59	897.9	24017.8	2642.0	NG	388.3
10/14/22 14:00	897.8	24026.8	2642.9	NG	388.3
10/14/22 14:01	897.6	24081.5	2649.0	NG	388.3
10/14/22 14:02	897.1	24051.2	2645.6	NG	388.1
10/14/22 14:03	897.1	24020.3	2642.2	NG	387.9
10/14/22 14:04	897.1	24021.4	2642.4	NG	388.2
10/14/22 14:05	897.1	24047.0	2645.2	NG	388.1
10/14/22 14:06	897.2	24056.1	2646.2	NG	387.8
10/14/22 14:07	897.3	23994.8	2639.4	NG	387.7
10/14/22 14:08	897.3	23983.5	2638.2	NG	387.8
10/14/22 14:09	897.2	24046.4	2645.1	NG	388.3
10/14/22 14:10	897.1	24045.6	2645.0	NG	388.4
10/14/22 14:11	897.2	24036.3	2644.0	NG	388.5
10/14/22 14:12	897.7	24023.6	2642.6	NG	388.2
10/14/22 14:13	897.8	24036.3	2644.0	NG	388.2
10/14/22 14:14	897.6	24051.9	2645.7	NG	388.5
10/14/22 14:15	897.5	24013.1	2641.4	NG	388.3
10/14/22 14:16	896.9	24041.6	2644.6	NG	388.5
10/14/22 14:17	897.0	24064.4	2647.1	NG	388.4

McDonough 4A ICR Process Data

Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Gas Flow hscf	Total Heat Input MMBtu/hr	Fuel Type	Load MW
10/14/22 14:18	897.1	24029.3	2643.2	NG	388.1
10/14/22 14:19	897.1	24045.3	2645.0	NG	388.2
Run 7 Average	898.3	24161.4	2657.8	NG	390.1

Unit 4B

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
Run 1					
10/17/22 08:20	884.3	2616.6	23811.5	NG	387.44
10/17/22 08:21	884.5	2620.8	23792.7	NG	387.23
10/17/22 08:22	884.6	2610.9	23721.3	NG	386.49
10/17/22 08:23	884.7	2612.1	23773.3	NG	387.12
10/17/22 08:24	884.6	2613.7	23717.2	NG	386.99
10/17/22 08:25	884.7	2607.2	23702.3	NG	385.99
10/17/22 08:26	884.7	2610.4	23756.9	NG	386.40
10/17/22 08:27	884.6	2616.2	23711.3	NG	386.99
10/17/22 08:28	884.7	2610.2	23719.3	NG	385.91
10/17/22 08:29	884.6	2606.9	23733.2	NG	386.67
10/17/22 08:30	884.7	2617.1	23763.1	NG	387.09
10/17/22 08:31	884.6	2608.6	23693.9	NG	386.27
10/17/22 08:32	884.6	2612.5	23753.0	NG	386.73
10/17/22 08:33	884.6	2618.8	23776.4	NG	387.22
10/17/22 08:34	884.7	2610.8	23714.7	NG	386.42
10/17/22 08:35	884.7	2611.3	23745.5	NG	387.19
10/17/22 08:36	884.7	2617.1	23802.2	NG	386.99
10/17/22 08:37	884.6	2610.3	23720.2	NG	386.06
10/17/22 08:38	884.5	2618.0	23764.2	NG	387.52
10/17/22 08:39	884.5	2608.5	23721.4	NG	386.50
10/17/22 08:40	884.4	2607.0	23711.2	NG	386.40
10/17/22 08:41	884.3	2616.5	23773.9	NG	386.96
10/17/22 08:42	884.3	2608.6	23694.2	NG	386.14
10/17/22 08:43	884.3	2610.1	23735.3	NG	386.45
10/17/22 08:44	884.2	2611.2	23744.0	NG	386.38
10/17/22 08:45	884.3	2608.6	23669.8	NG	385.65
10/17/22 08:46	884.3	2613.0	23774.0	NG	386.44
10/17/22 08:47	884.4	2609.1	23691.1	NG	385.99
10/17/22 08:48	884.6	2601.9	23680.3	NG	385.62
10/17/22 08:49	884.6	2607.9	23748.2	NG	386.27
10/17/22 08:50	884.6	2607.7	23631.4	NG	385.90
10/17/22 08:51	884.6	2604.7	23675.8	NG	385.18
10/17/22 08:52	884.7	2604.0	23690.0	NG	386.00
10/17/22 08:53	884.7	2597.1	23600.3	NG	384.93
10/17/22 08:54	884.5	2598.0	23651.3	NG	385.49
10/17/22 08:55	884.5	2612.0	23715.4	NG	385.83
10/17/22 08:56	884.5	2601.0	23570.2	NG	385.12
10/17/22 08:57	884.5	2603.9	23697.4	NG	385.46
10/17/22 08:58	884.3	2600.3	23659.4	NG	385.02
10/17/22 08:59	884.3	2595.1	23620.4	NG	384.94
10/17/22 09:00	884.2	2602.9	23672.1	NG	385.33
10/17/22 09:01	884.2	2598.5	23596.7	NG	384.64

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 09:02	884.2	2599.3	23584.8	NG	384.54
10/17/22 09:03	884.2	2601.3	23625.8	NG	384.29
10/17/22 09:04	884.1	2599.6	23626.4	NG	384.37
10/17/22 09:05	884.2	2597.2	23609.3	NG	385.13
10/17/22 09:06	884.2	2608.3	23660.1	NG	384.71
10/17/22 09:07	884.4	2597.5	23575.2	NG	383.79
10/17/22 09:08	884.3	2600.7	23603.7	NG	384.69
10/17/22 09:09	884.3	2601.3	23618.4	NG	384.41
10/17/22 09:10	884.4	2591.7	23601.6	NG	383.78
10/17/22 09:11	884.3	2593.1	23614.2	NG	384.50
10/17/22 09:12	884.2	2601.8	23619.5	NG	384.65
10/17/22 09:13	884.2	2596.8	23575.6	NG	384.06
10/17/22 09:14	884.2	2597.0	23560.7	NG	384.56
10/17/22 09:15	884.1	2594.7	23644.5	NG	384.64
10/17/22 09:16	884.0	2590.1	23556.5	NG	383.82
10/17/22 09:17	884.1	2595.1	23591.5	NG	384.32
10/17/22 09:18	884.1	2596.9	23605.6	NG	383.89
10/17/22 09:19	884.1	2584.4	23539.5	NG	383.96
10/17/22 09:20	883.9	2596.1	23613.3	NG	383.88
Run 1 Average	884.4	2605.2	23677.4	NG	385.6
Run 2					
10/17/22 09:35	884.0	2592.8	23554.7	NG	383.31
10/17/22 09:36	883.7	2588.6	23559.1	NG	383.58
10/17/22 09:37	883.7	2592.9	23541.9	NG	383.96
10/17/22 09:38	883.9	2591.2	23532.7	NG	383.13
10/17/22 09:39	884.0	2586.3	23504.0	NG	382.79
10/17/22 09:40	884.0	2585.2	23538.4	NG	382.84
10/17/22 09:41	884.1	2593.9	23596.8	NG	383.24
10/17/22 09:42	884.1	2595.5	23523.6	NG	382.53
10/17/22 09:43	884.0	2582.1	23485.8	NG	382.47
10/17/22 09:44	884.0	2591.7	23564.2	NG	383.33
10/17/22 09:45	884.0	2587.5	23501.6	NG	382.97
10/17/22 09:46	884.0	2591.2	23570.2	NG	383.16
10/17/22 09:47	883.8	2589.4	23593.4	NG	383.18
10/17/22 09:48	883.7	2582.7	23509.4	NG	382.93
10/17/22 09:49	883.7	2589.6	23565.5	NG	383.22
10/17/22 09:50	883.7	2587.9	23502.7	NG	382.69
10/17/22 09:51	883.7	2582.1	23550.9	NG	382.71
10/17/22 09:52	883.5	2587.4	23537.6	NG	383.19
10/17/22 09:53	883.7	2585.6	23501.4	NG	382.62
10/17/22 09:54	883.8	2583.9	23519.5	NG	382.54
10/17/22 09:55	883.6	2590.9	23499.8	NG	382.65

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 09:56	883.7	2579.1	23522.6	NG	382.42
10/17/22 09:57	883.7	2590.7	23488.5	NG	382.67
10/17/22 09:58	883.7	2587.3	23520.9	NG	382.82
10/17/22 09:59	883.7	2585.4	23516.0	NG	382.49
10/17/22 10:00	883.7	2582.1	23501.3	NG	382.52
10/17/22 10:01	883.6	2585.7	23454.6	NG	382.09
10/17/22 10:02	883.6	2578.0	23422.5	NG	382.17
10/17/22 10:03	883.6	2585.7	23472.1	NG	382.57
10/17/22 10:04	883.5	2577.1	23418.8	NG	382.04
10/17/22 10:05	883.5	2581.3	23523.9	NG	382.75
10/17/22 10:06	883.5	2586.1	23459.4	NG	382.56
10/17/22 10:07	883.4	2579.2	23449.0	NG	381.90
10/17/22 10:08	883.7	2582.1	23523.8	NG	382.70
10/17/22 10:09	884.1	2583.0	23475.8	NG	381.83
10/17/22 10:10	884.1	2586.3	23459.9	NG	382.47
10/17/22 10:11	883.6	2580.0	23497.1	NG	381.62
10/17/22 10:12	883.5	2576.5	23432.9	NG	381.56
10/17/22 10:13	883.5	2588.3	23478.7	NG	382.02
10/17/22 10:14	883.6	2587.2	23497.3	NG	381.88
10/17/22 10:15	883.7	2577.1	23435.1	NG	381.13
10/17/22 10:16	883.6	2581.5	23500.1	NG	381.56
10/17/22 10:17	883.6	2584.6	23480.6	NG	381.55
10/17/22 10:18	883.5	2570.1	23451.0	NG	380.85
10/17/22 10:19	883.5	2579.0	23448.6	NG	381.58
10/17/22 10:20	883.5	2578.1	23489.4	NG	381.28
10/17/22 10:21	883.4	2582.1	23437.5	NG	381.49
10/17/22 10:22	883.9	2586.8	23488.4	NG	382.26
10/17/22 10:23	884.0	2587.1	23509.4	NG	381.95
10/17/22 10:24	883.9	2584.1	23476.8	NG	381.47
10/17/22 10:25	883.8	2581.4	23481.4	NG	381.72
10/17/22 10:26	883.4	2580.8	23465.5	NG	381.39
10/17/22 10:27	883.1	2582.0	23423.9	NG	381.53
10/17/22 10:28	883.2	2582.8	23458.1	NG	382.15
10/17/22 10:29	883.3	2580.6	23439.4	NG	381.47
10/17/22 10:30	883.3	2578.2	23414.4	NG	381.55
10/17/22 10:31	883.2	2579.6	23453.8	NG	381.72
10/17/22 10:32	883.2	2568.7	23392.1	NG	381.15
10/17/22 10:33	883.2	2583.3	23517.5	NG	381.47
10/17/22 10:34	883.1	2574.6	23457.2	NG	380.90
10/17/22 10:35	883.2	2582.8	23502.2	NG	381.36
Run 2 Average	883.6	2584.0	23493.3	NG	382.26
Run 3					

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 10:45	883.0	2578.7	23449.0	NG	381.73
10/17/22 10:46	882.9	2581.2	23475.1	NG	381.79
10/17/22 10:47	882.8	2578.1	23475.7	NG	381.85
10/17/22 10:48	882.7	2587.0	23449.6	NG	381.89
10/17/22 10:49	882.8	2581.0	23482.4	NG	381.98
10/17/22 10:50	883.3	2587.6	23491.2	NG	382.00
10/17/22 10:51	883.5	2583.9	23502.7	NG	381.88
10/17/22 10:52	883.6	2584.0	23486.6	NG	381.43
10/17/22 10:53	883.6	2584.7	23534.2	NG	381.42
10/17/22 10:54	883.5	2588.5	23442.0	NG	381.28
10/17/22 10:55	883.5	2576.9	23402.3	NG	380.91
10/17/22 10:56	883.2	2584.4	23459.4	NG	381.74
10/17/22 10:57	882.8	2580.2	23477.6	NG	381.56
10/17/22 10:58	882.9	2576.4	23460.1	NG	381.33
10/17/22 10:59	882.8	2582.0	23485.1	NG	381.92
10/17/22 11:00	883.1	2577.7	23394.3	NG	381.42
10/17/22 11:01	882.8	2577.6	23463.5	NG	381.68
10/17/22 11:02	883.0	2582.2	23494.3	NG	381.87
10/17/22 11:03	882.7	2573.7	23449.3	NG	381.28
10/17/22 11:04	883.0	2582.7	23476.4	NG	381.74
10/17/22 11:05	883.4	2583.1	23464.4	NG	381.40
10/17/22 11:06	883.3	2575.6	23461.3	NG	381.25
10/17/22 11:07	883.3	2580.3	23489.8	NG	382.28
10/17/22 11:08	883.3	2578.5	23433.3	NG	381.13
10/17/22 11:09	883.5	2576.2	23412.1	NG	381.30
10/17/22 11:10	883.5	2578.4	23392.1	NG	381.01
10/17/22 11:11	883.5	2570.8	23448.5	NG	381.37
10/17/22 11:12	883.5	2578.5	23445.5	NG	381.58
10/17/22 11:13	883.1	2578.5	23440.4	NG	380.97
10/17/22 11:14	883.4	2578.4	23495.7	NG	381.27
10/17/22 11:15	883.0	2574.6	23447.6	NG	381.87
10/17/22 11:16	883.0	2588.6	23490.1	NG	381.66
10/17/22 11:17	883.0	2572.1	23456.6	NG	381.04
10/17/22 11:18	883.1	2579.7	23422.8	NG	381.61
10/17/22 11:19	883.1	2583.9	23500.9	NG	382.09
10/17/22 11:20	883.1	2586.3	23515.5	NG	381.57
10/17/22 11:21	883.2	2582.7	23477.2	NG	381.19
10/17/22 11:22	883.2	2585.2	23527.0	NG	381.87
10/17/22 11:23	883.2	2590.4	23534.7	NG	381.88
10/17/22 11:24	883.4	2578.4	23405.0	NG	381.35
10/17/22 11:25	883.6	2577.6	23460.7	NG	381.95
10/17/22 11:26	883.5	2587.3	23533.4	NG	382.14
10/17/22 11:27	883.6	2579.8	23447.1	NG	381.43

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 11:28	883.7	2579.6	23436.7	NG	381.19
10/17/22 11:29	883.5	2580.6	23478.0	NG	381.11
10/17/22 11:30	883.5	2585.9	23486.9	NG	381.71
10/17/22 11:31	883.3	2581.9	23412.7	NG	380.99
10/17/22 11:32	883.2	2586.5	23509.4	NG	381.42
10/17/22 11:33	883.3	2586.9	23521.2	NG	381.56
10/17/22 11:34	883.2	2577.5	23463.7	NG	381.12
10/17/22 11:35	883.2	2581.6	23486.8	NG	381.47
10/17/22 11:36	883.2	2585.3	23466.4	NG	381.47
10/17/22 11:37	883.3	2582.2	23455.8	NG	381.51
10/17/22 11:38	883.2	2585.4	23525.7	NG	381.88
10/17/22 11:39	883.2	2587.0	23542.1	NG	382.32
10/17/22 11:40	883.3	2584.6	23481.1	NG	381.85
10/17/22 11:41	883.3	2583.0	23467.6	NG	381.93
10/17/22 11:42	883.3	2578.6	23434.3	NG	381.43
10/17/22 11:43	883.2	2578.9	23437.5	NG	381.65
10/17/22 11:44	883.2	2583.9	23516.5	NG	381.95
10/17/22 11:45	883.1	2578.2	23458.7	NG	381.46
Run 3 Avergae	883.2	2581.3	23469.4	NG	381.57
Run 4					
10/17/22 11:55	883.2	2570.2	23353.2	NG	380.55
10/17/22 11:56	883.1	2574.6	23473.3	NG	381.03
10/17/22 11:57	883.0	2585.9	23488.2	NG	381.88
10/17/22 11:58	883.0	2583.0	23451.6	NG	381.09
10/17/22 11:59	883.1	2577.9	23428.7	NG	381.13
10/17/22 12:00	883.0	2578.5	23376.0	NG	380.98
10/17/22 12:01	883.2	2569.3	23376.8	NG	380.60
10/17/22 12:02	883.1	2579.2	23475.2	NG	380.68
10/17/22 12:03	883.0	2582.5	23451.3	NG	381.37
10/17/22 12:04	882.9	2576.9	23437.4	NG	380.84
10/17/22 12:05	882.9	2572.1	23429.9	NG	380.37
10/17/22 12:06	882.9	2581.3	23456.9	NG	381.32
10/17/22 12:07	883.1	2579.2	23395.9	NG	380.62
10/17/22 12:08	883.1	2567.1	23383.9	NG	380.31
10/17/22 12:09	883.0	2582.5	23468.6	NG	381.73
10/17/22 12:10	883.0	2573.5	23375.7	NG	380.82
10/17/22 12:11	882.9	2583.9	23476.5	NG	381.24
10/17/22 12:12	882.9	2579.0	23443.4	NG	381.02
10/17/22 12:13	882.9	2572.2	23443.6	NG	380.97
10/17/22 12:14	882.9	2579.7	23420.7	NG	381.07
10/17/22 12:15	882.9	2574.9	23390.4	NG	380.88
10/17/22 12:16	882.7	2577.3	23468.3	NG	381.30

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 12:17	882.8	2580.9	23405.7	NG	380.78
10/17/22 12:18	882.7	2575.8	23384.3	NG	380.65
10/17/22 12:19	882.7	2584.2	23460.0	NG	381.21
10/17/22 12:20	882.9	2578.3	23367.5	NG	380.77
10/17/22 12:21	882.9	2579.1	23469.5	NG	380.24
10/17/22 12:22	882.9	2574.8	23370.7	NG	380.75
10/17/22 12:23	882.7	2579.0	23420.3	NG	380.94
10/17/22 12:24	882.7	2569.3	23373.4	NG	380.64
10/17/22 12:25	882.7	2578.1	23486.6	NG	380.74
10/17/22 12:26	882.7	2581.6	23513.4	NG	380.95
10/17/22 12:27	882.9	2574.3	23408.8	NG	380.28
10/17/22 12:28	882.8	2580.3	23428.7	NG	380.61
10/17/22 12:29	882.8	2583.4	23480.6	NG	381.20
10/17/22 12:30	882.8	2578.3	23457.5	NG	380.68
10/17/22 12:31	882.8	2577.5	23414.8	NG	380.73
10/17/22 12:32	882.9	2580.1	23454.8	NG	380.65
10/17/22 12:33	883.0	2571.6	23346.4	NG	379.53
10/17/22 12:34	883.0	2574.0	23368.7	NG	379.82
10/17/22 12:35	883.0	2574.8	23398.0	NG	379.84
10/17/22 12:36	882.9	2573.7	23361.3	NG	380.13
10/17/22 12:37	882.9	2577.8	23396.3	NG	380.13
10/17/22 12:38	882.9	2569.4	23331.5	NG	379.10
10/17/22 12:39	882.9	2569.0	23317.1	NG	379.27
10/17/22 12:40	882.7	2573.8	23344.2	NG	379.40
10/17/22 12:41	882.6	2565.9	23268.6	NG	379.05
10/17/22 12:42	882.6	2567.3	23300.8	NG	379.27
10/17/22 12:43	882.7	2574.9	23380.0	NG	379.70
10/17/22 12:44	882.7	2567.3	23351.4	NG	379.49
10/17/22 12:45	882.7	2574.6	23358.7	NG	379.64
10/17/22 12:46	882.7	2570.5	23366.7	NG	379.72
10/17/22 12:47	882.7	2569.9	23363.0	NG	379.13
10/17/22 12:48	882.6	2573.5	23421.4	NG	379.52
10/17/22 12:49	882.7	2581.4	23402.0	NG	380.10
10/17/22 12:50	882.6	2576.5	23378.6	NG	379.84
10/17/22 12:51	882.7	2572.0	23359.1	NG	379.56
10/17/22 12:52	882.7	2578.0	23427.3	NG	379.85
10/17/22 12:53	882.7	2575.9	23380.0	NG	380.06
10/17/22 12:54	882.7	2570.5	23452.8	NG	380.55
10/17/22 12:55	882.7	2574.2	23418.0	NG	380.56
Run 4 Average	882.9	2575.9	23407.4	NG	380.4
Run 5					
10/17/22 13:05	882.7	2572.4	23405.3	NG	380.46

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 13:06	882.6	2571.5	23405.7	NG	380.29
10/17/22 13:07	882.6	2570.4	23399.9	NG	380.14
10/17/22 13:08	882.6	2565.4	23349.8	NG	379.53
10/17/22 13:09	882.7	2576.1	23438.0	NG	380.69
10/17/22 13:10	882.7	2576.1	23421.0	NG	380.17
10/17/22 13:11	882.7	2563.9	23282.2	NG	379.33
10/17/22 13:12	882.7	2569.7	23420.9	NG	379.87
10/17/22 13:13	882.7	2576.6	23410.8	NG	380.53
10/17/22 13:14	882.8	2570.0	23302.2	NG	379.76
10/17/22 13:15	882.9	2562.9	23322.3	NG	379.57
10/17/22 13:16	882.9	2576.7	23444.3	NG	380.13
10/17/22 13:17	882.8	2563.6	23369.5	NG	379.76
10/17/22 13:18	882.8	2569.8	23406.2	NG	379.84
10/17/22 13:19	882.9	2569.6	23385.2	NG	380.27
10/17/22 13:20	882.8	2572.0	23352.2	NG	379.64
10/17/22 13:21	882.7	2571.5	23425.2	NG	380.14
10/17/22 13:22	882.6	2575.2	23409.6	NG	380.35
10/17/22 13:23	882.7	2567.5	23375.2	NG	379.57
10/17/22 13:24	882.7	2573.4	23408.4	NG	379.92
10/17/22 13:25	882.7	2575.9	23369.1	NG	379.90
10/17/22 13:26	882.7	2568.6	23357.8	NG	379.16
10/17/22 13:27	882.7	2568.8	23394.5	NG	379.97
10/17/22 13:28	882.5	2574.1	23392.3	NG	379.80
10/17/22 13:29	882.6	2567.1	23360.9	NG	379.68
10/17/22 13:30	882.5	2569.9	23388.0	NG	379.71
10/17/22 13:31	882.5	2570.7	23342.4	NG	379.74
10/17/22 13:32	882.6	2565.7	23323.3	NG	379.51
10/17/22 13:33	882.6	2572.3	23354.6	NG	379.67
10/17/22 13:34	882.6	2570.0	23351.2	NG	379.69
10/17/22 13:35	882.6	2568.6	23384.2	NG	379.55
10/17/22 13:36	882.6	2569.8	23346.0	NG	379.32
10/17/22 13:37	882.6	2575.3	23413.7	NG	380.33
10/17/22 13:38	882.4	2570.5	23388.8	NG	379.63
10/17/22 13:39	882.5	2568.1	23332.9	NG	379.99
10/17/22 13:40	882.5	2575.2	23415.0	NG	380.12
10/17/22 13:41	882.5	2574.7	23382.8	NG	380.27
10/17/22 13:42	882.5	2563.1	23332.8	NG	379.36
10/17/22 13:43	882.5	2568.6	23369.5	NG	380.07
10/17/22 13:44	882.7	2574.9	23376.2	NG	379.69
10/17/22 13:45	882.8	2564.0	23342.2	NG	379.68
10/17/22 13:46	883.0	2571.6	23430.9	NG	380.00
10/17/22 13:47	882.5	2572.4	23406.2	NG	380.33
10/17/22 13:48	882.5	2572.7	23415.5	NG	380.10

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 13:49	882.5	2570.3	23391.1	NG	380.44
10/17/22 13:50	882.4	2572.8	23392.2	NG	380.24
10/17/22 13:51	882.4	2575.7	23417.4	NG	380.32
10/17/22 13:52	882.4	2569.5	23363.0	NG	379.92
10/17/22 13:53	882.4	2568.8	23392.5	NG	380.24
10/17/22 13:54	882.4	2573.0	23400.4	NG	380.28
10/17/22 13:55	882.3	2571.7	23409.9	NG	380.25
10/17/22 13:56	882.3	2574.4	23384.6	NG	380.30
10/17/22 13:57	882.7	2565.6	23339.8	NG	380.49
10/17/22 13:58	883.0	2576.8	23412.7	NG	380.26
10/17/22 13:59	882.6	2573.0	23385.3	NG	380.41
10/17/22 14:00	882.3	2571.7	23397.7	NG	380.11
10/17/22 14:01	882.3	2572.4	23401.8	NG	380.33
10/17/22 14:02	882.4	2574.6	23388.4	NG	379.99
10/17/22 14:03	882.4	2573.2	23391.1	NG	379.91
10/17/22 14:04	882.4	2571.1	23408.9	NG	380.18
10/17/22 14:05	882.4	2576.2	23442.6	NG	380.97
Run 5 Average	882.6	2571.1	23384.0	NG	380.0
Run 6					
10/17/22 14:20	882.4	2566.1	23350.9	NG	379.39
10/17/22 14:21	883.2	2571.9	23435.6	NG	380.19
10/17/22 14:22	883.1	2573.6	23379.6	NG	380.14
10/17/22 14:23	883.3	2563.8	23323.1	NG	379.58
10/17/22 14:24	883.2	2569.0	23372.3	NG	379.47
10/17/22 14:25	882.6	2581.4	23429.6	NG	379.68
10/17/22 14:26	882.5	2575.0	23404.4	NG	380.14
10/17/22 14:27	882.5	2566.8	23338.4	NG	379.69
10/17/22 14:28	882.6	2570.0	23350.7	NG	379.99
10/17/22 14:29	882.6	2568.6	23396.4	NG	380.23
10/17/22 14:30	882.5	2572.7	23385.3	NG	380.46
10/17/22 14:31	882.6	2571.5	23376.6	NG	379.70
10/17/22 14:32	883.0	2569.3	23374.8	NG	379.68
10/17/22 14:33	883.3	2570.8	23365.1	NG	379.68
10/17/22 14:34	883.3	2573.8	23422.0	NG	379.93
10/17/22 14:35	883.4	2567.6	23320.0	NG	379.37
10/17/22 14:36	883.4	2566.2	23375.4	NG	379.35
10/17/22 14:37	883.1	2562.6	23267.5	NG	378.96
10/17/22 14:38	882.8	2566.6	23316.3	NG	379.28
10/17/22 14:39	882.7	2565.2	23375.5	NG	379.33
10/17/22 14:40	882.6	2559.3	23297.1	NG	378.86
10/17/22 14:41	882.6	2561.0	23321.0	NG	379.30
10/17/22 14:42	882.5	2565.2	23370.6	NG	379.27

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 14:43	882.6	2570.3	23356.3	NG	379.78
10/17/22 14:44	883.0	2570.7	23394.6	NG	379.64
10/17/22 14:45	883.0	2572.6	23433.5	NG	379.80
10/17/22 14:46	883.0	2571.4	23378.5	NG	379.51
10/17/22 14:47	883.0	2568.6	23347.2	NG	379.26
10/17/22 14:48	883.1	2572.7	23362.6	NG	379.63
10/17/22 14:49	883.0	2568.8	23354.7	NG	379.75
10/17/22 14:50	882.8	2572.1	23399.8	NG	379.71
10/17/22 14:51	882.3	2576.2	23451.3	NG	380.04
10/17/22 14:52	882.4	2580.2	23416.3	NG	380.02
10/17/22 14:53	882.3	2572.5	23454.9	NG	380.09
10/17/22 14:54	882.4	2579.5	23415.2	NG	380.45
10/17/22 14:55	882.7	2574.2	23409.1	NG	380.28
10/17/22 14:56	883.1	2570.9	23382.9	NG	380.70
10/17/22 14:57	883.0	2571.8	23405.4	NG	380.74
10/17/22 14:58	883.1	2581.5	23452.7	NG	380.64
10/17/22 14:59	883.2	2576.7	23344.8	NG	380.05
10/17/22 15:00	883.2	2569.5	23419.3	NG	380.03
10/17/22 15:01	883.2	2574.3	23389.7	NG	380.32
10/17/22 15:02	883.2	2571.5	23346.3	NG	379.58
10/17/22 15:03	883.0	2573.8	23371.6	NG	379.94
10/17/22 15:04	883.0	2568.4	23360.6	NG	380.12
10/17/22 15:05	883.2	2563.9	23335.6	NG	379.51
10/17/22 15:06	883.1	2571.1	23338.6	NG	379.72
10/17/22 15:07	883.1	2567.9	23364.7	NG	379.61
10/17/22 15:08	883.0	2562.4	23284.2	NG	379.25
10/17/22 15:09	883.1	2566.5	23381.4	NG	379.89
10/17/22 15:10	883.1	2571.6	23352.1	NG	379.56
10/17/22 15:11	883.1	2566.1	23324.1	NG	379.26
10/17/22 15:12	883.1	2565.8	23312.9	NG	379.29
10/17/22 15:13	883.1	2565.8	23344.9	NG	379.27
10/17/22 15:14	883.0	2569.8	23379.9	NG	379.75
10/17/22 15:15	882.9	2568.4	23357.5	NG	379.38
10/17/22 15:16	882.7	2569.3	23360.1	NG	379.98
10/17/22 15:17	882.8	2573.9	23373.8	NG	380.57
10/17/22 15:18	883.1	2575.6	23438.6	NG	380.42
10/17/22 15:19	883.1	2572.8	23393.9	NG	380.15
10/17/22 15:20	883.2	2571.1	23406.8	NG	379.99
Run 6 Average	882.9	2570.3	23372.9	NG	379.8
Run 7					
10/17/22 15:35	882.9	2573.2	23370.3	NG	380.59
10/17/22 15:36	883.0	2577.2	23388.9	NG	380.78

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 15:37	882.9	2578.0	23408.0	NG	380.89
10/17/22 15:38	882.8	2573.9	23430.9	NG	381.06
10/17/22 15:39	882.9	2570.9	23362.6	NG	379.97
10/17/22 15:40	882.9	2571.8	23409.5	NG	380.90
10/17/22 15:41	882.9	2573.0	23336.7	NG	380.39
10/17/22 15:42	882.8	2562.6	23308.2	NG	380.07
10/17/22 15:43	882.9	2577.4	23427.2	NG	380.54
10/17/22 15:44	882.7	2569.8	23384.0	NG	380.15
10/17/22 15:45	882.9	2574.9	23338.4	NG	380.90
10/17/22 15:46	882.9	2573.5	23415.1	NG	380.65
10/17/22 15:47	882.9	2572.0	23361.3	NG	380.20
10/17/22 15:48	882.9	2576.7	23396.3	NG	380.83
10/17/22 15:49	882.8	2575.7	23422.4	NG	380.80
10/17/22 15:50	882.9	2580.0	23433.2	NG	380.89
10/17/22 15:51	882.9	2576.4	23382.8	NG	380.65
10/17/22 15:52	882.8	2572.1	23389.1	NG	380.48
10/17/22 15:53	882.6	2577.8	23457.0	NG	381.13
10/17/22 15:54	882.6	2573.1	23362.7	NG	380.89
10/17/22 15:55	882.6	2570.5	23364.8	NG	380.18
10/17/22 15:56	882.6	2574.1	23436.7	NG	380.83
10/17/22 15:57	882.7	2580.3	23370.3	NG	380.64
10/17/22 15:58	882.7	2570.1	23371.0	NG	380.17
10/17/22 15:59	882.7	2568.9	23420.8	NG	380.35
10/17/22 16:00	882.6	2573.7	23376.1	NG	380.06
10/17/22 16:01	882.6	2575.5	23442.2	NG	381.04
10/17/22 16:02	882.6	2582.4	23450.0	NG	380.90
10/17/22 16:03	882.3	2573.1	23402.3	NG	380.72
10/17/22 16:04	882.2	2576.0	23427.0	NG	380.98
10/17/22 16:05	882.1	2579.6	23459.0	NG	381.04
10/17/22 16:06	882.1	2573.3	23407.5	NG	380.94
10/17/22 16:07	882.7	2581.6	23444.0	NG	381.06
10/17/22 16:08	882.7	2579.8	23436.3	NG	381.29
10/17/22 16:09	882.6	2575.9	23438.4	NG	381.08
10/17/22 16:10	882.6	2578.8	23462.2	NG	381.16
10/17/22 16:11	882.6	2580.0	23442.8	NG	381.48
10/17/22 16:12	882.6	2575.9	23373.8	NG	380.66
10/17/22 16:13	882.7	2576.7	23454.7	NG	381.02
10/17/22 16:14	882.7	2583.0	23431.9	NG	380.98
10/17/22 16:15	882.6	2578.5	23437.4	NG	381.15
10/17/22 16:16	882.4	2576.6	23473.7	NG	381.33
10/17/22 16:17	882.4	2580.4	23468.1	NG	382.12
10/17/22 16:18	882.6	2579.4	23438.8	NG	381.13
10/17/22 16:19	882.5	2584.0	23428.8	NG	381.44

McDonough 4B ICR Process Data

Average Gaseous Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 16:20	882.6	2587.3	23464.6	NG	382.18
10/17/22 16:21	882.6	2578.6	23379.7	NG	381.39
10/17/22 16:22	882.6	2582.1	23451.1	NG	381.70
10/17/22 16:23	882.6	2583.4	23514.0	NG	381.68
10/17/22 16:24	882.7	2574.0	23436.7	NG	381.33
10/17/22 16:25	882.6	2582.4	23500.0	NG	381.95
10/17/22 16:26	882.3	2585.8	23485.4	NG	381.53
10/17/22 16:27	882.0	2580.4	23417.5	NG	381.60
10/17/22 16:28	881.9	2589.7	23530.9	NG	381.85
10/17/22 16:29	881.9	2581.7	23488.8	NG	381.80
10/17/22 16:30	881.9	2582.6	23496.4	NG	382.18
10/17/22 16:31	881.9	2582.1	23492.3	NG	382.34
10/17/22 16:32	882.5	2585.8	23526.0	NG	382.21
10/17/22 16:33	882.5	2587.5	23533.2	NG	382.39
10/17/22 16:34	882.6	2589.0	23527.9	NG	382.87
10/17/22 16:35	882.7	2594.2	23547.4	NG	382.75
Run 7 Average	882.6	2577.9	23430.1	NG	381.12

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
Run 1					
10/17/22 08:43	884.3	2610.1	23735.3	NG	386.45
10/17/22 08:44	884.2	2611.2	23744.0	NG	386.38
10/17/22 08:45	884.3	2608.6	23669.8	NG	385.65
10/17/22 08:46	884.3	2613.0	23774.0	NG	386.44
10/17/22 08:47	884.4	2609.1	23691.1	NG	385.99
10/17/22 08:48	884.6	2601.9	23680.3	NG	385.62
10/17/22 08:49	884.6	2607.9	23748.2	NG	386.27
10/17/22 08:50	884.6	2607.7	23631.4	NG	385.90
10/17/22 08:51	884.6	2604.7	23675.8	NG	385.18
10/17/22 08:52	884.7	2604.0	23690.0	NG	386.00
10/17/22 08:53	884.7	2597.1	23600.3	NG	384.93
10/17/22 08:54	884.5	2598.0	23651.3	NG	385.49
10/17/22 08:55	884.5	2612.0	23715.4	NG	385.83
10/17/22 08:56	884.5	2601.0	23570.2	NG	385.12
10/17/22 08:57	884.5	2603.9	23697.4	NG	385.46
10/17/22 08:58	884.3	2600.3	23659.4	NG	385.02
10/17/22 08:59	884.3	2595.1	23620.4	NG	384.94
10/17/22 09:00	884.2	2602.9	23672.1	NG	385.33
10/17/22 09:01	884.2	2598.5	23596.7	NG	384.64
10/17/22 09:02	884.2	2599.3	23584.8	NG	384.54
10/17/22 09:03	884.2	2601.3	23625.8	NG	384.29
10/17/22 09:04	884.1	2599.6	23626.4	NG	384.37
10/17/22 09:05	884.2	2597.2	23609.3	NG	385.13
10/17/22 09:06	884.2	2608.3	23660.1	NG	384.71
10/17/22 09:07	884.4	2597.5	23575.2	NG	383.79
10/17/22 09:08	884.3	2600.7	23603.7	NG	384.69
10/17/22 09:09	884.3	2601.3	23618.4	NG	384.41
10/17/22 09:10	884.4	2591.7	23601.6	NG	383.78
10/17/22 09:11	884.3	2593.1	23614.2	NG	384.50
10/17/22 09:12	884.2	2601.8	23619.5	NG	384.65
10/17/22 09:13	884.2	2596.8	23575.6	NG	384.06
10/17/22 09:14	884.2	2597.0	23560.7	NG	384.56
10/17/22 09:15	884.1	2594.7	23644.5	NG	384.64
10/17/22 09:16	884.0	2590.1	23556.5	NG	383.82
10/17/22 09:17	884.1	2595.1	23591.5	NG	384.32
10/17/22 09:18	884.1	2596.9	23605.6	NG	383.89
10/17/22 09:19	884.1	2584.4	23539.5	NG	383.96
10/17/22 09:20	883.9	2596.1	23613.3	NG	383.88
10/17/22 09:21	883.9	2593.7	23564.8	NG	383.91
10/17/22 09:22	884.0	2589.8	23560.1	NG	383.86
10/17/22 09:23	884.0	2594.9	23594.3	NG	384.25
10/17/22 09:24	884.0	2591.3	23536.8	NG	383.52

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 09:25	884.1	2589.6	23514.0	NG	383.31
10/17/22 09:26	884.2	2595.9	23615.0	NG	383.85
10/17/22 09:27	884.2	2592.2	23508.0	NG	383.25
10/17/22 09:28	884.2	2594.2	23630.3	NG	383.39
10/17/22 09:29	884.3	2601.0	23563.1	NG	383.65
10/17/22 09:30	884.2	2587.7	23491.6	NG	383.06
10/17/22 09:31	884.2	2593.3	23583.3	NG	384.35
10/17/22 09:32	884.1	2597.4	23576.7	NG	383.50
10/17/22 09:33	884.1	2587.8	23519.9	NG	383.42
10/17/22 09:34	884.0	2595.7	23607.6	NG	384.45
10/17/22 09:35	884.0	2592.8	23554.7	NG	383.31
10/17/22 09:36	883.7	2588.6	23559.1	NG	383.58
10/17/22 09:37	883.7	2592.9	23541.9	NG	383.96
10/17/22 09:38	883.9	2591.2	23532.7	NG	383.13
10/17/22 09:39	884.0	2586.3	23504.0	NG	382.79
10/17/22 09:40	884.0	2585.2	23538.4	NG	382.84
10/17/22 09:41	884.1	2593.9	23596.8	NG	383.24
10/17/22 09:42	884.1	2595.5	23523.6	NG	382.53
10/17/22 09:43	884.0	2582.1	23485.8	NG	382.47
10/17/22 09:44	884.0	2591.7	23564.2	NG	383.33
10/17/22 09:45	884.0	2587.5	23501.6	NG	382.97
10/17/22 09:46	884.0	2591.2	23570.2	NG	383.16
10/17/22 09:47	883.8	2589.4	23593.4	NG	383.18
10/17/22 09:48	883.7	2582.7	23509.4	NG	382.93
10/17/22 09:49	883.7	2589.6	23565.5	NG	383.22
10/17/22 09:50	883.7	2587.9	23502.7	NG	382.69
10/17/22 09:51	883.7	2582.1	23550.9	NG	382.71
10/17/22 09:52	883.5	2587.4	23537.6	NG	383.19
10/17/22 09:53	883.7	2585.6	23501.4	NG	382.62
10/17/22 09:54	883.8	2583.9	23519.5	NG	382.54
10/17/22 09:55	883.6	2590.9	23499.8	NG	382.65
10/17/22 09:56	883.7	2579.1	23522.6	NG	382.42
10/17/22 09:57	883.7	2590.7	23488.5	NG	382.67
10/17/22 09:58	883.7	2587.3	23520.9	NG	382.82
10/17/22 09:59	883.7	2585.4	23516.0	NG	382.49
10/17/22 10:00	883.7	2582.1	23501.3	NG	382.52
10/17/22 10:01	883.6	2585.7	23454.6	NG	382.09
10/17/22 10:02	883.6	2578.0	23422.5	NG	382.17
10/17/22 10:03	883.6	2585.7	23472.1	NG	382.57
10/17/22 10:04	883.5	2577.1	23418.8	NG	382.04
10/17/22 10:05	883.5	2581.3	23523.9	NG	382.75
10/17/22 10:06	883.5	2586.1	23459.4	NG	382.56
10/17/22 10:07	883.4	2579.2	23449.0	NG	381.90

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 10:08	883.7	2582.1	23523.8	NG	382.70
10/17/22 10:09	884.1	2583.0	23475.8	NG	381.83
10/17/22 10:10	884.1	2586.3	23459.9	NG	382.47
10/17/22 10:11	883.6	2580.0	23497.1	NG	381.62
10/17/22 10:12	883.5	2576.5	23432.9	NG	381.56
10/17/22 10:13	883.5	2588.3	23478.7	NG	382.02
10/17/22 10:14	883.6	2587.2	23497.3	NG	381.88
10/17/22 10:15	883.7	2577.1	23435.1	NG	381.13
10/17/22 10:16	883.6	2581.5	23500.1	NG	381.56
10/17/22 10:17	883.6	2584.6	23480.6	NG	381.55
10/17/22 10:18	883.5	2570.1	23451.0	NG	380.85
10/17/22 10:19	883.5	2579.0	23448.6	NG	381.58
10/17/22 10:20	883.5	2578.1	23489.4	NG	381.28
10/17/22 10:21	883.4	2582.1	23437.5	NG	381.49
10/17/22 10:22	883.9	2586.8	23488.4	NG	382.26
10/17/22 10:23	884.0	2587.1	23509.4	NG	381.95
10/17/22 10:24	883.9	2584.1	23476.8	NG	381.47
10/17/22 10:25	883.8	2581.4	23481.4	NG	381.72
10/17/22 10:26	883.4	2580.8	23465.5	NG	381.39
10/17/22 10:27	883.1	2582.0	23423.9	NG	381.53
10/17/22 10:28	883.2	2582.8	23458.1	NG	382.15
10/17/22 10:29	883.3	2580.6	23439.4	NG	381.47
10/17/22 10:30	883.3	2578.2	23414.4	NG	381.55
10/17/22 10:31	883.2	2579.6	23453.8	NG	381.72
10/17/22 10:32	883.2	2568.7	23392.1	NG	381.15
10/17/22 10:33	883.2	2583.3	23517.5	NG	381.47
10/17/22 10:34	883.1	2574.6	23457.2	NG	380.90
10/17/22 10:35	883.2	2582.8	23502.2	NG	381.36
10/17/22 10:36	883.7	2582.0	23489.0	NG	381.86
10/17/22 10:37	883.6	2575.8	23466.2	NG	381.15
10/17/22 10:38	883.6	2576.7	23425.9	NG	381.47
10/17/22 10:39	883.6	2578.8	23416.8	NG	381.47
10/17/22 10:40	883.6	2577.6	23463.0	NG	381.48
10/17/22 10:41	883.5	2578.7	23450.3	NG	381.40
10/17/22 10:42	883.1	2579.1	23457.5	NG	381.67
10/17/22 10:43	883.0	2585.0	23484.2	NG	381.58
10/17/22 10:44	883.0	2581.0	23453.9	NG	381.60
10/17/22 10:45	883.0	2578.7	23449.0	NG	381.73
10/17/22 10:46	882.9	2581.2	23475.1	NG	381.79
10/17/22 10:47	882.8	2578.1	23475.7	NG	381.85
10/17/22 10:48	882.7	2587.0	23449.6	NG	381.89
10/17/22 10:49	882.8	2581.0	23482.4	NG	381.98
10/17/22 10:50	883.3	2587.6	23491.2	NG	382.00

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 10:51	883.5	2583.9	23502.7	NG	381.88
10/17/22 10:52	883.6	2584.0	23486.6	NG	381.43
10/17/22 10:53	883.6	2584.7	23534.2	NG	381.42
10/17/22 10:54	883.5	2588.5	23442.0	NG	381.28
10/17/22 10:55	883.5	2576.9	23402.3	NG	380.91
10/17/22 10:56	883.2	2584.4	23459.4	NG	381.74
10/17/22 10:57	882.8	2580.2	23477.6	NG	381.56
10/17/22 10:58	882.9	2576.4	23460.1	NG	381.33
10/17/22 10:59	882.8	2582.0	23485.1	NG	381.92
10/17/22 11:00	883.1	2577.7	23394.3	NG	381.42
10/17/22 11:01	882.8	2577.6	23463.5	NG	381.68
10/17/22 11:02	883.0	2582.2	23494.3	NG	381.87
10/17/22 11:03	882.7	2573.7	23449.3	NG	381.28
10/17/22 11:04	883.0	2582.7	23476.4	NG	381.74
10/17/22 11:05	883.4	2583.1	23464.4	NG	381.40
10/17/22 11:06	883.3	2575.6	23461.3	NG	381.25
10/17/22 11:07	883.3	2580.3	23489.8	NG	382.28
10/17/22 11:08	883.3	2578.5	23433.3	NG	381.13
10/17/22 11:09	883.5	2576.2	23412.1	NG	381.30
10/17/22 11:10	883.5	2578.4	23392.1	NG	381.01
10/17/22 11:11	883.5	2570.8	23448.5	NG	381.37
10/17/22 11:12	883.5	2578.5	23445.5	NG	381.58
10/17/22 11:13	883.1	2578.5	23440.4	NG	380.97
10/17/22 11:14	883.4	2578.4	23495.7	NG	381.27
10/17/22 11:15	883.0	2574.6	23447.6	NG	381.87
10/17/22 11:16	883.0	2588.6	23490.1	NG	381.66
10/17/22 11:17	883.0	2572.1	23456.6	NG	381.04
10/17/22 11:18	883.1	2579.7	23422.8	NG	381.61
10/17/22 11:19	883.1	2583.9	23500.9	NG	382.09
10/17/22 11:20	883.1	2586.3	23515.5	NG	381.57
10/17/22 11:21	883.2	2582.7	23477.2	NG	381.19
10/17/22 11:22	883.2	2585.2	23527.0	NG	381.87
10/17/22 11:23	883.2	2590.4	23534.7	NG	381.88
10/17/22 11:24	883.4	2578.4	23405.0	NG	381.35
10/17/22 11:25	883.6	2577.6	23460.7	NG	381.95
10/17/22 11:26	883.5	2587.3	23533.4	NG	382.14
10/17/22 11:27	883.6	2579.8	23447.1	NG	381.43
10/17/22 11:28	883.7	2579.6	23436.7	NG	381.19
10/17/22 11:29	883.5	2580.6	23478.0	NG	381.11
10/17/22 11:30	883.5	2585.9	23486.9	NG	381.71
10/17/22 11:31	883.3	2581.9	23412.7	NG	380.99
10/17/22 11:32	883.2	2586.5	23509.4	NG	381.42
10/17/22 11:33	883.3	2586.9	23521.2	NG	381.56

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 11:34	883.2	2577.5	23463.7	NG	381.12
10/17/22 11:35	883.2	2581.6	23486.8	NG	381.47
10/17/22 11:36	883.2	2585.3	23466.4	NG	381.47
10/17/22 11:37	883.3	2582.2	23455.8	NG	381.51
10/17/22 11:38	883.2	2585.4	23525.7	NG	381.88
10/17/22 11:39	883.2	2587.0	23542.1	NG	382.32
10/17/22 11:40	883.3	2584.6	23481.1	NG	381.85
10/17/22 11:41	883.3	2583.0	23467.6	NG	381.93
10/17/22 11:42	883.3	2578.6	23434.3	NG	381.43
10/17/22 11:43	883.2	2578.9	23437.5	NG	381.65
10/17/22 11:44	883.2	2583.9	23516.5	NG	381.95
10/17/22 11:45	883.1	2578.2	23458.7	NG	381.46
10/17/22 11:46	883.2	2581.2	23387.1	NG	381.49
10/17/22 11:47	883.1	2582.8	23448.0	NG	381.71
10/17/22 11:48	883.1	2579.6	23413.3	NG	381.26
10/17/22 11:49	883.1	2572.1	23435.0	NG	380.80
10/17/22 11:50	883.1	2584.2	23480.5	NG	381.85
10/17/22 11:51	883.1	2584.7	23500.8	NG	381.90
10/17/22 11:52	883.2	2585.2	23446.3	NG	381.30
10/17/22 11:53	883.2	2581.2	23496.6	NG	381.47
10/17/22 11:54	883.2	2576.7	23401.5	NG	381.16
10/17/22 11:55	883.2	2570.2	23353.2	NG	380.55
10/17/22 11:56	883.1	2574.6	23473.3	NG	381.03
10/17/22 11:57	883.0	2585.9	23488.2	NG	381.88
10/17/22 11:58	883.0	2583.0	23451.6	NG	381.09
10/17/22 11:59	883.1	2577.9	23428.7	NG	381.13
10/17/22 12:00	883.0	2578.5	23376.0	NG	380.98
10/17/22 12:01	883.2	2569.3	23376.8	NG	380.60
10/17/22 12:02	883.1	2579.2	23475.2	NG	380.68
10/17/22 12:03	883.0	2582.5	23451.3	NG	381.37
10/17/22 12:04	882.9	2576.9	23437.4	NG	380.84
10/17/22 12:05	882.9	2572.1	23429.9	NG	380.37
10/17/22 12:06	882.9	2581.3	23456.9	NG	381.32
10/17/22 12:07	883.1	2579.2	23395.9	NG	380.62
10/17/22 12:08	883.1	2567.1	23383.9	NG	380.31
10/17/22 12:09	883.0	2582.5	23468.6	NG	381.73
10/17/22 12:10	883.0	2573.5	23375.7	NG	380.82
10/17/22 12:11	882.9	2583.9	23476.5	NG	381.24
10/17/22 12:12	882.9	2579.0	23443.4	NG	381.02
Run 1 Average	883.6	2586.0	23508.1	NG	382.5
Run 2					
10/17/22 12:34	883.0	2574.0	23368.7	NG	379.82

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 12:35	883.0	2574.8	23398.0	NG	379.84
10/17/22 12:36	882.9	2573.7	23361.3	NG	380.13
10/17/22 12:37	882.9	2577.8	23396.3	NG	380.13
10/17/22 12:38	882.9	2569.4	23331.5	NG	379.10
10/17/22 12:39	882.9	2569.0	23317.1	NG	379.27
10/17/22 12:40	882.7	2573.8	23344.2	NG	379.40
10/17/22 12:41	882.6	2565.9	23268.6	NG	379.05
10/17/22 12:42	882.6	2567.3	23300.8	NG	379.27
10/17/22 12:43	882.7	2574.9	23380.0	NG	379.70
10/17/22 12:44	882.7	2567.3	23351.4	NG	379.49
10/17/22 12:45	882.7	2574.6	23358.7	NG	379.64
10/17/22 12:46	882.7	2570.5	23366.7	NG	379.72
10/17/22 12:47	882.7	2569.9	23363.0	NG	379.13
10/17/22 12:48	882.6	2573.5	23421.4	NG	379.52
10/17/22 12:49	882.7	2581.4	23402.0	NG	380.10
10/17/22 12:50	882.6	2576.5	23378.6	NG	379.84
10/17/22 12:51	882.7	2572.0	23359.1	NG	379.56
10/17/22 12:52	882.7	2578.0	23427.3	NG	379.85
10/17/22 12:53	882.7	2575.9	23380.0	NG	380.06
10/17/22 12:54	882.7	2570.5	23452.8	NG	380.55
10/17/22 12:55	882.7	2574.2	23418.0	NG	380.56
10/17/22 12:56	882.7	2568.7	23367.2	NG	379.58
10/17/22 12:57	882.7	2575.1	23404.9	NG	380.60
10/17/22 12:58	882.7	2578.7	23398.0	NG	380.43
10/17/22 12:59	882.8	2573.9	23372.1	NG	379.92
10/17/22 13:00	882.7	2576.4	23402.1	NG	380.55
10/17/22 13:01	882.8	2584.0	23493.6	NG	381.10
10/17/22 13:02	882.7	2578.1	23396.5	NG	380.56
10/17/22 13:03	882.8	2569.8	23372.6	NG	380.41
10/17/22 13:04	882.7	2574.8	23419.1	NG	380.75
10/17/22 13:05	882.7	2572.4	23405.3	NG	380.46
10/17/22 13:06	882.6	2571.5	23405.7	NG	380.29
10/17/22 13:07	882.6	2570.4	23399.9	NG	380.14
10/17/22 13:08	882.6	2565.4	23349.8	NG	379.53
10/17/22 13:09	882.7	2576.1	23438.0	NG	380.69
10/17/22 13:10	882.7	2576.1	23421.0	NG	380.17
10/17/22 13:11	882.7	2563.9	23282.2	NG	379.33
10/17/22 13:12	882.7	2569.7	23420.9	NG	379.87
10/17/22 13:13	882.7	2576.6	23410.8	NG	380.53
10/17/22 13:14	882.8	2570.0	23302.2	NG	379.76
10/17/22 13:15	882.9	2562.9	23322.3	NG	379.57
10/17/22 13:16	882.9	2576.7	23444.3	NG	380.13
10/17/22 13:17	882.8	2563.6	23369.5	NG	379.76

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 13:18	882.8	2569.8	23406.2	NG	379.84
10/17/22 13:19	882.9	2569.6	23385.2	NG	380.27
10/17/22 13:20	882.8	2572.0	23352.2	NG	379.64
10/17/22 13:21	882.7	2571.5	23425.2	NG	380.14
10/17/22 13:22	882.6	2575.2	23409.6	NG	380.35
10/17/22 13:23	882.7	2567.5	23375.2	NG	379.57
10/17/22 13:24	882.7	2573.4	23408.4	NG	379.92
10/17/22 13:25	882.7	2575.9	23369.1	NG	379.90
10/17/22 13:26	882.7	2568.6	23357.8	NG	379.16
10/17/22 13:27	882.7	2568.8	23394.5	NG	379.97
10/17/22 13:28	882.5	2574.1	23392.3	NG	379.80
10/17/22 13:29	882.6	2567.1	23360.9	NG	379.68
10/17/22 13:30	882.5	2569.9	23388.0	NG	379.71
10/17/22 13:31	882.5	2570.7	23342.4	NG	379.74
10/17/22 13:32	882.6	2565.7	23323.3	NG	379.51
10/17/22 13:33	882.6	2572.3	23354.6	NG	379.67
10/17/22 13:34	882.6	2570.0	23351.2	NG	379.69
10/17/22 13:35	882.6	2568.6	23384.2	NG	379.55
10/17/22 13:36	882.6	2569.8	23346.0	NG	379.32
10/17/22 13:37	882.6	2575.3	23413.7	NG	380.33
10/17/22 13:38	882.4	2570.5	23388.8	NG	379.63
10/17/22 13:39	882.5	2568.1	23332.9	NG	379.99
10/17/22 13:40	882.5	2575.2	23415.0	NG	380.12
10/17/22 13:41	882.5	2574.7	23382.8	NG	380.27
10/17/22 13:42	882.5	2563.1	23332.8	NG	379.36
10/17/22 13:43	882.5	2568.6	23369.5	NG	380.07
10/17/22 13:44	882.7	2574.9	23376.2	NG	379.69
10/17/22 13:45	882.8	2564.0	23342.2	NG	379.68
10/17/22 13:46	883.0	2571.6	23430.9	NG	380.00
10/17/22 13:47	882.5	2572.4	23406.2	NG	380.33
10/17/22 13:48	882.5	2572.7	23415.5	NG	380.10
10/17/22 13:49	882.5	2570.3	23391.1	NG	380.44
10/17/22 13:50	882.4	2572.8	23392.2	NG	380.24
10/17/22 13:51	882.4	2575.7	23417.4	NG	380.32
10/17/22 13:52	882.4	2569.5	23363.0	NG	379.92
10/17/22 13:53	882.4	2568.8	23392.5	NG	380.24
10/17/22 13:54	882.4	2573.0	23400.4	NG	380.28
10/17/22 13:55	882.3	2571.7	23409.9	NG	380.25
10/17/22 13:56	882.3	2574.4	23384.6	NG	380.30
10/17/22 13:57	882.7	2565.6	23339.8	NG	380.49
10/17/22 13:58	883.0	2576.8	23412.7	NG	380.26
10/17/22 13:59	882.6	2573.0	23385.3	NG	380.41
10/17/22 14:00	882.3	2571.7	23397.7	NG	380.11

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 14:01	882.3	2572.4	23401.8	NG	380.33
10/17/22 14:02	882.4	2574.6	23388.4	NG	379.99
10/17/22 14:03	882.4	2573.2	23391.1	NG	379.91
10/17/22 14:04	882.4	2571.1	23408.9	NG	380.18
10/17/22 14:05	882.4	2576.2	23442.6	NG	380.97
10/17/22 14:06	882.3	2574.4	23446.2	NG	380.50
10/17/22 14:07	882.4	2573.1	23430.0	NG	380.33
10/17/22 14:08	882.4	2572.1	23388.8	NG	380.37
10/17/22 14:09	882.5	2572.6	23328.2	NG	380.23
10/17/22 14:10	882.7	2583.1	23385.3	NG	380.61
10/17/22 14:11	882.9	2574.0	23431.6	NG	380.73
10/17/22 14:12	882.4	2576.5	23341.5	NG	380.49
10/17/22 14:13	882.4	2569.6	23402.3	NG	380.52
10/17/22 14:14	882.4	2573.6	23412.1	NG	380.18
10/17/22 14:15	882.5	2566.4	23324.4	NG	379.57
10/17/22 14:16	882.5	2575.6	23361.5	NG	380.48
10/17/22 14:17	882.5	2574.5	23397.2	NG	380.41
10/17/22 14:18	882.5	2570.5	23411.5	NG	380.04
10/17/22 14:19	882.6	2568.7	23339.8	NG	379.49
10/17/22 14:20	882.4	2566.1	23350.9	NG	379.39
10/17/22 14:21	883.2	2571.9	23435.6	NG	380.19
10/17/22 14:22	883.1	2573.6	23379.6	NG	380.14
10/17/22 14:23	883.3	2563.8	23323.1	NG	379.58
10/17/22 14:24	883.2	2569.0	23372.3	NG	379.47
10/17/22 14:25	882.6	2581.4	23429.6	NG	379.68
10/17/22 14:26	882.5	2575.0	23404.4	NG	380.14
10/17/22 14:27	882.5	2566.8	23338.4	NG	379.69
10/17/22 14:28	882.6	2570.0	23350.7	NG	379.99
10/17/22 14:29	882.6	2568.6	23396.4	NG	380.23
10/17/22 14:30	882.5	2572.7	23385.3	NG	380.46
10/17/22 14:31	882.6	2571.5	23376.6	NG	379.70
10/17/22 14:32	883.0	2569.3	23374.8	NG	379.68
10/17/22 14:33	883.3	2570.8	23365.1	NG	379.68
10/17/22 14:34	883.3	2573.8	23422.0	NG	379.93
10/17/22 14:35	883.4	2567.6	23320.0	NG	379.37
10/17/22 14:36	883.4	2566.2	23375.4	NG	379.35
10/17/22 14:37	883.1	2562.6	23267.5	NG	378.96
10/17/22 14:38	882.8	2566.6	23316.3	NG	379.28
10/17/22 14:39	882.7	2565.2	23375.5	NG	379.33
10/17/22 14:40	882.6	2559.3	23297.1	NG	378.86
10/17/22 14:41	882.6	2561.0	23321.0	NG	379.30
10/17/22 14:42	882.5	2565.2	23370.6	NG	379.27
10/17/22 14:43	882.6	2570.3	23356.3	NG	379.78

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 14:44	883.0	2570.7	23394.6	NG	379.64
10/17/22 14:45	883.0	2572.6	23433.5	NG	379.80
10/17/22 14:46	883.0	2571.4	23378.5	NG	379.51
10/17/22 14:47	883.0	2568.6	23347.2	NG	379.26
10/17/22 14:48	883.1	2572.7	23362.6	NG	379.63
10/17/22 14:49	883.0	2568.8	23354.7	NG	379.75
10/17/22 14:50	882.8	2572.1	23399.8	NG	379.71
10/17/22 14:51	882.3	2576.2	23451.3	NG	380.04
10/17/22 14:52	882.4	2580.2	23416.3	NG	380.02
10/17/22 14:53	882.3	2572.5	23454.9	NG	380.09
10/17/22 14:54	882.4	2579.5	23415.2	NG	380.45
10/17/22 14:55	882.7	2574.2	23409.1	NG	380.28
10/17/22 14:56	883.1	2570.9	23382.9	NG	380.70
10/17/22 14:57	883.0	2571.8	23405.4	NG	380.74
10/17/22 14:58	883.1	2581.5	23452.7	NG	380.64
10/17/22 14:59	883.2	2576.7	23344.8	NG	380.05
10/17/22 15:00	883.2	2569.5	23419.3	NG	380.03
10/17/22 15:01	883.2	2574.3	23389.7	NG	380.32
10/17/22 15:02	883.2	2571.5	23346.3	NG	379.58
10/17/22 15:03	883.0	2573.8	23371.6	NG	379.94
10/17/22 15:04	883.0	2568.4	23360.6	NG	380.12
10/17/22 15:05	883.2	2563.9	23335.6	NG	379.51
10/17/22 15:06	883.1	2571.1	23338.6	NG	379.72
10/17/22 15:07	883.1	2567.9	23364.7	NG	379.61
10/17/22 15:08	883.0	2562.4	23284.2	NG	379.25
10/17/22 15:09	883.1	2566.5	23381.4	NG	379.89
10/17/22 15:10	883.1	2571.6	23352.1	NG	379.56
10/17/22 15:11	883.1	2566.1	23324.1	NG	379.26
10/17/22 15:12	883.1	2565.8	23312.9	NG	379.29
10/17/22 15:13	883.1	2565.8	23344.9	NG	379.27
10/17/22 15:14	883.0	2569.8	23379.9	NG	379.75
10/17/22 15:15	882.9	2568.4	23357.5	NG	379.38
10/17/22 15:16	882.7	2569.3	23360.1	NG	379.98
10/17/22 15:17	882.8	2573.9	23373.8	NG	380.57
10/17/22 15:18	883.1	2575.6	23438.6	NG	380.42
10/17/22 15:19	883.1	2572.8	23393.9	NG	380.15
10/17/22 15:20	883.2	2571.1	23406.8	NG	379.99
10/17/22 15:21	883.1	2573.2	23391.5	NG	379.93
10/17/22 15:22	883.1	2570.5	23383.1	NG	380.20
10/17/22 15:23	883.1	2575.9	23390.0	NG	379.78
10/17/22 15:24	883.1	2572.8	23408.1	NG	379.90
10/17/22 15:25	883.0	2576.2	23397.2	NG	380.07
10/17/22 15:26	883.1	2569.2	23348.8	NG	380.09

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 15:27	883.1	2566.0	23362.2	NG	379.95
10/17/22 15:28	882.9	2572.0	23369.4	NG	380.16
10/17/22 15:29	882.7	2574.4	23398.7	NG	380.31
10/17/22 15:30	882.8	2575.2	23427.0	NG	380.53
10/17/22 15:31	882.7	2575.0	23431.2	NG	380.51
10/17/22 15:32	882.8	2574.3	23398.5	NG	380.62
10/17/22 15:33	882.7	2577.4	23433.6	NG	380.67
10/17/22 15:34	882.7	2582.8	23432.7	NG	381.00
10/17/22 15:35	882.9	2573.2	23370.3	NG	380.59
10/17/22 15:36	883.0	2577.2	23388.9	NG	380.78
10/17/22 15:37	882.9	2578.0	23408.0	NG	380.89
10/17/22 15:38	882.8	2573.9	23430.9	NG	381.06
10/17/22 15:39	882.9	2570.9	23362.6	NG	379.97
10/17/22 15:40	882.9	2571.8	23409.5	NG	380.90
10/17/22 15:41	882.9	2573.0	23336.7	NG	380.39
10/17/22 15:42	882.8	2562.6	23308.2	NG	380.07
10/17/22 15:43	882.9	2577.4	23427.2	NG	380.54
10/17/22 15:44	882.7	2569.8	23384.0	NG	380.15
10/17/22 15:45	882.9	2574.9	23338.4	NG	380.90
10/17/22 15:46	882.9	2573.5	23415.1	NG	380.65
10/17/22 15:47	882.9	2572.0	23361.3	NG	380.20
10/17/22 15:48	882.9	2576.7	23396.3	NG	380.83
10/17/22 15:49	882.8	2575.7	23422.4	NG	380.80
10/17/22 15:50	882.9	2580.0	23433.2	NG	380.89
10/17/22 15:51	882.9	2576.4	23382.8	NG	380.65
10/17/22 15:52	882.8	2572.1	23389.1	NG	380.48
10/17/22 15:53	882.6	2577.8	23457.0	NG	381.13
10/17/22 15:54	882.6	2573.1	23362.7	NG	380.89
10/17/22 15:55	882.6	2570.5	23364.8	NG	380.18
10/17/22 15:56	882.6	2574.1	23436.7	NG	380.83
10/17/22 15:57	882.7	2580.3	23370.3	NG	380.64
10/17/22 15:58	882.7	2570.1	23371.0	NG	380.17
10/17/22 15:59	882.7	2568.9	23420.8	NG	380.35
10/17/22 16:00	882.6	2573.7	23376.1	NG	380.06
10/17/22 16:01	882.6	2575.5	23442.2	NG	381.04
10/17/22 16:02	882.6	2582.4	23450.0	NG	380.90
10/17/22 16:03	882.3	2573.1	23402.3	NG	380.72
10/17/22 16:04	882.2	2576.0	23427.0	NG	380.98
10/17/22 16:05	882.1	2579.6	23459.0	NG	381.04
10/17/22 16:06	882.1	2573.3	23407.5	NG	380.94
10/17/22 16:07	882.7	2581.6	23444.0	NG	381.06
10/17/22 16:08	882.7	2579.8	23436.3	NG	381.29
10/17/22 16:09	882.6	2575.9	23438.4	NG	381.08

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/17/22 16:10	882.6	2578.8	23462.2	NG	381.16
10/17/22 16:11	882.6	2580.0	23442.8	NG	381.48
Run 2 Average	882.7	2572.2	23384.6	NG	380.1
Run 3					
10/18/22 07:42	881.8	2732.4	24828.3	NG	406.28
10/18/22 07:43	881.7	2729.8	24833.5	NG	406.03
10/18/22 07:44	881.8	2726.2	24805.1	NG	405.79
10/18/22 07:45	881.8	2741.8	24893.1	NG	405.69
10/18/22 07:46	881.7	2737.2	24859.1	NG	406.45
10/18/22 07:47	881.8	2728.9	24847.5	NG	406.51
10/18/22 07:48	881.8	2727.4	24778.3	NG	405.64
10/18/22 07:49	881.9	2730.5	24858.7	NG	406.24
10/18/22 07:50	881.9	2732.6	24829.3	NG	406.39
10/18/22 07:51	881.8	2730.5	24812.5	NG	406.43
10/18/22 07:52	881.8	2731.8	24825.8	NG	406.53
10/18/22 07:53	881.8	2730.8	24837.5	NG	405.71
10/18/22 07:54	881.9	2729.1	24857.9	NG	406.23
10/18/22 07:55	881.9	2731.3	24769.6	NG	406.06
10/18/22 07:56	881.9	2735.7	24839.2	NG	406.10
10/18/22 07:57	882.0	2732.8	24810.3	NG	405.78
10/18/22 07:58	882.1	2728.4	24844.8	NG	405.69
10/18/22 07:59	882.2	2736.4	24862.7	NG	406.60
10/18/22 08:00	882.2	2735.0	24807.2	NG	406.11
10/18/22 08:01	882.1	2731.6	24823.1	NG	405.87
10/18/22 08:02	882.1	2727.5	24808.3	NG	405.99
10/18/22 08:03	882.1	2729.1	24800.2	NG	405.94
10/18/22 08:04	882.2	2730.5	24819.1	NG	405.24
10/18/22 08:05	882.2	2725.4	24789.5	NG	405.96
10/18/22 08:06	882.1	2737.4	24885.0	NG	406.13
10/18/22 08:07	882.1	2740.3	24810.5	NG	406.17
10/18/22 08:08	881.5	2730.8	24770.6	NG	406.08
10/18/22 08:09	881.7	2725.3	24819.2	NG	405.41
10/18/22 08:10	881.4	2735.2	24901.3	NG	406.30
10/18/22 08:11	881.5	2731.2	24863.6	NG	405.71
10/18/22 08:12	881.4	2726.1	24751.9	NG	405.44
10/18/22 08:13	881.5	2727.9	24755.8	NG	406.06
10/18/22 08:14	881.5	2732.7	24834.5	NG	405.77
10/18/22 08:15	881.6	2724.1	24699.8	NG	405.63
10/18/22 08:16	881.6	2731.4	24811.4	NG	405.97
10/18/22 08:17	881.6	2733.1	24836.2	NG	405.81
10/18/22 08:18	881.7	2720.9	24737.5	NG	405.02
10/18/22 08:19	881.6	2727.5	24787.1	NG	406.04

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 08:20	881.6	2735.5	24805.4	NG	406.21
10/18/22 08:21	881.6	2720.2	24742.8	NG	405.24
10/18/22 08:22	881.7	2719.7	24737.0	NG	405.61
10/18/22 08:23	881.6	2723.1	24778.4	NG	405.37
10/18/22 08:24	881.7	2725.6	24763.1	NG	405.46
10/18/22 08:25	881.6	2720.2	24719.5	NG	405.02
10/18/22 08:26	881.7	2728.2	24734.3	NG	405.24
10/18/22 08:27	881.7	2727.2	24763.9	NG	405.41
10/18/22 08:28	881.6	2724.5	24728.1	NG	405.19
10/18/22 08:29	881.6	2721.5	24695.3	NG	404.78
10/18/22 08:30	881.7	2721.7	24804.3	NG	405.16
10/18/22 08:31	881.7	2726.4	24752.6	NG	405.59
10/18/22 08:32	881.7	2720.9	24743.8	NG	404.98
10/18/22 08:33	881.7	2721.2	24739.2	NG	405.40
10/18/22 08:34	881.7	2725.4	24775.9	NG	405.09
10/18/22 08:35	881.8	2721.8	24752.3	NG	405.39
10/18/22 08:36	881.7	2725.5	24753.7	NG	404.82
10/18/22 08:37	881.7	2724.5	24668.2	NG	404.60
10/18/22 08:38	881.7	2723.7	24802.3	NG	405.44
10/18/22 08:39	881.7	2718.1	24734.4	NG	404.82
10/18/22 08:40	881.7	2718.1	24710.5	NG	404.13
10/18/22 08:41	881.7	2717.5	24717.1	NG	405.01
10/18/22 08:42	881.7	2721.5	24758.6	NG	405.13
10/18/22 08:43	881.6	2715.0	24731.2	NG	404.43
10/18/22 08:44	881.7	2727.6	24771.2	NG	405.11
10/18/22 08:45	881.8	2731.1	24834.1	NG	405.24
10/18/22 08:46	881.9	2725.4	24736.1	NG	404.34
10/18/22 08:47	881.9	2719.5	24774.8	NG	404.85
10/18/22 08:48	881.9	2722.4	24736.2	NG	404.81
10/18/22 08:49	881.9	2708.1	24714.6	NG	403.97
10/18/22 08:50	882.1	2713.1	24671.6	NG	404.33
10/18/22 08:51	882.1	2715.2	24720.2	NG	404.82
10/18/22 08:52	882.1	2717.6	24695.8	NG	404.41
10/18/22 08:53	882.1	2713.0	24695.2	NG	403.50
10/18/22 08:54	881.9	2716.4	24663.3	NG	404.60
10/18/22 08:55	881.9	2730.3	24774.9	NG	404.95
10/18/22 08:56	881.9	2722.9	24717.7	NG	403.81
10/18/22 08:57	882.0	2715.9	24815.2	NG	404.40
10/18/22 08:58	881.9	2716.0	24755.8	NG	405.13
10/18/22 08:59	881.9	2712.7	24652.7	NG	403.85
10/18/22 09:00	881.9	2720.2	24705.1	NG	404.35
10/18/22 09:01	881.9	2720.0	24732.9	NG	404.82
10/18/22 09:02	882.0	2720.0	24754.0	NG	404.66

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 09:03	882.1	2715.6	24729.3	NG	404.03
10/18/22 09:04	882.1	2719.2	24703.4	NG	404.97
10/18/22 09:05	882.2	2724.8	24711.1	NG	404.71
10/18/22 09:06	882.2	2710.9	24655.2	NG	403.94
10/18/22 09:07	882.2	2719.1	24751.3	NG	404.71
10/18/22 09:08	882.2	2720.0	24705.1	NG	404.49
10/18/22 09:09	882.3	2711.5	24671.7	NG	403.69
10/18/22 09:10	882.2	2713.0	24705.1	NG	404.32
10/18/22 09:11	882.1	2716.5	24671.4	NG	404.58
10/18/22 09:12	882.2	2713.3	24591.9	NG	403.72
10/18/22 09:13	882.2	2722.0	24684.6	NG	404.95
10/18/22 09:14	882.2	2721.6	24690.0	NG	404.35
10/18/22 09:15	882.2	2703.1	24548.0	NG	403.44
10/18/22 09:16	882.2	2712.2	24613.7	NG	403.86
10/18/22 09:17	882.2	2712.3	24702.3	NG	403.90
10/18/22 09:18	882.1	2713.6	24669.3	NG	404.42
10/18/22 09:19	882.0	2720.1	24687.5	NG	404.24
10/18/22 09:20	882.0	2721.2	24701.2	NG	404.23
10/18/22 09:21	882.1	2714.1	24674.4	NG	403.73
10/18/22 09:22	882.1	2708.6	24653.8	NG	403.40
10/18/22 09:23	882.0	2714.1	24644.2	NG	403.97
10/18/22 09:24	882.1	2719.5	24722.3	NG	404.27
10/18/22 09:25	881.8	2715.5	24618.9	NG	403.77
10/18/22 09:26	881.5	2712.2	24648.4	NG	403.57
10/18/22 09:27	881.6	2719.7	24762.8	NG	404.25
10/18/22 09:28	881.7	2723.6	24630.9	NG	403.74
10/18/22 09:29	881.6	2706.7	24670.3	NG	403.65
10/18/22 09:30	881.4	2714.9	24734.7	NG	404.21
10/18/22 09:31	881.4	2711.8	24643.8	NG	403.21
10/18/22 09:32	881.3	2712.7	24666.8	NG	403.70
10/18/22 09:33	881.3	2716.2	24699.8	NG	404.04
10/18/22 09:34	881.4	2709.5	24707.9	NG	403.98
10/18/22 09:35	881.5	2712.4	24668.2	NG	403.69
10/18/22 09:36	881.6	2713.8	24733.2	NG	404.03
10/18/22 09:37	881.6	2714.2	24667.8	NG	403.99
10/18/22 09:38	881.6	2710.7	24637.3	NG	403.22
10/18/22 09:39	881.5	2714.6	24630.2	NG	403.63
10/18/22 09:40	881.6	2711.8	24690.7	NG	403.74
10/18/22 09:41	881.6	2717.8	24648.4	NG	403.60
10/18/22 09:42	881.6	2703.9	24593.6	NG	403.10
10/18/22 09:43	881.6	2720.3	24672.0	NG	403.90
10/18/22 09:44	881.6	2716.1	24653.7	NG	403.62
10/18/22 09:45	881.6	2708.2	24638.9	NG	403.40

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 09:46	881.6	2710.4	24660.9	NG	403.41
10/18/22 09:47	881.5	2709.4	24676.7	NG	403.50
10/18/22 09:48	881.3	2708.0	24664.9	NG	402.84
10/18/22 09:49	881.3	2709.2	24656.8	NG	403.12
10/18/22 09:50	881.3	2708.5	24667.1	NG	403.44
10/18/22 09:51	881.4	2709.1	24542.5	NG	402.66
10/18/22 09:52	881.5	2700.9	24583.8	NG	402.54
10/18/22 09:53	881.6	2708.3	24638.2	NG	403.21
10/18/22 09:54	881.5	2701.6	24631.6	NG	403.26
10/18/22 09:55	881.6	2704.1	24553.6	NG	402.20
10/18/22 09:56	881.6	2702.0	24590.5	NG	403.14
10/18/22 09:57	881.6	2711.7	24682.9	NG	403.50
10/18/22 09:58	881.6	2711.4	24715.6	NG	404.18
10/18/22 09:59	881.6	2731.0	24771.6	NG	405.59
10/18/22 10:00	881.7	2731.5	24870.6	NG	406.14
10/18/22 10:01	881.8	2732.1	24867.5	NG	406.01
10/18/22 10:02	881.9	2736.5	24832.2	NG	406.61
10/18/22 10:03	882.1	2732.7	24814.9	NG	406.88
10/18/22 10:04	882.2	2731.5	24780.1	NG	406.86
10/18/22 10:05	882.2	2733.1	24850.2	NG	406.78
10/18/22 10:06	882.2	2733.2	24840.3	NG	406.35
10/18/22 10:07	881.9	2731.9	24848.0	NG	406.09
10/18/22 10:08	881.9	2729.3	24838.2	NG	406.47
10/18/22 10:09	881.8	2737.6	24847.4	NG	406.66
10/18/22 10:10	881.7	2730.7	24873.8	NG	406.53
10/18/22 10:11	881.8	2739.6	24831.5	NG	406.07
10/18/22 10:12	881.7	2734.4	24828.3	NG	406.39
10/18/22 10:13	881.5	2734.9	24874.9	NG	406.25
10/18/22 10:14	881.6	2732.1	24822.3	NG	406.19
10/18/22 10:15	881.6	2728.4	24880.5	NG	406.33
10/18/22 10:16	881.5	2731.0	24854.4	NG	405.96
10/18/22 10:17	881.6	2742.4	24826.3	NG	406.17
10/18/22 10:18	881.6	2724.5	24832.9	NG	406.40
10/18/22 10:19	881.5	2731.5	24856.5	NG	405.91
10/18/22 10:20	881.4	2734.0	24827.3	NG	406.34
10/18/22 10:21	881.4	2737.1	24910.1	NG	405.77
10/18/22 10:22	881.3	2736.7	24826.5	NG	405.60
10/18/22 10:23	881.3	2729.5	24857.1	NG	405.98
10/18/22 10:24	881.2	2734.3	24836.1	NG	405.85
10/18/22 10:25	881.2	2729.9	24822.7	NG	406.18
10/18/22 10:26	881.3	2736.1	24860.4	NG	405.95
10/18/22 10:27	881.3	2730.8	24870.6	NG	405.69
10/18/22 10:28	881.3	2730.7	24842.8	NG	405.86

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 10:29	881.4	2736.7	24915.1	NG	406.17
10/18/22 10:30	881.5	2730.7	24862.6	NG	405.57
10/18/22 10:31	881.6	2733.5	24861.0	NG	405.93
10/18/22 10:32	881.6	2739.3	24928.7	NG	405.96
10/18/22 10:33	881.6	2733.2	24863.3	NG	405.84
10/18/22 10:34	881.7	2733.5	24822.0	NG	406.05
10/18/22 10:35	881.6	2733.0	24850.2	NG	406.70
10/18/22 10:36	881.6	2741.3	24947.5	NG	406.23
10/18/22 10:37	881.7	2736.0	24907.6	NG	406.21
10/18/22 10:38	881.7	2736.2	24885.8	NG	406.50
10/18/22 10:39	881.7	2739.5	24947.4	NG	405.77
10/18/22 10:40	881.8	2742.3	24865.3	NG	405.96
10/18/22 10:41	881.8	2736.3	24917.1	NG	406.07
10/18/22 10:42	881.9	2742.1	24855.5	NG	406.49
10/18/22 10:43	881.9	2738.7	24924.5	NG	406.18
10/18/22 10:44	881.9	2740.3	24895.3	NG	406.12
10/18/22 10:45	882.1	2733.8	24844.6	NG	406.81
10/18/22 10:46	882.2	2728.2	24844.8	NG	406.05
10/18/22 10:47	882.1	2736.7	24867.8	NG	406.44
10/18/22 10:48	882.1	2732.7	24887.9	NG	406.39
10/18/22 10:49	881.9	2732.1	24886.5	NG	406.21
10/18/22 10:50	881.8	2733.6	24801.2	NG	406.38
10/18/22 10:51	881.8	2733.5	24834.1	NG	406.48
10/18/22 10:52	881.8	2739.1	24892.5	NG	405.90
10/18/22 10:53	881.8	2731.9	24867.5	NG	406.78
10/18/22 10:54	881.9	2736.6	24928.0	NG	406.11
10/18/22 10:55	881.9	2741.8	24929.8	NG	406.50
10/18/22 10:56	881.9	2735.9	24922.8	NG	406.55
10/18/22 10:57	881.9	2738.2	24885.1	NG	406.28
10/18/22 10:58	881.8	2742.0	24914.9	NG	406.60
10/18/22 10:59	881.9	2733.4	24900.9	NG	406.46
10/18/22 11:00	881.9	2731.9	24891.1	NG	406.34
10/18/22 11:01	881.9	2734.6	24888.9	NG	406.57
10/18/22 11:02	882.0	2735.9	24870.6	NG	406.47
10/18/22 11:03	882.0	2734.6	24978.7	NG	406.41
10/18/22 11:04	882.1	2739.8	24860.1	NG	405.91
10/18/22 11:05	882.1	2738.9	24916.3	NG	406.70
10/18/22 11:06	882.0	2739.1	24890.3	NG	406.25
10/18/22 11:07	882.0	2740.1	24952.0	NG	406.34
10/18/22 11:08	881.9	2737.4	24838.5	NG	406.24
10/18/22 11:09	881.9	2732.2	24881.9	NG	406.47
10/18/22 11:10	881.8	2732.3	24912.5	NG	406.55
10/18/22 11:11	881.8	2731.4	24898.9	NG	406.56

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 11:12	881.8	2735.6	24897.4	NG	406.30
10/18/22 11:13	881.9	2734.9	24905.8	NG	406.12
10/18/22 11:14	881.9	2737.2	24888.2	NG	406.19
10/18/22 11:15	881.9	2736.4	24864.3	NG	406.25
10/18/22 11:16	881.9	2734.2	24829.0	NG	406.52
10/18/22 11:17	881.9	2732.6	24872.0	NG	405.82
Run 3 Average	881.8	2725.8	24781.9	NG	405.3
Run 4					
10/18/22 11:30	881.9	2734.1	24923.4	NG	406.17
10/18/22 11:31	881.9	2737.5	24892.5	NG	406.35
10/18/22 11:32	881.9	2732.7	24846.7	NG	406.58
10/18/22 11:33	881.9	2731.1	24829.1	NG	406.29
10/18/22 11:34	881.9	2730.7	24914.5	NG	406.48
10/18/22 11:35	881.9	2729.6	24787.2	NG	405.94
10/18/22 11:36	881.9	2738.9	24900.6	NG	405.96
10/18/22 11:37	881.9	2736.4	24889.0	NG	406.57
10/18/22 11:38	881.8	2736.2	24859.1	NG	406.00
10/18/22 11:39	881.8	2734.5	24853.4	NG	406.31
10/18/22 11:40	882.0	2730.1	24836.5	NG	405.91
10/18/22 11:41	882.4	2730.3	24835.7	NG	406.11
10/18/22 11:42	882.2	2734.1	24864.6	NG	406.26
10/18/22 11:43	882.3	2733.3	24772.7	NG	405.60
10/18/22 11:44	882.4	2727.4	24816.8	NG	405.26
10/18/22 11:45	882.5	2733.9	24870.3	NG	406.46
10/18/22 11:46	882.4	2734.9	24827.8	NG	406.07
10/18/22 11:47	882.4	2726.4	24802.3	NG	405.83
10/18/22 11:48	882.4	2740.5	24855.2	NG	406.39
10/18/22 11:49	882.4	2732.4	24848.5	NG	406.28
10/18/22 11:50	882.4	2731.4	24860.3	NG	405.45
10/18/22 11:51	882.5	2729.2	24839.5	NG	405.85
10/18/22 11:52	882.4	2732.8	24896.3	NG	406.68
10/18/22 11:53	882.4	2733.0	24908.7	NG	405.89
10/18/22 11:54	882.3	2736.2	24801.4	NG	406.02
10/18/22 11:55	882.3	2733.6	24859.1	NG	405.76
10/18/22 11:56	882.3	2740.5	24844.0	NG	406.01
10/18/22 11:57	882.2	2734.8	24876.2	NG	405.68
10/18/22 11:58	882.2	2735.1	24838.1	NG	406.12
10/18/22 11:59	882.2	2738.2	24877.2	NG	405.97
10/18/22 12:00	882.4	2734.4	24794.1	NG	405.71
10/18/22 12:01	882.4	2719.4	24731.4	NG	405.32
10/18/22 12:02	882.3	2728.2	24762.2	NG	405.69
10/18/22 12:03	882.3	2729.7	24831.2	NG	405.70

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 12:04	882.3	2722.2	24835.1	NG	405.23
10/18/22 12:05	882.3	2731.4	24817.4	NG	405.91
10/18/22 12:06	882.4	2722.2	24759.6	NG	404.78
10/18/22 12:07	882.3	2732.3	24764.9	NG	405.69
10/18/22 12:08	882.3	2729.4	24787.8	NG	406.22
10/18/22 12:09	882.3	2727.8	24769.2	NG	405.23
10/18/22 12:10	882.4	2731.4	24872.4	NG	405.20
10/18/22 12:11	882.4	2737.0	24861.0	NG	406.18
10/18/22 12:12	882.4	2724.8	24740.5	NG	404.97
10/18/22 12:13	882.4	2726.3	24758.9	NG	405.23
10/18/22 12:14	882.3	2734.8	24796.3	NG	405.46
10/18/22 12:15	882.3	2722.6	24734.7	NG	404.73
10/18/22 12:16	882.2	2722.6	24768.4	NG	405.50
10/18/22 12:17	882.2	2728.7	24781.1	NG	405.84
10/18/22 12:18	882.2	2719.5	24736.1	NG	404.66
10/18/22 12:19	882.2	2718.5	24799.8	NG	405.43
10/18/22 12:20	882.3	2730.0	24833.3	NG	405.96
10/18/22 12:21	882.3	2726.7	24839.9	NG	405.52
10/18/22 12:22	882.3	2723.9	24825.2	NG	405.59
10/18/22 12:23	882.3	2725.8	24861.4	NG	405.80
10/18/22 12:24	882.3	2733.0	24859.4	NG	405.53
10/18/22 12:25	882.2	2728.8	24772.3	NG	405.42
10/18/22 12:26	882.3	2720.6	24812.5	NG	404.95
10/18/22 12:27	882.2	2735.9	24824.5	NG	405.74
10/18/22 12:28	882.3	2723.9	24758.2	NG	405.98
10/18/22 12:29	882.4	2726.7	24767.1	NG	405.25
10/18/22 12:30	882.4	2725.9	24871.5	NG	405.38
10/18/22 12:31	882.3	2730.7	24799.1	NG	405.87
10/18/22 12:32	882.2	2726.9	24786.1	NG	404.84
10/18/22 12:33	882.2	2724.3	24782.5	NG	405.10
10/18/22 12:34	882.2	2730.5	24798.1	NG	405.12
10/18/22 12:35	882.2	2724.4	24749.7	NG	405.05
10/18/22 12:36	882.2	2721.7	24793.9	NG	405.31
10/18/22 12:37	882.2	2729.0	24792.1	NG	405.74
10/18/22 12:38	882.2	2720.8	24744.6	NG	404.67
10/18/22 12:39	882.2	2722.7	24825.2	NG	404.67
10/18/22 12:40	882.2	2730.4	24811.1	NG	405.58
10/18/22 12:41	882.2	2724.5	24784.7	NG	405.13
10/18/22 12:42	882.2	2721.8	24803.0	NG	404.69
10/18/22 12:43	882.3	2726.6	24748.0	NG	405.35
10/18/22 12:44	882.2	2726.3	24810.1	NG	405.52
10/18/22 12:45	882.2	2724.4	24751.6	NG	404.49
10/18/22 12:46	882.2	2719.7	24705.8	NG	404.01

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 12:47	882.2	2721.7	24757.3	NG	404.80
10/18/22 12:48	882.2	2725.7	24813.2	NG	404.62
10/18/22 12:49	882.2	2721.4	24671.1	NG	404.50
10/18/22 12:50	882.2	2723.3	24840.0	NG	404.99
10/18/22 12:51	882.2	2728.2	24766.0	NG	405.10
10/18/22 12:52	882.2	2720.3	24745.9	NG	404.24
10/18/22 12:53	882.1	2722.5	24727.2	NG	404.85
10/18/22 12:54	882.1	2724.4	24733.9	NG	405.04
10/18/22 12:55	882.1	2721.9	24741.7	NG	404.57
10/18/22 12:56	882.0	2732.1	24777.9	NG	405.55
10/18/22 12:57	881.9	2731.7	24754.7	NG	405.46
10/18/22 12:58	881.9	2718.5	24742.7	NG	404.21
10/18/22 12:59	882.0	2722.8	24788.6	NG	404.96
10/18/22 13:00	882.1	2730.2	24725.9	NG	404.72
10/18/22 13:01	882.2	2718.0	24758.9	NG	404.47
10/18/22 13:02	882.2	2725.5	24801.5	NG	404.57
10/18/22 13:03	882.2	2724.4	24828.0	NG	405.08
10/18/22 13:04	882.2	2713.2	24652.7	NG	404.10
10/18/22 13:05	882.2	2718.4	24788.1	NG	403.96
10/18/22 13:06	882.2	2720.0	24685.0	NG	404.44
10/18/22 13:07	882.2	2729.1	24699.8	NG	404.25
10/18/22 13:08	882.1	2729.6	24803.3	NG	404.99
10/18/22 13:09	882.1	2729.8	24814.6	NG	404.89
10/18/22 13:10	882.2	2723.4	24721.0	NG	404.15
10/18/22 13:11	882.1	2723.5	24758.0	NG	404.83
10/18/22 13:12	882.1	2724.9	24779.1	NG	405.08
10/18/22 13:13	882.0	2716.4	24724.4	NG	403.92
10/18/22 13:14	882.0	2719.9	24744.6	NG	404.31
10/18/22 13:15	881.9	2724.6	24872.3	NG	405.28
10/18/22 13:16	881.9	2720.6	24732.5	NG	404.81
10/18/22 13:17	881.9	2719.4	24733.0	NG	404.08
10/18/22 13:18	881.9	2729.8	24804.1	NG	404.54
10/18/22 13:19	882.6	2716.9	24678.3	NG	403.85
10/18/22 13:20	882.7	2718.1	24731.8	NG	404.37
10/18/22 13:21	882.6	2713.3	24710.7	NG	404.06
10/18/22 13:22	882.7	2714.0	24693.1	NG	403.38
10/18/22 13:23	882.7	2715.7	24771.9	NG	404.45
10/18/22 13:24	882.7	2723.7	24754.4	NG	404.21
10/18/22 13:25	882.6	2715.0	24717.8	NG	403.64
10/18/22 13:26	882.8	2720.5	24694.2	NG	404.23
10/18/22 13:27	882.7	2715.1	24725.9	NG	404.30
10/18/22 13:28	882.6	2710.4	24667.5	NG	403.58
10/18/22 13:29	882.5	2719.0	24727.7	NG	404.05

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 13:30	882.6	2720.0	24725.9	NG	403.97
10/18/22 13:31	882.4	2716.0	24671.0	NG	403.68
10/18/22 13:32	882.4	2716.9	24744.8	NG	404.17
10/18/22 13:33	882.3	2722.5	24735.7	NG	404.41
10/18/22 13:34	882.3	2716.4	24629.1	NG	403.42
10/18/22 13:35	882.2	2711.3	24641.1	NG	403.72
10/18/22 13:36	882.1	2716.0	24673.5	NG	403.85
10/18/22 13:37	882.1	2711.6	24659.1	NG	403.82
10/18/22 13:38	882.2	2713.2	24668.6	NG	403.15
10/18/22 13:39	882.2	2715.9	24648.5	NG	403.10
10/18/22 13:40	882.2	2716.3	24728.0	NG	404.00
10/18/22 13:41	882.2	2720.2	24697.8	NG	404.11
10/18/22 13:42	882.3	2718.3	24742.6	NG	403.90
10/18/22 13:43	882.4	2721.3	24691.2	NG	403.44
10/18/22 13:44	882.4	2712.8	24659.0	NG	403.58
10/18/22 13:45	882.4	2706.9	24670.3	NG	403.30
10/18/22 13:46	882.3	2716.1	24676.0	NG	403.58
10/18/22 13:47	882.3	2719.1	24709.0	NG	403.54
10/18/22 13:48	882.2	2717.8	24730.5	NG	403.63
10/18/22 13:49	882.3	2718.7	24694.3	NG	403.30
10/18/22 13:50	882.3	2715.9	24702.8	NG	403.94
10/18/22 13:51	882.3	2715.9	24657.0	NG	404.12
10/18/22 13:52	882.3	2718.9	24688.8	NG	403.93
10/18/22 13:53	882.3	2715.1	24679.8	NG	403.69
10/18/22 13:54	882.2	2719.8	24771.3	NG	404.14
10/18/22 13:55	882.2	2727.2	24804.4	NG	404.06
10/18/22 13:56	882.2	2709.0	24631.0	NG	404.02
10/18/22 13:57	882.2	2716.5	24714.3	NG	404.11
10/18/22 13:58	882.3	2723.0	24742.1	NG	403.89
10/18/22 13:59	882.2	2720.8	24651.8	NG	403.91
10/18/22 14:00	882.2	2720.7	24703.7	NG	403.70
10/18/22 14:01	882.1	2715.6	24701.3	NG	403.36
10/18/22 14:02	882.2	2716.7	24651.8	NG	403.97
10/18/22 14:03	882.3	2719.2	24580.1	NG	403.54
10/18/22 14:04	882.3	2714.2	24707.4	NG	403.03
10/18/22 14:05	882.3	2720.4	24719.2	NG	403.55
10/18/22 14:06	882.3	2718.6	24707.6	NG	403.74
10/18/22 14:07	882.3	2718.0	24742.7	NG	403.87
10/18/22 14:08	882.3	2710.0	24635.1	NG	403.48
10/18/22 14:09	882.3	2718.2	24689.9	NG	403.27
10/18/22 14:10	882.2	2718.6	24693.0	NG	403.52
10/18/22 14:11	882.1	2717.5	24714.3	NG	403.92
10/18/22 14:12	882.1	2719.8	24666.8	NG	403.56

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 14:13	882.1	2719.4	24716.8	NG	403.61
10/18/22 14:14	882.2	2715.8	24708.0	NG	403.58
10/18/22 14:15	882.1	2713.9	24733.7	NG	403.46
10/18/22 14:16	882.6	2717.4	24715.8	NG	403.40
10/18/22 14:17	882.8	2724.5	24733.0	NG	403.58
10/18/22 14:18	882.8	2715.1	24722.7	NG	403.33
10/18/22 14:19	882.9	2714.0	24689.3	NG	403.37
10/18/22 14:20	882.7	2718.9	24700.9	NG	403.47
10/18/22 14:21	882.7	2717.1	24745.6	NG	403.46
10/18/22 14:22	882.8	2717.4	24743.9	NG	403.67
10/18/22 14:23	882.7	2713.6	24642.7	NG	403.32
10/18/22 14:24	882.8	2708.7	24642.6	NG	402.90
10/18/22 14:25	882.8	2712.8	24705.2	NG	403.28
10/18/22 14:26	882.8	2713.2	24664.8	NG	403.58
10/18/22 14:27	882.7	2720.9	24645.5	NG	403.74
10/18/22 14:28	882.7	2715.4	24653.5	NG	402.95
10/18/22 14:29	882.7	2722.1	24712.2	NG	403.10
10/18/22 14:30	882.7	2717.1	24727.3	NG	403.52
10/18/22 14:31	882.6	2716.0	24709.9	NG	403.19
10/18/22 14:32	882.6	2711.2	24611.7	NG	402.91
10/18/22 14:33	882.6	2708.0	24649.9	NG	402.83
10/18/22 14:34	882.4	2714.4	24733.6	NG	403.57
10/18/22 14:35	882.4	2714.0	24629.6	NG	402.57
10/18/22 14:36	882.4	2706.5	24679.1	NG	402.87
10/18/22 14:37	882.3	2717.9	24653.8	NG	403.27
10/18/22 14:38	882.2	2711.6	24622.7	NG	403.19
10/18/22 14:39	882.2	2714.1	24653.6	NG	403.11
10/18/22 14:40	882.3	2719.5	24734.1	NG	403.86
10/18/22 14:41	882.3	2723.0	24691.9	NG	403.28
10/18/22 14:42	882.4	2719.9	24727.4	NG	403.21
10/18/22 14:43	882.6	2723.7	24784.0	NG	403.25
10/18/22 14:44	882.6	2723.9	24732.7	NG	403.26
10/18/22 14:45	882.6	2716.1	24729.9	NG	403.36
10/18/22 14:46	882.6	2714.7	24718.8	NG	403.46
10/18/22 14:47	882.6	2717.6	24742.8	NG	402.97
10/18/22 14:48	882.6	2719.7	24659.8	NG	403.08
10/18/22 14:49	882.6	2718.5	24678.8	NG	403.42
10/18/22 14:50	882.3	2718.0	24682.6	NG	404.07
10/18/22 14:51	882.4	2719.7	24741.8	NG	403.61
10/18/22 14:52	882.4	2718.2	24766.7	NG	403.50
10/18/22 14:53	882.5	2713.2	24715.7	NG	403.74
10/18/22 14:54	882.4	2721.4	24725.1	NG	403.33
10/18/22 14:55	882.3	2716.6	24730.5	NG	403.68

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/18/22 14:56	882.3	2713.0	24713.2	NG	402.73
10/18/22 14:57	882.3	2714.1	24753.3	NG	403.29
10/18/22 14:58	882.3	2731.7	24737.8	NG	403.73
10/18/22 14:59	882.3	2723.9	24772.6	NG	403.59
10/18/22 15:00	882.3	2717.5	24693.0	NG	402.97
10/18/22 15:01	882.3	2715.4	24719.5	NG	403.23
10/18/22 15:02	882.2	2718.9	24727.6	NG	404.33
10/18/22 15:03	882.3	2719.5	24782.5	NG	403.49
10/18/22 15:04	882.3	2717.4	24699.5	NG	402.98
10/18/22 15:05	882.2	2713.9	24776.2	NG	403.42
10/18/22 15:06	882.2	2722.2	24838.7	NG	403.40
10/18/22 15:07	882.2	2721.2	24772.7	NG	403.08
10/18/22 15:08	882.2	2720.6	24758.2	NG	403.85
Run 4 Average	882.3	2722.4	24751.6	NG	404.5
Run 5					
10/19/22 07:05	883.3	2777.3	25225.9	NG	412.42
10/19/22 07:06	883.3	2774.9	25209.7	NG	411.89
10/19/22 07:07	883.4	2772.3	25251.4	NG	412.41
10/19/22 07:08	883.4	2782.8	25241.6	NG	411.73
10/19/22 07:09	883.4	2770.8	25258.8	NG	412.18
10/19/22 07:10	883.4	2771.7	25235.6	NG	412.24
10/19/22 07:11	883.3	2781.9	25298.1	NG	411.94
10/19/22 07:12	883.3	2773.9	25250.7	NG	412.11
10/19/22 07:13	883.3	2782.1	25247.4	NG	412.09
10/19/22 07:14	883.2	2771.9	25186.3	NG	412.23
10/19/22 07:15	883.2	2773.5	25242.1	NG	411.99
10/19/22 07:16	883.2	2779.4	25216.4	NG	411.92
10/19/22 07:17	883.2	2779.4	25280.3	NG	411.74
10/19/22 07:18	883.3	2776.4	25190.6	NG	412.25
10/19/22 07:19	883.3	2770.1	25238.0	NG	411.90
10/19/22 07:20	883.4	2773.8	25258.5	NG	412.14
10/19/22 07:21	883.4	2779.6	25258.8	NG	412.19
10/19/22 07:22	883.3	2775.0	25229.1	NG	411.60
10/19/22 07:23	883.3	2775.6	25210.4	NG	412.05
10/19/22 07:24	883.3	2773.5	25194.1	NG	412.00
10/19/22 07:25	883.3	2776.3	25228.4	NG	411.91
10/19/22 07:26	883.3	2774.8	25237.8	NG	411.53
10/19/22 07:27	883.4	2775.2	25263.3	NG	411.77
10/19/22 07:28	883.4	2766.0	25166.9	NG	411.76
10/19/22 07:29	883.4	2776.4	25208.2	NG	411.54
10/19/22 07:30	883.3	2771.7	25188.4	NG	411.71
10/19/22 07:31	883.4	2769.7	25219.2	NG	410.92

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 07:32	883.4	2773.6	25193.8	NG	411.23
10/19/22 07:33	883.5	2774.7	25180.0	NG	411.82
10/19/22 07:34	883.5	2766.6	25201.9	NG	411.15
10/19/22 07:35	883.6	2768.3	25220.3	NG	411.34
10/19/22 07:36	883.5	2768.6	25162.3	NG	411.26
10/19/22 07:37	883.6	2777.2	25158.8	NG	411.08
10/19/22 07:38	883.5	2767.6	25175.7	NG	411.12
10/19/22 07:39	883.5	2772.2	25180.4	NG	410.68
10/19/22 07:40	883.4	2771.5	25190.0	NG	410.79
10/19/22 07:41	883.4	2772.2	25138.3	NG	410.44
10/19/22 07:42	883.5	2765.1	25181.0	NG	410.94
10/19/22 07:43	883.4	2771.1	25118.6	NG	410.61
10/19/22 07:44	883.5	2774.2	25169.8	NG	410.64
10/19/22 07:45	883.5	2770.7	25144.7	NG	410.95
10/19/22 07:46	883.5	2770.5	25181.7	NG	410.84
10/19/22 07:47	883.6	2766.8	25127.1	NG	410.57
10/19/22 07:48	883.7	2765.3	25126.7	NG	410.56
10/19/22 07:49	883.8	2765.5	25125.7	NG	411.17
10/19/22 07:50	883.8	2759.9	25219.9	NG	410.18
10/19/22 07:51	883.7	2774.0	25121.8	NG	410.50
10/19/22 07:52	883.7	2764.3	25203.7	NG	410.46
10/19/22 07:53	883.8	2765.8	25097.4	NG	410.43
10/19/22 07:54	883.7	2766.5	25066.8	NG	410.06
10/19/22 07:55	883.7	2769.1	25200.8	NG	409.71
10/19/22 07:56	883.7	2764.3	25094.5	NG	410.39
10/19/22 07:57	883.6	2765.4	25139.0	NG	410.09
10/19/22 07:58	883.6	2758.7	25073.0	NG	410.54
10/19/22 07:59	883.7	2764.2	25113.6	NG	410.02
10/19/22 08:00	883.8	2756.6	25134.5	NG	410.22
10/19/22 08:01	883.8	2757.3	25139.4	NG	409.47
10/19/22 08:02	883.8	2767.1	25091.1	NG	409.84
10/19/22 08:03	883.7	2764.3	25068.8	NG	409.96
10/19/22 08:04	883.6	2760.7	25095.2	NG	409.86
10/19/22 08:05	883.7	2759.6	25092.9	NG	409.60
10/19/22 08:06	883.6	2756.4	25036.9	NG	410.18
10/19/22 08:07	883.6	2762.0	25076.6	NG	409.80
10/19/22 08:08	883.6	2752.1	24997.7	NG	409.65
10/19/22 08:09	883.6	2752.2	25034.7	NG	409.27
10/19/22 08:10	883.5	2750.8	25027.6	NG	409.87
10/19/22 08:11	883.5	2754.2	25031.9	NG	409.41
10/19/22 08:12	883.5	2755.9	25030.0	NG	409.64
10/19/22 08:13	883.5	2761.9	25140.8	NG	409.95
10/19/22 08:14	883.5	2757.7	25066.8	NG	409.21

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 08:15	883.5	2749.9	25031.9	NG	409.26
10/19/22 08:16	883.4	2750.3	24987.4	NG	408.51
10/19/22 08:17	883.5	2752.1	25028.6	NG	409.36
10/19/22 08:18	883.6	2756.8	25087.2	NG	409.36
10/19/22 08:19	883.7	2749.4	24971.0	NG	408.90
10/19/22 08:20	883.7	2754.8	25007.9	NG	408.34
10/19/22 08:21	883.7	2756.9	25025.2	NG	409.22
10/19/22 08:22	883.7	2759.4	24938.9	NG	408.70
10/19/22 08:23	883.7	2750.9	24981.2	NG	409.22
10/19/22 08:24	883.5	2750.2	25009.3	NG	409.09
10/19/22 08:25	883.5	2757.7	24969.5	NG	408.79
10/19/22 08:26	883.5	2748.8	24933.8	NG	408.05
10/19/22 08:27	883.6	2750.4	25030.1	NG	408.66
10/19/22 08:28	883.6	2750.8	24902.6	NG	408.26
10/19/22 08:29	883.5	2747.2	24957.3	NG	408.47
10/19/22 08:30	883.4	2756.3	24965.6	NG	408.42
10/19/22 08:31	883.5	2750.5	24979.4	NG	407.74
10/19/22 08:32	883.4	2745.1	24922.7	NG	408.01
10/19/22 08:33	883.5	2748.9	24967.0	NG	408.76
10/19/22 08:34	883.5	2746.3	24906.1	NG	407.60
10/19/22 08:35	883.5	2744.0	24961.0	NG	408.01
10/19/22 08:36	883.4	2750.2	24965.7	NG	408.30
10/19/22 08:37	883.5	2746.0	24882.5	NG	407.55
10/19/22 08:38	883.5	2739.7	24951.5	NG	407.75
10/19/22 08:39	883.5	2748.1	25002.5	NG	408.24
10/19/22 08:40	883.5	2740.1	24951.2	NG	407.47
10/19/22 08:41	883.5	2739.8	24994.9	NG	408.14
10/19/22 08:42	883.4	2750.9	24963.5	NG	407.90
10/19/22 08:43	883.4	2739.7	24859.6	NG	406.79
10/19/22 08:44	883.4	2742.0	24878.6	NG	407.83
10/19/22 08:45	883.3	2745.0	24935.7	NG	407.64
10/19/22 08:46	883.4	2737.1	24904.7	NG	407.02
10/19/22 08:47	883.4	2740.7	24885.0	NG	407.21
10/19/22 08:48	883.5	2743.3	24939.5	NG	407.00
10/19/22 08:49	883.5	2733.6	24877.5	NG	406.58
10/19/22 08:50	883.4	2747.3	24974.5	NG	407.95
10/19/22 08:51	883.5	2744.8	24924.1	NG	406.83
10/19/22 08:52	883.5	2734.9	24832.1	NG	406.87
10/19/22 08:53	883.4	2745.3	24941.7	NG	407.56
10/19/22 08:54	883.4	2739.4	24903.3	NG	406.50
10/19/22 08:55	883.4	2731.6	24853.0	NG	406.73
10/19/22 08:56	883.5	2736.2	24919.6	NG	406.49
10/19/22 08:57	883.3	2739.4	24909.7	NG	406.58

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 08:58	883.3	2736.5	24837.8	NG	406.43
10/19/22 08:59	883.3	2737.6	24875.1	NG	406.46
10/19/22 09:00	883.3	2728.6	24866.0	NG	406.46
10/19/22 09:01	883.3	2745.5	24953.0	NG	406.31
10/19/22 09:02	883.2	2738.2	24850.1	NG	406.76
10/19/22 09:03	883.2	2733.1	24883.6	NG	406.59
10/19/22 09:04	883.3	2730.4	24877.1	NG	406.21
10/19/22 09:05	883.3	2740.2	24886.3	NG	406.37
10/19/22 09:06	883.2	2729.6	24849.7	NG	406.09
10/19/22 09:07	883.2	2734.5	24811.2	NG	406.03
10/19/22 09:08	883.2	2729.9	24796.2	NG	405.72
10/19/22 09:09	883.2	2736.6	24820.9	NG	406.19
10/19/22 09:10	883.3	2736.6	24841.9	NG	406.29
10/19/22 09:11	883.2	2730.3	24860.7	NG	405.57
10/19/22 09:12	883.3	2733.5	24826.5	NG	405.82
10/19/22 09:13	883.2	2728.0	24796.5	NG	405.76
10/19/22 09:14	883.2	2730.3	24807.9	NG	406.12
10/19/22 09:15	883.2	2731.8	24824.7	NG	405.96
10/19/22 09:16	883.3	2730.2	24839.9	NG	405.65
10/19/22 09:17	883.3	2723.4	24769.7	NG	405.95
10/19/22 09:18	883.2	2729.3	24766.2	NG	405.51
10/19/22 09:19	883.3	2728.2	24846.9	NG	405.24
10/19/22 09:20	883.2	2729.2	24825.3	NG	406.08
10/19/22 09:21	883.2	2730.3	24808.8	NG	405.31
10/19/22 09:22	883.2	2723.2	24777.9	NG	405.35
10/19/22 09:23	883.2	2734.2	24872.2	NG	405.56
10/19/22 09:24	883.2	2733.9	24810.6	NG	405.68
10/19/22 09:25	883.2	2727.2	24831.0	NG	405.67
10/19/22 09:26	883.2	2728.5	24795.4	NG	404.56
10/19/22 09:27	883.1	2733.9	24854.6	NG	405.68
10/19/22 09:28	883.2	2724.0	24712.4	NG	404.72
10/19/22 09:29	883.2	2717.6	24744.8	NG	405.30
10/19/22 09:30	883.1	2722.3	24747.3	NG	405.71
10/19/22 09:31	883.0	2727.0	24749.4	NG	404.29
10/19/22 09:32	883.1	2728.4	24706.3	NG	404.48
10/19/22 09:33	883.1	2731.4	24807.1	NG	404.98
10/19/22 09:34	883.0	2715.6	24775.0	NG	404.40
10/19/22 09:35	882.9	2727.9	24798.3	NG	404.40
10/19/22 09:36	882.9	2719.6	24723.9	NG	404.44
10/19/22 09:37	882.9	2718.6	24738.0	NG	403.94
10/19/22 09:38	882.9	2723.0	24756.0	NG	405.38
10/19/22 09:39	883.0	2740.2	24777.1	NG	406.14
10/19/22 09:40	883.0	2735.5	25003.6	NG	407.43

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 09:41	883.1	2739.9	24918.1	NG	407.09
10/19/22 09:42	883.2	2746.7	24910.3	NG	407.06
10/19/22 09:43	883.3	2743.1	24930.3	NG	407.73
10/19/22 09:44	883.5	2747.7	24927.2	NG	407.58
10/19/22 09:45	883.6	2747.3	24971.0	NG	407.47
10/19/22 09:46	883.8	2745.9	24953.2	NG	408.54
10/19/22 09:47	884.1	2751.3	25031.1	NG	408.35
10/19/22 09:48	884.1	2750.8	25012.5	NG	408.61
10/19/22 09:49	884.1	2746.3	25005.1	NG	407.70
10/19/22 09:50	884.1	2746.9	24988.9	NG	408.75
10/19/22 09:51	884.1	2754.6	24951.2	NG	408.53
10/19/22 09:52	884.3	2748.7	25018.5	NG	408.92
10/19/22 09:53	884.3	2752.8	24998.8	NG	408.48
10/19/22 09:54	884.2	2749.1	25009.3	NG	409.01
10/19/22 09:55	884.1	2752.6	25042.0	NG	408.30
10/19/22 09:56	884.1	2748.3	25077.3	NG	409.14
10/19/22 09:57	884.1	2758.7	25067.7	NG	408.73
10/19/22 09:58	883.9	2750.7	24964.2	NG	409.06
10/19/22 09:59	884.0	2746.6	25020.7	NG	408.79
10/19/22 10:00	883.9	2752.6	24955.8	NG	408.76
10/19/22 10:01	883.9	2757.1	25021.3	NG	408.58
10/19/22 10:02	883.8	2755.0	25000.5	NG	408.79
10/19/22 10:03	883.9	2743.0	24922.0	NG	408.43
10/19/22 10:04	883.8	2751.2	25025.2	NG	408.95
10/19/22 10:05	883.7	2752.9	25054.8	NG	408.44
10/19/22 10:06	883.8	2744.3	24966.4	NG	408.21
10/19/22 10:07	883.8	2754.7	24973.8	NG	408.50
10/19/22 10:08	883.8	2748.3	25055.8	NG	408.68
10/19/22 10:09	883.7	2744.5	24976.3	NG	408.17
10/19/22 10:10	883.6	2753.5	25071.6	NG	408.81
10/19/22 10:11	883.6	2753.5	25031.5	NG	408.74
10/19/22 10:12	883.6	2747.6	24963.9	NG	408.14
10/19/22 10:13	883.5	2753.9	25039.7	NG	409.24
10/19/22 10:14	883.5	2745.5	24991.4	NG	408.90
10/19/22 10:15	883.6	2736.8	24925.0	NG	408.58
10/19/22 10:16	883.6	2758.5	25084.7	NG	408.91
10/19/22 10:17	883.6	2749.9	25043.4	NG	408.75
10/19/22 10:18	883.6	2747.3	24998.3	NG	408.63
10/19/22 10:19	883.8	2745.5	25045.9	NG	408.29
10/19/22 10:20	883.7	2749.6	25009.7	NG	409.11
10/19/22 10:21	883.6	2754.5	25006.5	NG	408.49
10/19/22 10:22	883.6	2745.2	24966.3	NG	408.10
10/19/22 10:23	883.5	2749.9	25054.4	NG	409.13

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 10:24	883.5	2752.7	24944.7	NG	408.45
10/19/22 10:25	883.4	2743.6	24931.4	NG	407.33
10/19/22 10:26	883.4	2749.4	25023.0	NG	408.97
10/19/22 10:27	883.3	2746.4	24882.9	NG	408.05
10/19/22 10:28	883.3	2743.2	25080.5	NG	408.63
10/19/22 10:29	883.3	2750.2	24993.1	NG	408.13
10/19/22 10:30	883.4	2746.2	24921.9	NG	407.52
10/19/22 10:31	883.8	2740.4	24980.5	NG	407.76
10/19/22 10:32	883.6	2756.0	24958.2	NG	408.32
10/19/22 10:33	883.8	2748.5	24961.6	NG	407.79
10/19/22 10:34	883.9	2749.6	25030.8	NG	408.04
10/19/22 10:35	883.9	2746.5	24938.7	NG	408.70
10/19/22 10:36	884.0	2744.2	24958.5	NG	407.20
10/19/22 10:37	884.0	2748.4	24937.7	NG	407.93
Run 5 Average	883.5	2751.1	25004.9	NG	408.6
Run 6					
10/19/22 10:50	883.6	2740.6	24873.0	NG	408.07
10/19/22 10:51	883.5	2742.6	24960.4	NG	407.40
10/19/22 10:52	883.5	2733.7	24951.3	NG	406.95
10/19/22 10:53	883.5	2742.5	25011.5	NG	408.06
10/19/22 10:54	883.5	2740.8	24961.5	NG	408.07
10/19/22 10:55	883.5	2743.3	24999.0	NG	407.47
10/19/22 10:56	883.5	2746.9	24994.5	NG	408.24
10/19/22 10:57	883.5	2742.0	24919.8	NG	407.96
10/19/22 10:58	883.3	2741.7	24921.3	NG	407.61
10/19/22 10:59	883.4	2752.4	24947.3	NG	407.98
10/19/22 11:00	883.5	2751.8	24953.7	NG	407.40
10/19/22 11:01	883.5	2742.8	24908.0	NG	407.18
10/19/22 11:02	883.4	2747.3	24930.7	NG	407.95
10/19/22 11:03	883.4	2744.4	24912.1	NG	407.50
10/19/22 11:04	883.4	2741.9	24882.3	NG	407.27
10/19/22 11:05	883.4	2747.0	24920.3	NG	408.18
10/19/22 11:06	883.3	2747.9	24963.5	NG	407.62
10/19/22 11:07	883.3	2743.2	24920.9	NG	407.67
10/19/22 11:08	883.3	2742.0	24901.5	NG	406.79
10/19/22 11:09	883.3	2737.0	24920.6	NG	406.67
10/19/22 11:10	883.4	2741.9	24934.7	NG	406.76
10/19/22 11:11	883.5	2743.8	24947.0	NG	407.32
10/19/22 11:12	883.7	2741.5	24921.7	NG	407.19
10/19/22 11:13	884.0	2742.0	24832.2	NG	407.20
10/19/22 11:14	884.0	2737.6	24920.2	NG	407.41
10/19/22 11:15	884.0	2736.6	24877.3	NG	407.15

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 11:16	884.0	2736.5	24879.0	NG	406.63
10/19/22 11:17	884.0	2735.6	24891.7	NG	406.14
10/19/22 11:18	883.9	2744.1	24920.1	NG	407.20
10/19/22 11:19	884.0	2727.9	24894.8	NG	406.48
10/19/22 11:20	883.9	2733.8	24947.0	NG	406.37
10/19/22 11:21	883.9	2740.4	24888.5	NG	407.50
10/19/22 11:22	883.8	2745.6	24849.0	NG	406.59
10/19/22 11:23	883.9	2740.2	24895.5	NG	407.06
10/19/22 11:24	883.8	2737.9	24878.3	NG	406.69
10/19/22 11:25	883.7	2736.6	24854.5	NG	406.57
10/19/22 11:26	883.7	2732.0	24891.0	NG	406.61
10/19/22 11:27	883.7	2730.4	24923.8	NG	406.55
10/19/22 11:28	883.8	2731.8	24797.9	NG	406.22
10/19/22 11:29	883.8	2735.4	24853.2	NG	406.21
10/19/22 11:30	883.8	2734.9	24832.8	NG	406.63
10/19/22 11:31	883.7	2739.5	24884.0	NG	406.47
10/19/22 11:32	883.6	2735.7	24871.4	NG	406.37
10/19/22 11:33	883.6	2735.2	24850.1	NG	406.07
10/19/22 11:34	883.8	2738.4	24879.4	NG	406.02
10/19/22 11:35	883.7	2733.2	24906.8	NG	406.47
10/19/22 11:36	883.5	2738.7	24876.5	NG	406.29
10/19/22 11:37	883.6	2736.2	24924.4	NG	406.65
10/19/22 11:38	883.5	2732.7	24930.0	NG	406.86
10/19/22 11:39	883.6	2726.7	24760.6	NG	405.38
10/19/22 11:40	883.6	2732.5	24796.5	NG	406.18
10/19/22 11:41	883.5	2728.6	24798.4	NG	405.85
10/19/22 11:42	883.5	2724.1	24809.9	NG	405.97
10/19/22 11:43	883.4	2734.1	24816.8	NG	406.26
10/19/22 11:44	883.4	2737.1	24834.5	NG	406.33
10/19/22 11:45	883.3	2735.2	24768.0	NG	405.76
10/19/22 11:46	883.3	2724.5	24827.6	NG	405.54
10/19/22 11:47	883.7	2727.3	24851.9	NG	405.58
10/19/22 11:48	884.1	2726.6	24841.6	NG	405.51
10/19/22 11:49	884.1	2724.4	24774.4	NG	404.62
10/19/22 11:50	884.1	2721.1	24816.6	NG	405.41
10/19/22 11:51	884.1	2724.1	24804.3	NG	405.15
10/19/22 11:52	884.0	2726.8	24833.2	NG	405.29
10/19/22 11:53	884.1	2724.2	24785.0	NG	404.89
10/19/22 11:54	884.3	2722.0	24821.5	NG	405.46
10/19/22 11:55	884.2	2730.4	24779.2	NG	405.27
10/19/22 11:56	884.1	2728.1	24774.7	NG	405.50
10/19/22 11:57	884.1	2727.9	24814.6	NG	405.40
10/19/22 11:58	884.1	2730.3	24762.7	NG	405.65

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 11:59	884.2	2728.9	24777.2	NG	405.76
10/19/22 12:00	884.0	2721.4	24701.9	NG	405.35
10/19/22 12:01	884.0	2728.3	24805.7	NG	404.98
10/19/22 12:02	884.0	2723.8	24790.1	NG	405.60
10/19/22 12:03	884.0	2716.2	24677.3	NG	404.16
10/19/22 12:04	883.9	2722.2	24739.3	NG	404.97
10/19/22 12:05	884.0	2726.7	24899.7	NG	405.69
10/19/22 12:06	883.9	2719.3	24690.7	NG	404.64
10/19/22 12:07	883.9	2718.5	24743.0	NG	405.15
10/19/22 12:08	883.8	2732.0	24812.4	NG	405.84
10/19/22 12:09	883.8	2732.2	24783.1	NG	405.75
10/19/22 12:10	883.8	2727.7	24739.2	NG	405.29
10/19/22 12:11	883.8	2719.8	24742.0	NG	404.50
10/19/22 12:12	883.7	2730.3	24823.1	NG	404.78
10/19/22 12:13	883.5	2726.6	24780.7	NG	404.91
10/19/22 12:14	883.5	2717.4	24736.5	NG	404.31
10/19/22 12:15	883.6	2722.2	24736.6	NG	404.24
10/19/22 12:16	883.6	2722.6	24791.6	NG	405.05
10/19/22 12:17	883.5	2723.5	24780.0	NG	405.10
10/19/22 12:18	883.5	2720.6	24821.6	NG	405.20
10/19/22 12:19	884.1	2721.6	24797.3	NG	404.58
10/19/22 12:20	884.3	2723.6	24780.7	NG	404.96
10/19/22 12:21	884.4	2729.1	24759.0	NG	404.75
10/19/22 12:22	884.4	2728.9	24809.2	NG	404.45
10/19/22 12:23	884.3	2721.8	24684.4	NG	403.77
10/19/22 12:24	884.2	2725.3	24738.5	NG	404.93
10/19/22 12:25	884.1	2726.4	24746.2	NG	404.76
10/19/22 12:26	884.0	2725.8	24746.9	NG	404.07
10/19/22 12:27	884.0	2719.2	24720.5	NG	404.14
10/19/22 12:28	884.0	2721.0	24695.1	NG	404.53
10/19/22 12:29	884.0	2721.2	24770.6	NG	405.11
10/19/22 12:30	884.0	2722.1	24763.1	NG	404.69
10/19/22 12:31	884.0	2722.9	24754.7	NG	404.52
10/19/22 12:32	884.0	2726.6	24706.1	NG	404.66
10/19/22 12:33	884.1	2728.9	24770.1	NG	404.62
10/19/22 12:34	884.1	2722.6	24778.9	NG	404.41
10/19/22 12:35	884.1	2725.9	24756.1	NG	404.56
10/19/22 12:36	884.1	2715.7	24720.8	NG	404.12
10/19/22 12:37	884.0	2718.7	24766.6	NG	404.29
10/19/22 12:38	884.0	2721.3	24702.9	NG	404.53
10/19/22 12:39	883.8	2727.5	24750.1	NG	404.26
10/19/22 12:40	883.8	2716.2	24705.6	NG	404.64
10/19/22 12:41	883.9	2711.4	24710.3	NG	403.99

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 12:42	883.8	2715.2	24746.0	NG	404.28
10/19/22 12:43	883.8	2719.1	24783.2	NG	404.57
10/19/22 12:44	883.8	2726.3	24774.3	NG	404.38
10/19/22 12:45	883.6	2711.7	24662.9	NG	404.39
10/19/22 12:46	883.5	2720.7	24744.1	NG	404.23
10/19/22 12:47	883.5	2731.0	24664.6	NG	404.95
10/19/22 12:48	883.6	2713.2	24811.4	NG	404.64
10/19/22 12:49	883.6	2720.5	24662.6	NG	404.24
10/19/22 12:50	883.9	2716.9	24730.0	NG	404.20
10/19/22 12:51	884.2	2715.6	24661.5	NG	404.13
10/19/22 12:52	884.4	2714.3	24634.0	NG	403.66
10/19/22 12:53	884.5	2715.4	24635.4	NG	403.33
10/19/22 12:54	884.3	2713.2	24707.2	NG	403.70
10/19/22 12:55	884.2	2709.3	24619.2	NG	403.48
10/19/22 12:56	884.1	2714.3	24719.9	NG	403.76
10/19/22 12:57	884.0	2713.8	24662.2	NG	403.74
10/19/22 12:58	884.0	2711.6	24670.2	NG	402.88
10/19/22 12:59	884.0	2715.5	24649.9	NG	403.72
10/19/22 13:00	884.0	2713.3	24685.4	NG	404.25
10/19/22 13:01	884.1	2718.1	24665.7	NG	403.74
10/19/22 13:02	884.0	2716.9	24606.0	NG	403.05
10/19/22 13:03	884.0	2717.9	24692.8	NG	403.98
10/19/22 13:04	883.9	2710.6	24607.1	NG	403.02
10/19/22 13:05	884.0	2698.1	24628.7	NG	402.54
10/19/22 13:06	884.0	2713.9	24684.3	NG	403.08
10/19/22 13:07	884.1	2703.0	24566.0	NG	402.83
10/19/22 13:08	884.1	2715.9	24582.0	NG	403.26
10/19/22 13:09	884.0	2712.0	24664.2	NG	403.80
10/19/22 13:10	883.8	2712.1	24666.4	NG	403.09
10/19/22 13:11	883.8	2713.7	24688.9	NG	402.62
10/19/22 13:12	883.8	2708.9	24682.9	NG	403.37
10/19/22 13:13	883.6	2712.9	24580.7	NG	402.84
10/19/22 13:14	883.5	2710.6	24656.3	NG	402.56
10/19/22 13:15	883.5	2709.1	24649.1	NG	403.54
10/19/22 13:16	883.5	2705.2	24557.9	NG	402.55
10/19/22 13:17	883.5	2704.7	24661.8	NG	402.18
10/19/22 13:18	883.5	2715.9	24629.2	NG	403.42
10/19/22 13:19	883.7	2704.6	24566.4	NG	402.56
10/19/22 13:20	884.3	2710.8	24588.8	NG	402.29
10/19/22 13:21	884.2	2708.1	24581.7	NG	401.95
10/19/22 13:22	884.2	2702.6	24592.3	NG	402.54
10/19/22 13:23	884.2	2712.7	24596.4	NG	402.18
10/19/22 13:24	884.2	2712.6	24622.4	NG	402.58

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 13:25	884.2	2703.5	24546.0	NG	402.32
10/19/22 13:26	884.2	2704.2	24635.1	NG	402.50
10/19/22 13:27	884.1	2715.5	24660.8	NG	402.47
10/19/22 13:28	884.1	2699.2	24536.9	NG	401.75
10/19/22 13:29	884.1	2702.6	24617.9	NG	401.51
10/19/22 13:30	884.1	2713.5	24631.1	NG	402.45
10/19/22 13:31	884.1	2706.0	24551.2	NG	401.72
10/19/22 13:32	884.0	2701.1	24601.8	NG	402.04
10/19/22 13:33	883.9	2706.0	24640.1	NG	402.75
10/19/22 13:34	884.0	2712.2	24674.9	NG	402.84
10/19/22 13:35	884.0	2706.7	24607.7	NG	402.70
10/19/22 13:36	884.0	2705.0	24603.8	NG	402.77
10/19/22 13:37	884.0	2708.5	24587.8	NG	403.07
10/19/22 13:38	884.1	2704.4	24620.7	NG	402.50
10/19/22 13:39	884.1	2701.4	24549.0	NG	402.21
10/19/22 13:40	884.0	2703.0	24661.5	NG	402.48
10/19/22 13:41	884.0	2707.6	24626.7	NG	402.24
10/19/22 13:42	883.9	2705.1	24570.9	NG	401.98
10/19/22 13:43	883.7	2709.3	24526.7	NG	402.62
10/19/22 13:44	883.5	2709.0	24610.6	NG	402.43
10/19/22 13:45	883.4	2703.9	24541.7	NG	402.42
10/19/22 13:46	883.4	2709.1	24582.4	NG	402.43
10/19/22 13:47	883.5	2712.7	24688.5	NG	402.83
10/19/22 13:48	883.9	2709.9	24574.8	NG	401.83
10/19/22 13:49	884.2	2715.3	24558.2	NG	402.09
10/19/22 13:50	884.1	2703.4	24589.8	NG	401.95
10/19/22 13:51	884.1	2703.8	24608.5	NG	402.22
10/19/22 13:52	884.1	2704.4	24628.1	NG	401.67
10/19/22 13:53	884.1	2709.7	24629.8	NG	402.19
10/19/22 13:54	884.1	2697.3	24587.7	NG	401.42
10/19/22 13:55	884.1	2702.0	24512.4	NG	401.24
10/19/22 13:56	884.2	2708.4	24635.3	NG	402.59
10/19/22 13:57	884.2	2707.0	24571.2	NG	401.86
10/19/22 13:58	884.1	2707.8	24616.2	NG	401.75
10/19/22 13:59	884.0	2713.1	24667.2	NG	402.51
10/19/22 14:00	883.9	2697.3	24585.0	NG	401.61
10/19/22 14:01	883.9	2701.9	24581.8	NG	402.00
10/19/22 14:02	883.9	2705.6	24636.7	NG	402.27
10/19/22 14:03	884.0	2711.9	24735.0	NG	402.21
10/19/22 14:04	883.9	2720.8	24700.5	NG	401.99
10/19/22 14:05	883.9	2709.9	24621.8	NG	401.83
10/19/22 14:06	884.0	2710.9	24620.8	NG	402.78
10/19/22 14:07	884.0	2707.8	24567.1	NG	402.27

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/19/22 14:08	884.1	2701.3	24555.7	NG	402.14
10/19/22 14:09	884.1	2713.7	24604.6	NG	401.77
10/19/22 14:10	884.0	2702.9	24594.0	NG	402.38
10/19/22 14:11	883.8	2706.1	24560.0	NG	402.27
10/19/22 14:12	883.8	2708.0	24669.9	NG	402.52
10/19/22 14:13	883.8	2717.0	24686.5	NG	403.19
10/19/22 14:14	883.9	2707.6	24543.9	NG	401.69
10/19/22 14:15	883.9	2701.4	24577.2	NG	401.40
10/19/22 14:16	884.1	2696.7	24549.9	NG	401.63
10/19/22 14:17	884.3	2707.2	24599.0	NG	401.31
10/19/22 14:18	884.4	2698.7	24511.9	NG	401.72
10/19/22 14:19	884.3	2701.4	24536.4	NG	402.12
10/19/22 14:20	884.2	2706.5	24561.4	NG	401.42
10/19/22 14:21	884.1	2703.1	24585.6	NG	401.00
10/19/22 14:22	884.1	2705.5	24621.8	NG	401.96
10/19/22 14:23	884.1	2704.2	24588.0	NG	402.06
10/19/22 14:24	884.1	2706.8	24487.8	NG	401.29
Run 6 Average	883.9	2720.7	24731.4	NG	404.3
<hr/>					
Run 7					
10/20/22 07:33	930.9	3250.6	29553.4	NG	461.44
10/20/22 07:34	930.8	3252.5	29540.8	NG	461.76
10/20/22 07:35	930.9	3247.7	29555.2	NG	461.49
10/20/22 07:36	931.1	3253.5	29551.2	NG	461.74
10/20/22 07:37	931.0	3249.3	29490.2	NG	461.87
10/20/22 07:38	931.0	3246.0	29489.2	NG	461.71
10/20/22 07:39	931.0	3246.8	29544.2	NG	462.38
10/20/22 07:40	930.9	3241.1	29506.0	NG	461.97
10/20/22 07:41	931.0	3241.4	29545.7	NG	461.35
10/20/22 07:42	930.9	3255.4	29477.6	NG	461.53
10/20/22 07:43	930.8	3249.1	29538.7	NG	461.68
10/20/22 07:44	930.7	3248.1	29527.2	NG	461.47
10/20/22 07:45	930.9	3247.3	29545.0	NG	461.68
10/20/22 07:46	930.7	3247.1	29538.9	NG	461.57
10/20/22 07:47	930.6	3245.6	29520.6	NG	461.29
10/20/22 07:48	930.8	3244.9	29545.5	NG	461.61
10/20/22 07:49	930.7	3246.0	29521.6	NG	461.62
10/20/22 07:50	931.0	3251.3	29564.3	NG	461.44
10/20/22 07:51	930.9	3254.9	29508.7	NG	461.42
10/20/22 07:52	930.7	3248.7	29583.9	NG	461.08
10/20/22 07:53	930.7	3248.0	29534.2	NG	461.93
10/20/22 07:54	930.9	3254.3	29574.7	NG	461.59
10/20/22 07:55	930.9	3251.9	29498.7	NG	461.73

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/20/22 07:56	930.9	3248.6	29563.1	NG	461.84
10/20/22 07:57	931.1	3248.5	29545.3	NG	461.89
10/20/22 07:58	931.1	3244.0	29515.8	NG	461.42
10/20/22 07:59	931.0	3248.3	29472.1	NG	461.27
10/20/22 08:00	931.0	3246.7	29514.5	NG	460.88
10/20/22 08:01	931.0	3247.1	29470.2	NG	460.42
10/20/22 08:02	931.0	3243.2	29513.0	NG	460.42
10/20/22 08:03	931.0	3245.4	29528.4	NG	461.21
10/20/22 08:04	931.2	3246.9	29533.6	NG	460.88
10/20/22 08:05	931.2	3247.9	29568.3	NG	461.19
10/20/22 08:06	931.2	3248.5	29566.8	NG	461.11
10/20/22 08:07	931.4	3245.5	29526.4	NG	460.89
10/20/22 08:08	931.4	3249.0	29570.0	NG	461.28
10/20/22 08:09	931.5	3247.8	29488.3	NG	460.99
10/20/22 08:10	931.5	3241.0	29458.6	NG	460.84
10/20/22 08:11	931.5	3246.1	29467.0	NG	460.81
10/20/22 08:12	931.4	3247.9	29491.8	NG	461.21
10/20/22 08:13	931.5	3244.6	29502.0	NG	460.66
10/20/22 08:14	931.5	3244.3	29475.3	NG	460.76
10/20/22 08:15	931.5	3246.8	29461.5	NG	460.58
10/20/22 08:16	931.4	3241.3	29512.9	NG	461.07
10/20/22 08:17	931.5	3250.1	29515.3	NG	460.16
10/20/22 08:18	931.5	3240.7	29493.7	NG	460.26
10/20/22 08:19	931.3	3246.0	29530.3	NG	461.09
10/20/22 08:20	931.3	3241.9	29500.2	NG	460.39
10/20/22 08:21	931.5	3239.1	29468.1	NG	459.63
10/20/22 08:22	931.5	3245.7	29556.0	NG	460.70
10/20/22 08:23	931.6	3241.8	29486.6	NG	460.38
10/20/22 08:24	931.8	3243.0	29501.8	NG	459.65
10/20/22 08:25	931.8	3244.5	29497.0	NG	460.04
10/20/22 08:26	931.9	3244.8	29470.4	NG	459.49
10/20/22 08:27	932.1	3235.2	29380.0	NG	459.07
10/20/22 08:28	932.1	3237.4	29436.9	NG	459.88
10/20/22 08:29	932.0	3240.6	29462.5	NG	459.94
10/20/22 08:30	931.9	3234.6	29360.5	NG	458.90
10/20/22 08:31	931.8	3236.9	29399.0	NG	459.60
10/20/22 08:32	931.8	3234.8	29407.6	NG	459.62
10/20/22 08:33	931.8	3233.5	29403.0	NG	459.12
10/20/22 08:34	931.8	3232.7	29387.8	NG	459.35
10/20/22 08:35	931.9	3236.1	29390.0	NG	459.12
10/20/22 08:36	932.1	3224.1	29306.5	NG	458.72
10/20/22 08:37	932.1	3226.0	29385.1	NG	459.11
10/20/22 08:38	931.9	3234.1	29387.0	NG	458.72

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/20/22 08:39	932.0	3226.1	29268.2	NG	457.89
10/20/22 08:40	932.1	3226.1	29361.5	NG	458.13
10/20/22 08:41	932.1	3230.9	29372.8	NG	458.58
10/20/22 08:42	932.1	3231.2	29270.1	NG	457.71
10/20/22 08:43	932.2	3229.0	29434.7	NG	458.37
10/20/22 08:44	932.4	3233.1	29389.2	NG	458.49
10/20/22 08:45	932.5	3230.3	29315.3	NG	457.96
10/20/22 08:46	932.4	3224.7	29385.5	NG	458.01
10/20/22 08:47	932.4	3229.3	29349.7	NG	458.09
10/20/22 08:48	932.5	3226.0	29341.3	NG	457.68
10/20/22 08:49	932.7	3218.7	29242.2	NG	457.76
10/20/22 08:50	932.7	3228.4	29354.2	NG	457.91
10/20/22 08:51	932.7	3223.5	29250.1	NG	457.08
10/20/22 08:52	932.7	3222.6	29303.5	NG	457.31
10/20/22 08:53	932.7	3225.1	29369.3	NG	457.90
10/20/22 08:54	932.6	3219.5	29209.2	NG	456.55
10/20/22 08:55	932.6	3214.6	29232.9	NG	457.07
10/20/22 08:56	932.4	3224.4	29298.9	NG	457.40
10/20/22 08:57	932.7	3223.6	29198.4	NG	456.40
10/20/22 08:58	932.9	3221.9	29286.9	NG	456.82
10/20/22 08:59	933.0	3225.4	29281.0	NG	456.82
10/20/22 09:00	933.1	3207.9	29158.2	NG	456.01
10/20/22 09:01	933.2	3215.9	29243.3	NG	456.46
10/20/22 09:02	933.2	3213.9	29286.9	NG	456.37
10/20/22 09:03	933.2	3216.5	29195.0	NG	455.79
10/20/22 09:04	933.2	3211.8	29202.4	NG	456.92
10/20/22 09:05	933.3	3218.3	29188.8	NG	456.22
10/20/22 09:06	933.4	3211.7	29229.4	NG	455.48
10/20/22 09:07	933.3	3207.4	29197.5	NG	455.60
10/20/22 09:08	933.3	3203.9	29170.6	NG	455.69
10/20/22 09:09	933.4	3209.1	29150.4	NG	455.28
10/20/22 09:10	933.7	3208.5	29168.8	NG	455.15
10/20/22 09:11	933.7	3211.0	29218.1	NG	455.12
10/20/22 09:12	933.7	3212.5	29159.8	NG	455.02
10/20/22 09:13	933.7	3197.4	29099.0	NG	454.56
10/20/22 09:14	933.7	3199.9	29089.5	NG	454.20
10/20/22 09:15	933.7	3203.0	29123.9	NG	454.35
10/20/22 09:16	933.7	3197.7	29071.6	NG	453.79
10/20/22 09:17	933.7	3206.4	29075.9	NG	453.72
10/20/22 09:18	933.9	3201.9	29051.8	NG	453.79
10/20/22 09:19	933.9	3201.8	29102.2	NG	453.98
10/20/22 09:20	933.9	3209.1	29190.1	NG	455.37
10/20/22 09:21	933.7	3201.2	29192.7	NG	454.85

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/20/22 09:22	933.8	3214.0	29219.3	NG	455.88
10/20/22 09:23	933.9	3215.1	29254.5	NG	456.30
10/20/22 09:24	933.9	3213.3	29190.5	NG	456.14
10/20/22 09:25	934.1	3214.3	29265.7	NG	456.49
10/20/22 09:26	934.1	3223.4	29291.0	NG	455.99
10/20/22 09:27	934.1	3212.1	29184.0	NG	455.79
10/20/22 09:28	934.0	3217.7	29288.5	NG	456.63
10/20/22 09:29	933.9	3216.5	29290.0	NG	457.27
10/20/22 09:30	933.9	3224.7	29255.7	NG	456.88
10/20/22 09:31	933.8	3211.6	29236.1	NG	456.88
10/20/22 09:32	933.8	3210.0	29272.0	NG	456.83
10/20/22 09:33	933.8	3225.2	29269.5	NG	456.92
10/20/22 09:34	933.7	3219.0	29172.7	NG	455.60
10/20/22 09:35	933.6	3209.5	29190.0	NG	456.02
10/20/22 09:36	933.4	3223.0	29272.7	NG	456.49
10/20/22 09:37	933.3	3213.2	29211.6	NG	456.02
10/20/22 09:38	933.2	3218.2	29243.3	NG	456.68
10/20/22 09:39	933.3	3226.9	29308.4	NG	456.53
10/20/22 09:40	933.3	3216.6	29252.3	NG	455.95
10/20/22 09:41	933.9	3220.8	29277.9	NG	455.99
10/20/22 09:42	934.2	3207.9	29229.7	NG	456.13
10/20/22 09:43	934.3	3212.7	29202.3	NG	455.84
10/20/22 09:44	934.3	3216.5	29237.2	NG	456.55
10/20/22 09:45	934.3	3215.0	29130.8	NG	455.99
10/20/22 09:46	934.3	3210.0	29246.6	NG	455.64
10/20/22 09:47	934.3	3213.1	29242.0	NG	456.13
10/20/22 09:48	934.2	3217.4	29221.6	NG	455.66
10/20/22 09:49	934.2	3211.9	29240.8	NG	455.63
10/20/22 09:50	934.1	3223.4	29272.7	NG	456.09
10/20/22 09:51	934.1	3209.9	29192.2	NG	455.82
10/20/22 09:52	934.1	3208.6	29184.4	NG	455.17
10/20/22 09:53	934.3	3211.2	29169.3	NG	455.41
10/20/22 09:54	934.3	3219.0	29208.1	NG	455.31
10/20/22 09:55	934.3	3207.3	29203.3	NG	454.56
10/20/22 09:56	934.1	3209.0	29174.1	NG	455.34
10/20/22 09:57	934.1	3209.5	29158.8	NG	454.60
10/20/22 09:58	934.2	3210.8	29156.1	NG	454.82
10/20/22 09:59	934.3	3214.0	29213.2	NG	455.15
10/20/22 10:00	934.4	3207.2	29207.4	NG	454.96
10/20/22 10:01	934.3	3202.3	29124.6	NG	454.31
10/20/22 10:02	934.3	3206.4	29162.2	NG	455.25
10/20/22 10:03	934.2	3209.6	29209.2	NG	454.89
10/20/22 10:04	934.1	3212.8	29154.1	NG	455.10

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/20/22 10:05	934.1	3200.4	29160.8	NG	455.05
10/20/22 10:06	934.2	3209.1	29163.2	NG	455.00
10/20/22 10:07	934.3	3208.8	29173.9	NG	454.39
10/20/22 10:08	934.3	3203.4	29130.6	NG	454.85
10/20/22 10:09	934.2	3207.3	29221.7	NG	455.32
10/20/22 10:10	934.3	3208.0	29188.0	NG	454.42
10/20/22 10:11	934.1	3203.0	29194.5	NG	455.10
10/20/22 10:12	933.8	3210.3	29253.9	NG	455.70
10/20/22 10:13	933.9	3203.8	29219.2	NG	454.80
10/20/22 10:14	933.8	3197.6	29096.4	NG	454.18
10/20/22 10:15	933.8	3208.6	29192.2	NG	454.75
10/20/22 10:16	934.1	3197.5	29143.3	NG	454.27
10/20/22 10:17	934.1	3204.3	29158.2	NG	454.64
10/20/22 10:18	934.0	3214.3	29198.1	NG	455.13
10/20/22 10:19	934.2	3206.1	29112.5	NG	453.89
10/20/22 10:20	934.1	3205.0	29215.6	NG	455.23
10/20/22 10:21	934.1	3211.9	29198.5	NG	455.22
10/20/22 10:22	934.2	3196.7	29082.9	NG	453.85
10/20/22 10:23	934.2	3202.1	29101.7	NG	454.70
10/20/22 10:24	934.4	3204.7	29225.4	NG	454.59
10/20/22 10:25	934.4	3203.4	29128.2	NG	453.87
10/20/22 10:26	934.5	3207.1	29107.1	NG	454.47
10/20/22 10:27	934.7	3202.0	29101.9	NG	454.32
10/20/22 10:28	934.8	3204.6	29135.9	NG	453.75
10/20/22 10:29	934.8	3200.7	29058.2	NG	454.00
10/20/22 10:30	934.9	3204.8	29099.5	NG	454.31
10/20/22 10:31	934.9	3212.0	29100.4	NG	454.19
10/20/22 10:32	934.8	3191.8	29074.6	NG	453.80
10/20/22 10:33	934.5	3202.5	29117.9	NG	454.34
10/20/22 10:34	934.5	3206.4	29037.5	NG	454.30
10/20/22 10:35	934.7	3199.2	29025.0	NG	453.23
10/20/22 10:36	934.6	3209.7	29144.3	NG	454.72
10/20/22 10:37	934.5	3201.7	29056.2	NG	453.60
10/20/22 10:38	934.7	3194.9	29092.7	NG	453.92
10/20/22 10:39	934.7	3207.4	29124.0	NG	454.26
10/20/22 10:40	934.8	3209.5	29133.1	NG	454.22
10/20/22 10:41	934.8	3197.5	29091.4	NG	453.60
10/20/22 10:42	934.6	3203.0	29110.3	NG	454.35
10/20/22 10:43	934.4	3207.7	29181.3	NG	454.16
10/20/22 10:44	934.5	3196.1	29017.8	NG	453.47
10/20/22 10:45	934.6	3197.6	29095.5	NG	453.53
10/20/22 10:46	934.4	3196.8	29089.4	NG	454.04
10/20/22 10:47	934.3	3205.7	29070.9	NG	453.71

McDonough 4B ICR Process Data
Average PM-Metal Summary

Date Time	Inlet Temp deg F	Total Heat Input MMBtu/hr	Total Gas hscf	Fuel Type	Load MW
10/20/22 10:48	934.0	3209.2	29211.3	NG	454.74
10/20/22 10:49	934.0	3214.8	29198.0	NG	454.37
10/20/22 10:50	934.2	3191.9	29070.9	NG	454.24
10/20/22 10:51	934.2	3202.8	29120.8	NG	454.81
10/20/22 10:52	934.3	3201.2	29074.8	NG	453.63
10/20/22 10:53	934.4	3194.7	29053.7	NG	453.60
10/20/22 10:54	934.6	3201.3	29133.0	NG	454.09
10/20/22 10:55	934.4	3202.4	29116.3	NG	453.44
10/20/22 10:56	934.3	3195.3	29129.5	NG	454.00
10/20/22 10:57	934.3	3205.7	29113.1	NG	453.64
10/20/22 10:58	934.2	3192.0	29050.5	NG	452.69
10/20/22 10:59	934.3	3197.2	29078.1	NG	453.49
10/20/22 11:00	934.4	3213.6	29137.1	NG	453.38
10/20/22 11:01	934.4	3196.6	29108.1	NG	453.40
10/20/22 11:02	934.4	3204.1	29144.2	NG	453.89
10/20/22 11:03	934.4	3202.0	29092.9	NG	453.76
Run 7 Average	933.1	3221.0	29283.2	NG	457.0

Sample Location Information

Stratification Test (Method 7E)

Company: Georgia Power
Plant: Plant McDonough
Location: Unit 4A
Technicians: JSG, WM
Date: 10/12/2022

Point	O2 (%)
1	12.977
2	12.977
3	12.971
4	12.982
5	12.979
6	12.975
7	12.974
8	12.966
9	12.973
10	12.975
11	12.977
12	12.976
<hr/>	
Averages	12.975

Minimum Number of Sampling Points Required:

Single Point

Stratification determination by Method 7E, Section 8.1.2

Sample Location Information for Isokinetic Sampling - Round Ducts

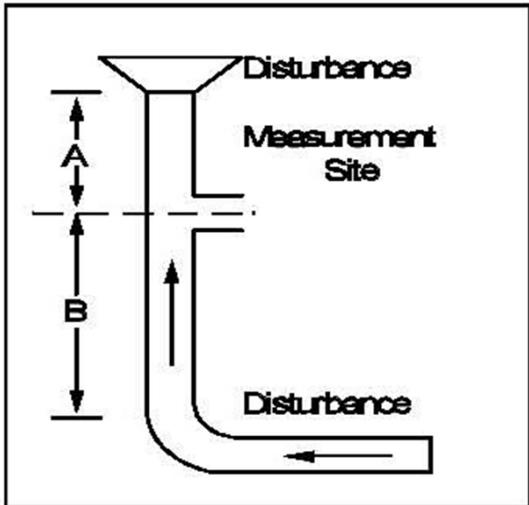
Project #: 499970
Company: Georgia Power
Plant: McDonough
Unit ID: Unit 4A
Sample Location: Exhaust

Distance A: 13.00 Feet, 0.55 Duct diameters
Distance B: 66.00 Feet, 2.78 Duct diameters
Meets Method 1 criteria

Meets Method 1 criteria

Duct Diameter:	<u>285</u>	inches	<u>23.75</u>	feet
# of Ports Used:			<u>4</u>	
# of Points/Diameter:			<u>12</u>	
Sample Plane:			<u>Horizontal</u>	
Port Type:			<u>Flange</u>	
Port Length:			<u>15.0</u>	inches
Port Inside Diameter:			<u>6.0</u>	inches

Traverse Point Locations



Pre-cyclonic flow check conducted? No Reason: Conducted Previously

Pre-Test Cyclonic Flow Check Data

Average a: 2.6 ($^{\circ}$)
Status: Pass

Average Ts: 215.21 (°F)

$$\text{Avg of sqrt } \Delta P: \quad \frac{0.8673}{0.7971} (\text{"H}_2\text{O})$$

Project No.	499970	Date	10/11/22
Client	Georgia Power	Stack Diameter (in)	285
Facility	McDonough Plant	Sampling Location	Exhaust
Source	Unit 4A	Condition	Max

Measurement Device Sensitivity	+0.01	Thermocouple ID	Internal Dimensions (in)
Measurement Device Standalone 0-10" Manometer ID	E13	Pitot ID	PIT-8B PTCF / Cp 0.0825
Measurement Device Standalone 0-1" Manometer ID	—	Barometer ID	14900.524
Measurement Device Standalone 0-0.25" Manometer ID	—	Barometric Pressure (in Hg)	29.20

Run No.	Prelims			Run No.	Angle Checks			Run No.	Angle Checks		
Stack CO2 (%)	Stack O2 (%)	P Static (in H2O)		Stack CO2 (%)	Stack O2 (%)	P Static (in H2O)		Stack CO2 (%)	Stack O2 (%)	P Static (in H2O)	
4.5	13.1	-0.23									
Run Time (24-hr)	Pitot Leak Checks			Run Time (24-hr)	Pitot Leak Checks			Run Time (24-hr)	Pitot Leak Checks		
Start 1400	Pre-Test +	Post-Test +		Start	Pre-Test +	Post-Test +		Start	Pre-Test +	Post-Test +	
Stop 1430	-	-		Stop	-	-		Stop	-	-	
Traverse Point No.	Flue Gas Temp. (°F)	Δ P (in H ₂ O)		Traverse Point No.	Flue Gas Temp. (°F)	Δ P (in H ₂ O)		Traverse Point No.	Flue Gas Temp. (°F)	Δ P (in H ₂ O)	
A1	6.41	218		C1	220	0.80		2			
2	0.32	216		2	221	0.58		5			
3	6.35	217		3	215	0.40		5			
4	0.50	215		4	214	0.35		5			
5	0.77	219		5	217	0.45		0			
6	6.80	210		6	212	0.42		0			
B1	1.11	220		D1	218	0.57		5			
2	1.11	222		2	215	0.62		2			
3	1.25	215		3	214	0.90		0			
4	1.20	214		4	216	1.10		0			
5	1.20	214		5	205	1.50		5			
6	0.90	210		6	210	1.60		5			

Comments
Moisture 10% est

Stratification Test (Method 7E)

Company: Georgia Power
Plant: Plant McDonough
Location: Unit 4B
Technicians: JSG, WM
Date: 10/17/2022

Point	O2 (%)
1	12.886
2	12.892
3	12.890
4	12.892
5	12.899
6	12.897
7	12.902
8	12.905
9	12.895
10	12.907
11	12.891
12	12.881
<hr/>	
Averages	12.895

Minimum Number of Sampling Points Required:

Single Point

Stratification determination by Method 7E, Section 8.1.2

Sample Location Information for Isokinetic Sampling - Round Ducts

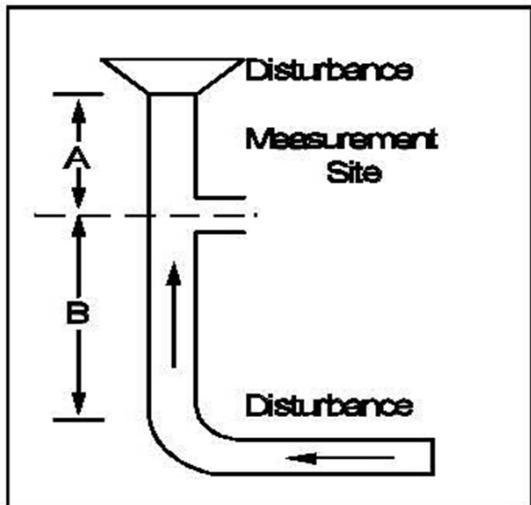
Project #: 499970
Company: Georgia Power
Plant: McDonough
Unit ID: Unit 4B
Sample Location: Exhaust

Distance A: 13.00 Feet, 0.55 Duct diameters
Distance B: 66.00 Feet, 2.78 Duct diameters
Meets Method 1 criteria

Meets Method 1 criteria

Duct Diameter:	<u>285</u>	inches	<u>23.75</u>	feet
# of Ports Used:			<u>4</u>	
# of Points/Diameter:			<u>12</u>	
Sample Plane:			<u>Horizontal</u>	
Port Type:			<u>Flange</u>	
Port Length:			<u>15.0</u>	inches
Port Inside Diameter:			<u>6.0</u>	inches

Traverse Point Locations



Pre-cyclonic flow check conducted? No Reason: Conducted Previously

Pre-Test Cyclonic Flow Check Data

Average a: 2.5 ($^{\circ}$)
Status: Pass

Average Ts: 219.96 (°F)

$$\begin{array}{ll} \text{Average } \Delta P: & \underline{0.7958} \text{ ("H}_2\text{O)} \\ \text{Avg of sqrt } \Delta P: & \underline{0.8762} \end{array}$$

Project No.	499970	Date	10/17/22
Client	Georgia Power	Stack Diameter (in)	Operator Name
Facility	Plant McDonough	Sampling Location	Exhaust
Source	Unit 4B	Condition	Max

Measurement Device Sensitivity	+ 0.01	Thermocouple ID	Internal Dimensions (in)
Measurement Device Standalone 0-10" Manometer ID	E13	Pitot ID	RPT-8B PTCF / Cp 0.825
Measurement Device Standalone 0-1" Manometer ID	—	Barometer ID	14960524
Measurement Device Standalone 0-0.25" Manometer ID	—	Barometric Pressure (in Hg)	29.00

Run No.	Prelimin Flow			Run No.	Angle Checks			Run No.	Angle Checks			Start
Stack CO2 (%)	Stack O2 (%)	P Static (in H2O)	Start	Stack CO2 (%)	Stack O2 (%)	P Static (in H2O)	Start	Stack CO2 (%)	Stack O2 (%)	P Static (in H2O)	Start	
4.5	13.0	-0.32	Run Time (24-hr)	—	—	—	Run Time (24-hr)	—	—	—	Run Time (24-hr)	
Start	Pre-Test	Post-Test	Stop	Pre-Test	Post-Test	Stop	Start	Pre-Test	Post-Test	Stop	Start	
Stop	+ X - X	+ X - X	Traverse Point No.	Flue Gas Temp. (°F)	Δ P (in H ₂ O)	Traverse Point No.	Flue Gas Temp. (°F)	Δ P (in H ₂ O)	Traverse Point No.	Flue Gas Temp. (°F)	Δ P (in H ₂ O)	Start
A1	220	0.51	0	225	0.75	1	225	0.75	1	225	0.75	Start
2	221	0.48	0	220	0.52	2	220	0.52	2	220	0.52	Start
3	220	0.55	1	225	0.51	4	225	0.51	4	225	0.51	Start
4	219	0.63	2	224	0.49	6	224	0.49	6	224	0.49	Start
5	215	0.61	1	220	0.70	0	220	0.70	0	220	0.70	Start
6	216	0.58	3	221	0.48	5	221	0.48	5	221	0.48	Start
B1	226	0.50	0	219	0.62	3	219	0.62	3	219	0.62	Start
2	222	1.0	5	218	0.75	3	218	0.75	3	218	0.75	Start
3	222	1.1	5	220	1.1	2	220	1.1	2	220	1.1	Start
4	220	1.1	4	222	1.4	1	222	1.4	1	222	1.4	Start
5	219	1.0	1	214	1.3	0	214	1.3	0	214	1.3	Start
6	219	0.92	7	218	1.5	5	218	1.5	5	218	1.5	Start

Comments

Moisture Assum 10%

Calculation Nomenclature and Formulas

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Test Location: Exhaust
Method: 5/29

Run: 1
Test Date: 10/12/2022

K-Factor Isokinetic Sampling Coefficient (based on pre-test data)

$$\text{K-Factor} = \frac{846.72 \times (D_n)^4 \times \Delta H_{@I} \times C_p^2 \times (1-B_{ws})^2 \times (M_d \times T_m \times P_s)}{(M_s \times T_s \times (P_{bar} + (\Delta H_{@I}/13.6)))}$$

Where:

T_s = Temperature of effluent gas ($^{\circ}\text{R}$)

T_m = Average dry test meter temperature ($^{\circ}\text{R}$)

D_n = Nozzle Diameter (in.)

$\Delta H_{@I}$ = Orifice pressure drop corresponding to 0.75 cfm meter flow rate (in. H_2O)

C_p = Pitot Tube Coefficient (dimensionless)

B_{ws} = Effluent gas fractional moisture content (dimensionless)

M_d = Dry molecular weight of exhaust (lb/lb-mole)

M_s = Molecular weight of exhaust, wet basis (lb/lb-mole)

P_s = Absolute flue gas pressure ("Hg)

P_{bar} = Ambient barometric pressure at sample elevation ("Hg)

$D_n =$	0.249	in.	$P_s =$	28.98	in. Hg abs.
$\Delta H_{@I} =$	1.82	in. H_2O	$M_s =$	28.12	lb/lb-mole
$C_p =$	0.826	(dimensionless)	$T_s =$	680	$^{\circ}\text{R}$
$M_d =$	29.25	lb/lb-mole	$P_{bar} =$	29.00	in. Hg
$T_m =$	530	$^{\circ}\text{R}$	$B_{ws} =$	0.100	(dimensionless)

K-Factor = 2.638

Dry Molecular Weight

$$M_d = 0.44 \times (\% \text{CO}_2) + 0.32 \times (\% \text{O}_2) + 0.28 \times \% \text{N}_2$$

Where:

M_d = Effluent gas molecular weight (lb/lb-mole, dry basis)

$\% \text{CO}_2$ = Effluent gas Carbon Dioxide Content (% volume, dry basis)

$\% \text{O}_2$ = Effluent gas Oxygen Content (% volume, dry basis)

$\% \text{N}_2$ = Effluent gas Nitrogen Dioxide Content (% volume, dry basis)

$\% \text{CO}_2 =$	4.5	% vol dry	$\% \text{N}_2 =$	82.4	% vol dry
$\% \text{O}_2 =$	13.1	% vol dry			

$M_d =$ 29.25 lb/lb-mole

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Test Location: Exhaust

Run: 1
Test Date: 10/12/2022

Wet Molecular Weight

$$M_s = M_d \times (1 - B_{ws}) + (18.015 \times B_{ws})$$

Where:

M_s = Effluent gas molecular weight (lb/lb-mole, wet basis)

B_{ws} = Effluent gas fractional moisture content (dimensionless)

$$M_d = \underline{29.25} \text{ lb/lb-mole} \quad B_{ws} = \underline{0.096}$$

$$M_s = \underline{\underline{28.16}} \text{ lb/lb-mole}$$

Effluent Gas Pressure

$$P_s = P_{bar} + (P_f/13.6)$$

Where:

P_s = flue gas pressure ("Hg)

P_{bar} = Ambient barometric pressure at sample elevation ("Hg)

P_g = Flue gas gauge pressure ("H₂O)

$$P_{bar} = \underline{29.25} \text{ "Hg} \quad P_g = \underline{-0.23} \text{ "H}_2\text{O}$$

$$P_s = \underline{\underline{29.23}} \text{ "Hg}$$

Average Meter Temperature

$$T_m = \frac{\sum_{i=1}^n (T_{min,i} + T_{mout,i})/2}{n}$$

Where:

T_m = Average dry test meter temperature ($^{\circ}$ R)

T_{min} = Temperature of gas entering dry test meter ($^{\circ}$ R)

T_{mout} = Temperature of gas leaving dry test meter ($^{\circ}$ R)

$$\text{Avg } T_{min} = \underline{536.4} \text{ }^{\circ}\text{R} \quad \text{Avg } T_{mout} = \underline{536.4} \text{ }^{\circ}\text{R}$$

$$T_m = \underline{\underline{536.4}} \text{ }^{\circ}\text{R}$$

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Test Location: Exhaust

Run: 1
Test Date: 10/12/2022

ΔH at Sample Point - Example Point

A2

$$\Delta H_i = K\text{-Factor} \times \Delta P_i$$

Where:

ΔH_i = Pressure differential across calibrated orifice at point i ("H₂O)

ΔP_i = Velocity head across pitot at point i ("H₂O)

$$K\text{-Factor} = \underline{\quad 2.666 \quad}$$

$$\Delta P_i = \underline{\quad 0.32 \quad} "H_2O$$

$$\Delta H_i = \underline{\quad 0.85 \quad} "H_2O$$

Sample Volume at Standard Conditions

$$V_{m(\text{std})} = (T_{\text{std}}/29.92) \times Y \times V_m \times (P_{\text{bar}} + \Delta H/13.6)/T_m$$

Where:

$V_{m(\text{std})}$ = Sample volume collected corrected to 29.92 inHg and 527.67°R (ft³, dry basis)

Y = Dry test meter calibration coefficient (dimensionless)

V_m = Sample volume collected at actual conditions (ft³, dry basis)

T_{std} = Standard Temperature 527.67(°R)

ΔH = Average pressure differential across calibrated orifice ("H₂O)

$$Y = \frac{0.994}{29.25} "Hg$$

$$P_{\text{bar}} = \frac{29.25}{536.4} "Hg$$

$$V_m = \frac{152.238}{527.67} cf$$

$$\Delta H = \frac{2.09}{527.67} "H_2O$$

$$V_{m(\text{std})} = \underline{\quad 146.304 \quad} dscf$$

Volume of Water Vapor Condensed

$$V_{wc(\text{std})} = 0.04716 \times (T_{\text{std}} / 527.67) \times M_{H_2O}$$

Where:

$V_{wc(\text{std})}$ = Volume of water vapor collected at 29.92 inHg and 527.67°R (ft³)

M_{H_2O} = Net weight gain of impingers (grams)

$$M_{H_2O} = \underline{\quad 331.3 \quad} \text{ grams}$$

$$V_{wc(\text{std})} = \underline{\quad 15.624 \quad} wscf$$

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Test Location: Exhaust

Run: 1
Test Date: 10/12/2022

Moisture Content

$$B_{ws} = \frac{V_{wc(std)}}{V_{wc(std)} + V_{m(std)}}$$

$$V_{wc(std)} = 15.624 \text{ wscf}$$

$$V_{m(std)} = 146.304 \text{ dscf}$$

$$B_{ws} = 0.096$$

Average Duct Velocity

$$V_s = 85.49 \times C_p \times \text{Sqrt } \Delta P (\text{avg}) \times (T_s / (P_s \times M_s))^{1/2}$$

Where:

V_s = Average velocity of effluent gas (ft/sec)

C_p = Pitot calibration coefficient (dimensionless)

$\text{Sqrt } \Delta P (\text{avg})$ = Average of the square roots of DP's at all traverse points

$$\begin{aligned} C_p &= 0.825 \\ T_s &= 676.0 \text{ }^{\circ}\text{R} \\ M_s &= 28.16 \text{ lb/lb-mole} \end{aligned}$$

$$\begin{aligned} \text{Sqrt } \Delta P (\text{avg}) &= 0.870 \\ P_s &= 29.23 \text{ "Hg} \end{aligned}$$

$$V_s = 55.60 \text{ ft/sec}$$

Method 2 Volumetric Flow Rate (Actual Basis)

$$Q = V_s \times A \times 60$$

Where:

Q = Effluent gas volumetric flow rate at actual conditions (ft^3/min)

A = Cross-sectional area of duct at sample location (ft^2)

$$V_s = 55.60 \text{ ft/sec}$$

$$A = 443.013 \text{ ft}^2$$

$$Q = 1,477,964 \text{ cfm}$$

Method 2 Volumetric Flow Rate (Standard Basis)

$$Q_{std} = \frac{T_{std} \times Q \times P_s}{T_s \times 29.92}$$

Where:

Q_{std} = Effluent gas volumetric flow rate corrected to 29.92 inHg and 527.67°R (ft^3/min)

$$\begin{aligned} Q &= 1477964 \text{ cfm} \\ T_s &= 676.0 \text{ }^{\circ}\text{R} \end{aligned}$$

$$P_s = 29.23 \text{ "Hg}$$

$$Q_{std} = 1,127,243 \text{ scfm}$$

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Test Location: Exhaust

Run: 1
Test Date: 10/12/2022

Method 2 Volumetric Flow Rate (Standard Dry Basis)

$$Q_{\text{std(dry)}} = Q_{\text{std}} \times (1 - B_{ws})$$

Where:

$Q_{\text{std(dry)}}$ = Effluent gas volumetric flow rate corrected to 29.92 inHg and 527.67°R (ft³/min, dry basis)

$$Q_{\text{std}} = \underline{1127243 \text{ scfm}} \quad B_{ws} = \underline{0.096}$$

$$Q_{\text{std(dry)}} = \underline{1,018,477 \text{ dscfm}}$$

Isokinetic Variation:

$$I = \frac{0.0945 \times T_s \times V_m(\text{std}) \times 527.67}{V_s \times \theta \times A_n \times P_s \times (1 - B_{ws}) \times T_{\text{std}}}$$

Where:

I = Percent of isokinetic sampling (dimensionless)

θ = Total sample collection time (min)

A_n = Cross-sectional area of nozzle (ft²)

$$\begin{aligned} T_s &= \underline{676.0}^{\circ\text{R}} & V_{m(\text{std})} &= \underline{146.304} \text{ dscf} \\ V_s &= \underline{55.603} \text{ ft/sec} & \theta &= \underline{192.0} \text{ min} \\ P_s &= \underline{29.23} \text{ "Hg} & A_n &= \underline{0.000338} \text{ ft}^2 \\ &&& B_{ws} = \underline{0.096} \end{aligned}$$

$$I = \underline{98.0} \text{ %}$$

PM Concentration - example for filterable only:

$$C_s = \frac{m_n \times 0.01543}{V_{m(\text{std})}}$$

Where:

C_s = Particulate matter concentration (grains/dry standard ft³)

m_n = Net mass of particulate matter collected (mg)

$$m_n = \underline{7.9} \text{ mg} \quad V_{m(\text{std})} = \underline{146.304} \text{ dscf}$$

$$C_s = \underline{0.00084} \text{ gr/dscf}$$

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Test Location: Exhaust

Run: 1
Test Date: 10/12/2022

PM Concentration in Exhaust Gas (gr/dscf or mg/std. m³), corrected to 15% O₂ - example for filterable only:

$$C_{corr.} = C_s \times \left(\frac{20.9 - \text{Reference O}_2}{20.9 - \% \text{ O}_2} \right)$$

Where:

Reference O₂ = 15% O₂

C_s = As-measured PM concentration (gr/dscf or mg/std. m³)

% O₂ = As-measured flue gas O₂ content (% volume)

$$C_s = \underline{0.00084 \text{ gr/dscf}}$$

$$\% \text{ O}_2 = \underline{13.1 \text{ % vol}}$$

$$C_{corr.} = \underline{0.00063 \text{ gr/dscf @ 15% O}_2}$$

PM Emission Rate Based on Method 2 Volumetric Flow Rate - example for filterable only:

$$ER_{M2} = \frac{C_s \times Q_{std(dry)} \times 60}{7000}$$

Where:

ER_{M2} = Particulate matter emission rate calculated using Method 2 volumetric flow rate (lb/hr)

7000 = grains per pound

$$C_s = \underline{0.0008 \text{ gr/dscf}}$$

$$Q_{std(dry)} = \underline{1018477 \text{ dscf/min}}$$

$$ER_{M2} = \underline{7.31 \text{ lb/hr}}$$

Example Calculations - Selected Metal Emission Rate

Project Number: 499970
 Customer: Georgia Power
 Unit Identification: Unit 4A
 Sample Location: Exhaust

Test Date: October 12, 2022
 Facility: McDonough
 Run #: 1
 Selected Metal: Arsenic:

Arsenic: Concentration ($\mu\text{g/dscm}$)

$$C_s = \frac{M}{V_{m(\text{std})}}$$

Where:

C_s = Concentration of selected metal, $\mu\text{g/dscm}$

M = Mass collected, microgram, μg

$V_{m(\text{std})}$ = Volume of sample gas in dry standard cubic meters

$$M = \underline{2.2210} \quad \mu\text{g} \qquad V_{m(\text{std})} = \underline{4.143} \quad \text{dry std. m}^3$$

$$C_s = \underline{5.361E-01} \quad \mu\text{g/dscm}$$

Arsenic: Concentration (lb/dscf):

$$C_d = \frac{\left(\frac{M}{(10^6 \times 453.6)} \right)}{V_{m(\text{std})}}$$

Where:

C_d = Concentration of selected metal, lb/dscf

M = Mass collected, microgram, μg

453.6 = conversion, 453.6 grams to lbs

$V_{m(\text{std})}$ = Volume of sample gas in dry standard cubic feet

$$V_{m(\text{std})} = \underline{1.463E+02} \quad \text{dscf}$$

$$C_d = \underline{3.347E-11} \quad \text{lb/dscf}$$

Arsenic: Emission Rate (lb/hr):

$$ER = C_d \times 60 \times Q_{\text{STD(dry)}}$$

Where:

ER = Emission Rate of Selected Metal, lb/hr

C_d = Concentration of selected metal, lb/dscf

60 = conversion, 60 minutes/hr

$Q_{\text{std(dry)}}$ = Stack gas volumetric flow rate, dry standard cubic feet per minute

$$C_d = \underline{3.347E-11} \quad \text{lb/dscf} \qquad Q_{\text{std(dry)}} = \underline{1018477} \quad \text{ft}^3/\text{min}$$

$$ER = \underline{2.045E-03} \quad \text{lb/hr}$$

Example Calculations - Effluent Gas Concentration Determination

Project Number:	499970	Test Date:	October 13, 2022
Customer:	Georgia Power	Facility:	Plant McDonough
Unit Identification:	Unit 4A	Run #:	1
Sample Location:	Stack		

$$C_{\text{gas}} = (C - C_0) \times \frac{C_{\text{ma}}}{C_m - C_0}$$

Where:

C_{gas} = Effluent gas concentration (ppm or %vol)

C = Average gas concentration indicated by analyzer (ppm or %vol)

C_0 = Average of pre- and post-test system bias checks using low range gas (ppm or % vol)

C_m = Average of pre- and post-test system bias checks using upscale gas (ppm or % vol)

C_{ma} = Actual concentration of upscale gas (ppm or % vol)

CO	$C = \frac{0.043}{5.868} \text{ ppm}$	$C_0 = \frac{0.346}{5.515} \text{ ppm}$
	$C_m = \underline{5.868} \text{ ppm}$	$C_{\text{ma}} = \underline{5.515} \text{ ppm}$

$$C_{\text{co}} = \underline{-0.303} \text{ ppm}$$

CO₂	$C = \frac{4.512}{9.997} \% \text{vol}$	$C_0 = \frac{0.005}{10.090} \% \text{vol}$
	$C_m = \underline{9.997} \% \text{vol}$	$C_{\text{ma}} = \underline{10.090} \% \text{vol}$

$$C_{\text{co2}} = \underline{4.551} \% \text{vol}$$

O₂	$C = \frac{12.831}{9.852} \% \text{vol}$	$C_0 = \frac{0.069}{10.020} \% \text{vol}$
	$C_m = \underline{9.852} \% \text{vol}$	$C_{\text{ma}} = \underline{10.020} \% \text{vol}$

$$C_{\text{o2}} = \underline{13.071} \% \text{vol}$$

Note: Interim results are not rounded.

Example Calculations - Pollutant Concentration Corrected to a Reference % Oxygen

Project Number:	499970	Test Date:	Ocotber 13, 2022
Customer:	Georgia Power	Facility:	Plant McDonough
Unit Identification:	Unit 4A	Run #:	1

$$C_{\text{gas}} @ \text{Reference } \%O_2 = C_{\text{gas}} \times \frac{(20.9 - \text{Ref } \%O_2)}{(20.9 - \%O_2)}$$

Where:

C_{gas} = Effluent gas pollutant concentration (ppm)

$\%O_2$ = Effluent gas Oxygen concentration (ppm or %vol)

20.9 = Concentration of Oxygen in ambient air (%vol)

Ref $\%O_2$ = Reference Oxygen concentration

$$\text{CO} \quad C_{\text{gas}} = \frac{-0.303}{15} \text{ ppmvd} \quad \% O_2 = \frac{13.071}{15} \% \text{ v/v dry}$$

$$C_{\text{co}} @ \text{Ref } \%O_2 = \frac{-0.228}{15} \text{ ppmvd}$$

Note: Interim results are not rounded.

Method 320 Processed Data

Client: Georgia Power
 Facility: Plant McDonough
 Source: Unit 4A

Condition: Natural Gas Max

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	7:20:32	0.431	-0.0107	0.011	0.012	0.0087	-22	0.032	0.0037	0.009	0.008	0.0004	0	14	190	0.992
10/13/2022	7:21:32	0.432	-0.0151	0.006	0.000	0.0081	-36	0.033	0.0038	0.009	0.008	0.0003	0	14	190	0.992
10/13/2022	7:22:32	0.426	-0.0153	0.002	0.011	0.0068	-39	0.033	0.0036	0.009	0.008	0.0004	1	14	190	0.992
10/13/2022	7:23:32	0.436	-0.0065	0.000	0.017	0.0082	-2	0.033	0.0038	0.010	0.008	0.0003	0	14	190	0.992
10/13/2022	7:24:32	0.401	-0.0112	0.005	0.008	0.0076	3	0.033	0.0037	0.009	0.009	0.0003	0	14	190	0.992
10/13/2022	7:25:32	0.433	-0.0023	0.013	-0.004	0.0058	24	0.036	0.0038	0.009	0.009	0.0003	1	14	190	0.992
10/13/2022	7:26:32	0.393	-0.0056	0.012	0.004	0.0082	59	0.031	0.0033	0.008	0.009	0.0003	0	14	190	0.992
10/13/2022	7:27:32	-2.167	0.0360	0.019	-0.609	-0.0083	8446	0.704	0.0049	0.013	0.329	0.0052	26	13	190	1.000
Ambient Air																
10/13/2022	7:28:32	0.047	-0.0388	0.049	0.045	0.0058	12462	0.172	0.0048	0.013	0.138	0.0010	80	12	190	1.004
10/13/2022	7:29:32	0.222	-0.0327	0.027	0.058	0.0070	12374	0.097	0.0049	0.014	0.131	0.0010	66	12	190	1.004
10/13/2022	7:30:32	0.237	-0.0409	0.017	0.075	0.0058	12844	0.077	0.0055	0.015	0.148	0.0010	70	12	190	1.004
10/13/2022	7:31:34	0.286	-0.0441	0.020	0.083	0.0106	13993	0.068	0.0051	0.014	0.154	0.0011	72	12	190	1.004
10/13/2022	7:32:32	0.328	-0.0443	0.029	0.111	0.0078	15028	0.061	0.0053	0.014	0.157	0.0011	83	12	190	1.004
10/13/2022	7:33:32	0.341	-0.0418	0.029	0.065	0.0093	10599	0.045	0.0046	0.013	0.105	0.0008	57	13	190	0.997
10/13/2022	7:34:32	0.445	-0.0091	0.005	0.004	0.0068	247	0.034	0.0040	0.009	0.020	0.0003	9	14	190	0.992
10/13/2022	7:35:32	0.422	-0.0058	0.002	-0.064	0.0068	279	0.035	0.0039	0.009	0.028	0.0004	1	14	190	0.992
10/13/2022	7:36:32	0.446	-0.0054	0.008	-0.050	0.0055	318	0.038	0.0039	0.010	0.031	0.0003	1	14	190	0.992
10/13/2022	7:37:32	0.424	-0.0079	0.005	-0.036	0.0059	300	0.036	0.0037	0.009	0.030	0.0003	1	14	190	0.992
Direct Zero																
10/13/2022	7:38:35	0.431	-0.0287	0.004	-0.038	0.0081	244	0.033	0.0041	0.010	0.027	0.0004	1	14	190	0.992
10/13/2022	7:39:32	0.407	-0.0056	0.007	-0.023	0.0082	192	0.033	0.0037	0.009	0.024	0.0004	1	14	190	0.992
10/13/2022	7:40:32	0.410	-0.0031	0.008	-0.030	0.0069	152	0.034	0.0037	0.009	0.018	0.0003	1	14	190	0.992
10/13/2022	7:41:33	58.920	-0.0148	-0.001	-0.034	0.0385	115	0.140	0.0037	0.009	0.019	0.0068	2	14	190	0.992
10/13/2022	7:42:32	94.557	-0.0195	0.003	-0.029	0.0295	-23	0.081	0.0041	0.010	0.022	0.0034	3	14	190	0.992
10/13/2022	7:43:32	95.674	-0.0271	-0.004	-0.030	0.0158	-66	0.086	0.0035	0.008	0.015	0.0071	3	14	190	0.992
10/13/2022	7:44:32	95.659	-0.0040	-0.001	-0.013	0.0195	-93	0.090	0.0036	0.009	0.014	0.0072	3	14	190	0.992
10/13/2022	7:45:32	95.905	-0.0004	-0.001	-0.009	0.0173	-130	0.087	0.0039	0.009	0.011	0.0072	3	14	190	0.992
Direct CTS																
10/13/2022	7:46:32	65.571	0.622	0.004	-0.696	-0.0573	11917	0.560	0.0095	0.026	0.392	0.0101	32	12	190	0.997
10/13/2022	7:47:32	92.304	0.0739	0.017	0.049	0.0101	11428	0.106	0.0058	0.016	0.141	0.0035	83	12	190	0.998
10/13/2022	7:48:32	94.687	0.0159	0.019	0.029	0.0094	7513	0.099	0.0050	0.012	0.102	0.0075	64	13	190	0.999
10/13/2022	7:49:32	95.074	0.0280	0.020	0.020	0.0075	5704	0.097	0.0049	0.011	0.084	0.0074	58	13	190	0.999
10/13/2022	7:50:32	95.622	0.0135	0.015	-0.196	0.0172	3062	0.098	0.0045	0.010	0.046	0.0077	26	13	190	0.999
10/13/2022	7:51:32	95.616	-0.0041	0.028	-0.101	0.0121	1403	0.091	0.0040	0.009	0.024	0.0073	23	13	190	0.999
System CTS																
10/13/2022	7:52:32	88.463	0.0041	0.006	-0.123	0.0280	995	0.117	0.0037	0.008	0.025	0.0062	10	14	190	0.999
10/13/2022	7:53:32	0.881	-0.0179	0.013	-0.092	0.0074	835	0.035	0.0038	0.009	0.021	0.0007	4	14	190	0.999
10/13/2022	7:54:32	0.596	-0.0074	0.017	-0.081	0.0086	713	0.032	0.0038	0.009	0.018	0.0006	4	14	190	0.999
10/13/2022	7:55:32	0.495	-0.0051	0.017	-0.050	0.0083	586	0.033	0.0038	0.009	0.016	0.0007	3	14	190	0.999
10/13/2022	7:56:32	0.463	-0.0106	0.011	-0.062	0.0082	467	0.034	0.0038	0.008	0.018	0.0006	2	14	190	0.999
System Zero																
10/13/2022	7:57:35	0.427	-0.0099	0.027	-0.433	0.0143	8119	0.166	0.0039	0.010	0.165	0.0040	27	13	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	7:58:32	0.232	-0.0357	0.050	0.212	-0.0012	38303	0.180	0.0066	0.022	0.423	0.0042	218	11	190	0.999
10/13/2022	7:59:32	0.145	-0.0243	0.039	0.349	0.0120	45403	0.156	0.0065	0.024	0.374	0.0038	251	11	190	0.999
10/13/2022	8:00:32	0.203	-0.0193	0.063	0.361	0.0097	52689	0.168	0.0067	0.025	0.409	0.0040	285	10	190	0.999
10/13/2022	8:01:32	0.201	-0.0159	0.067	0.454	0.0150	66034	0.192	0.0072	0.033	0.476	0.0044	365	10	190	0.999
10/13/2022	8:02:32	0.227	0.0036	0.088	0.629	0.0153	78309	0.209	0.0081	0.036	0.512	0.0048	432	10	190	0.999
10/13/2022	8:03:32	0.212	-0.0048	0.072	0.740	0.0210	94414	0.236	0.0086	0.044	0.602	0.0053	521	10	190	0.999
10/13/2022	8:04:32	0.202	0.0046	0.088	0.863	0.0228	84608	0.225	0.0085	0.039	0.633	0.0051	506	10	190	0.999
10/13/2022	8:05:32	0.210	-0.0063	0.059	0.736	0.0203	87981	0.230	0.0082	0.042	0.612	0.0052	499	10	190	0.999
10/13/2022	8:06:34	0.307	-0.0151	0.072	0.789	0.0211	81030	0.220	0.0078	0.038	0.554	0.0050	492	10	190	0.999
10/13/2022	8:07:32	0.212	-0.0134	0.074	0.812	0.0196	85800	0.226	0.0082	0.041	0.683	0.0052	486	10	190	0.999
10/13/2022	8:08:32	0.221	0.0008	0.087	0.728	0.0209	81303	0.212	0.0080	0.038	0.592	0.0049	459	10	190	0.999
10/13/2022	8:09:32	0.229	-0.0085	0.088	0.710	0.0184	91115	0.232	0.0085	0.043	0.628	0.0052	502	10	190	0.999
10/13/2022	8:10:32	0.239	0.0083	0.079	0.897	0.0230	80775	0.221	0.0080	0.039	0.738	0.0050	491	10	190	0.999
10/13/2022	8:11:32	0.153	-0.0146	0.099	0.709	0.0235	88569	0.229	0.0081	0.041	0.605	0.0052	500	10	190	0.999
10/13/2022	8:12:32	0.259	0.0135	0.109	0.801	0.0203	80938	0.218	0.0081	0.038	0.574	0.0050	486	10	190	0.999
10/13/2022	8:13:32	0.228	0.0055	0.097	0.746	0.0217	83639	0.219	0.0080	0.039	0.631	0.0051	473	10	190	0.999
10/13/2022	8:14:32	0.248	-0.0335	0.058	0.680	0.0206	90408	0.233	0.0083	0.043	0.623	0.0053	512	10	190	0.999
10/13/2022	8:15:32	0.261	-0.0001	0.097	0.845	0.0222	85882	0.229	0.0080	0.040	0.774	0.0051	515	10	190	0.999
10/13/2022	8:16:32	0.256	-0.0111	0.102	0.738	0.0193	83480	0.222	0.0083	0.040	0.636	0.0050	472	10	190	0.999
10/13/2022	8:17:32	0.288	0.0039	0.085	0.679	0.0218	88773	0.226	0.0087	0.041	0.507	0.0052	495	10	190	0.999
10/13/2022	8:18:32	0.287	-0.0151	0.126	0.758	0.0191	79957	0.213	0.0084	0.038	0.493	0.0048	468	10	190	0.999
10/13/2022	8:19:32	0.184	-0.0034	0.117	0.800	0.0198	87824	0.226	0.0081	0.041	0.822	0.0051	487	10	190	0.999
10/13/2022	8:20:32	0.267	-0.0190	0.089	0.810	0.0220	83905	0.222	0.0084	0.040	0.613	0.0049	492	10	190	0.999
10/13/2022	8:21:34	0.242	-0.0256	0.085	0.655	0.0216	78898	0.208	0.0079	0.037	0.523	0.0048	443	10	190	0.999
10/13/2022	8:22:32	0.260	0.0131	0.116	0.773	0.0188	104466	0.227	0.0094	0.048	0.700	0.0058	557	10	190	0.999
10/13/2022	8:23:32	0.256	-0.0209	0.108	0.898	0.0227	93327	0.239	0.0085	0.044	0.821	0.0055	540	10	190	0.999
10/13/2022	8:24:32	0.253	-0.0054	0.111	0.906	0.0237	90729	0.233	0.0087	0.042	0.708	0.0052	517	10	190	0.999
10/13/2022	8:25:32	0.292	-0.0111	0.107	0.863	0.0244	99383	0.227	0.0091	0.048	0.677	0.0056	562	10	190	0.999
10/13/2022	8:26:32	0.274	-0.0209	0.098	0.863	0.0235	92698	0.239	0.0088	0.043	0.686	0.0054	535	10	190	0.999
10/13/2022	8:27:32	0.260	-0.0206	0.110	0.835	0.0213	85588	0.228	0.0085	0.040	0.650	0.0051	509	10	190	0.999
10/13/2022	8:28:32	0.177	-0.0087	0.105	0.743	0.0202	92988	0.238	0.0092	0.044	0.789	0.0054	519	10	190	0.999
10/13/2022	8:29:33	0.286	-0.0182	0.124	0.744	0.0218	95600	0.250	0.0087	0.046	0.623	0.0056	558	10	190	0.999
10/13/2022	8:30:32	0.230	0.0119	0.105	0.865	0.0249	93025	0.241	0.0090	0.044	0.838	0.0054	538	10	190	0.999
10/13/2022	8:31:32	0.298	-0.0221	0.097	0.791	0.0190	85530	0.228	0.0081	0.041	0.646	0.0051	508	10	190	0.999
10/13/2022	8:32:32	0.265	-0.0167	0.100	0.723	0.0206	95346	0.244	0.0088	0.045	0.672	0.0056	530	10	190	0.999
Start Run 1																
10/13/2022	8:33:32	0.259	-0.0301	0.107	0.921	0.0240	83685	0.223	0.0083	0.039	0.841	0.0051	497	10	190	0.999
10/13/2022	8:34:32	0.191	-0.0272	0.117	0.680	0.0200	93349	0.240	0.0082	0.043	0.668	0.0055	527	10	190	0.999
10/13/2022	8:35:32	0.328	-0.0245	0.112	0.869	0.0236	87662	0.235	0.0078	0.042	0.720	0.0053	528	10	190	0.999
10/13/2022	8:36:32	0.278	-0.0247	0.121	0.813	0.0226	87874	0.240	0.0080	0.042	0.632	0.0053	534	10	190	0.999
10/13/2022	8:37:32	0.283	-0.0167	0.128	0.783	0.0247	92478	0.245	0.0082	0.044	0.595	0.0055	554	10	190	0.999
10/13/2022	8:38:32	0.284	0.0154	0.123	0.956	0.0223	93982	0.251	0.0081	0.044	0.801	0.0057	563	10	190	0.999
10/13/2022	8:39:32	0.250	-0.0082	0.110	0.771	0.0239	86575	0.240	0.0074	0.041	0.610	0.0054	536	10	190	0.999
10/13/2022	8:40:32	0.219	-0.0179	0.114	0.821	0.0178	91565	0.243	0.0078	0.044	0.855	0.0055	531	10	190	0.999
10/13/2022	8:41:34	0.284	-0.0222	0.099	0.867	0.0203	89701	0.242	0.0075	0.043	0.677	0.0055	545	10	190	0.999
10/13/2022	8:42:32	0.215	-0.0162	0.114	0.886	0.0211	88455	0.239	0.0077	0.041	0.739	0.0054	536	10	190	0.999
10/13/2022	8:43:32	0.288	0.0006	0.092	0.806	0.0218	91571	0.240	0.0082	0.043	0.634	0.0054	539	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	8:44:32	0.183	-0.0150	0.095	0.864	0.0226	92103	0.243	0.0080	0.044	0.665	0.0055	547	10	190	0.999
10/13/2022	8:45:32	0.266	-0.0163	0.115	0.809	0.0211	88864	0.238	0.0081	0.043	0.619	0.0054	534	10	190	0.999
10/13/2022	8:46:32	0.235	-0.0165	0.120	0.794	0.0256	86456	0.234	0.0081	0.040	0.619	0.0053	524	10	190	0.999
10/13/2022	8:47:32	0.187	-0.0190	0.097	0.719	0.0208	91572	0.235	0.0086	0.042	0.587	0.0053	512	10	190	0.999
10/13/2022	8:48:35	0.275	-0.0114	0.112	0.819	0.0222	87338	0.227	0.0082	0.041	0.661	0.0052	520	10	190	0.999
10/13/2022	8:49:32	0.297	-0.0054	0.096	0.746	0.0186	89326	0.234	0.0082	0.042	0.636	0.0053	503	10	190	0.999
10/13/2022	8:50:32	0.199	-0.0083	0.126	0.842	0.0210	94192	0.238	0.0085	0.044	0.615	0.0054	544	10	190	0.999
10/13/2022	8:51:35	0.272	-0.0179	0.094	0.785	0.0244	88465	0.232	0.0081	0.043	0.595	0.0053	521	10	190	0.999
10/13/2022	8:52:32	0.291	-0.0293	0.104	0.827	0.0222	9014	0.236	0.0083	0.043	0.823	0.0053	535	10	190	0.999
10/13/2022	8:53:33	0.259	0.0167	0.123	0.854	0.0227	92594	0.243	0.0089	0.043	0.731	0.0054	545	10	190	0.999
10/13/2022	8:54:32	0.232	-0.0045	0.106	0.792	0.0259	90259	0.236	0.0081	0.042	0.596	0.0054	530	10	190	0.999
10/13/2022	8:55:32	0.303	-0.0155	0.120	0.876	0.0213	86432	0.224	0.0083	0.042	0.700	0.0051	502	10	190	0.999
10/13/2022	8:56:32	0.273	-0.0148	0.102	0.697	0.0221	84371	0.223	0.0082	0.039	0.661	0.0050	475	10	190	0.999
10/13/2022	8:57:32	0.171	-0.0026	0.129	0.733	0.0193	92973	0.231	0.0089	0.043	0.654	0.0052	504	10	190	0.999
10/13/2022	8:58:32	0.228	-0.0181	0.097	0.877	0.0217	87892	0.226	0.0085	0.041	0.763	0.0052	506	10	190	0.999
10/13/2022	8:59:32	0.295	-0.0462	0.092	0.862	0.0227	89924	0.229	0.0088	0.043	0.709	0.0052	517	10	190	0.999
10/13/2022	9:00:34	0.263	-0.0048	0.107	0.837	0.0221	88840	0.229	0.0085	0.041	0.652	0.0050	518	10	190	0.999
10/13/2022	9:01:32	0.252	-0.0125	0.118	0.779	0.0211	94722	0.241	0.0089	0.044	0.593	0.0054	535	10	190	0.999
10/13/2022	9:02:32	0.202	-0.0110	0.115	0.856	0.0224	89467	0.228	0.0090	0.041	0.642	0.0052	514	10	190	0.999
10/13/2022	9:03:32	0.257	-0.0014	0.103	0.784	0.0223	89390	0.226	0.0086	0.043	0.580	0.0051	510	10	190	0.999
10/13/2022	9:04:32	0.245	-0.0266	0.092	0.792	0.0234	82576	0.221	0.0081	0.040	0.563	0.0050	492	10	190	0.999
10/13/2022	9:05:32	0.229	-0.0247	0.111	0.732	0.0195	93571	0.231	0.0090	0.044	0.656	0.0053	506	10	190	0.999
10/13/2022	9:06:32	0.276	-0.0258	0.111	0.829	0.0216	90690	0.230	0.0089	0.041	0.715	0.0053	518	10	190	0.999
10/13/2022	9:07:32	0.268	-0.0204	0.103	0.709	0.0206	82407	0.217	0.0083	0.039	0.480	0.0049	484	10	190	0.999
10/13/2022	9:08:32	0.155	-0.0101	0.113	0.722	0.0211	94516	0.238	0.0089	0.044	0.625	0.0053	516	10	190	0.999
10/13/2022	9:09:32	0.233	-0.0139	0.090	0.792	0.0233	88654	0.230	0.0080	0.042	0.641	0.0052	517	10	190	0.999
10/13/2022	9:10:32	0.304	-0.0117	0.100	0.794	0.0223	90367	0.227	0.0091	0.041	0.545	0.0051	511	10	190	0.999
10/13/2022	9:11:32	0.266	-0.0374	0.107	0.795	0.0226	89561	0.232	0.0088	0.042	0.600	0.0052	517	10	190	0.999
10/13/2022	9:12:32	0.274	-0.0219	0.112	0.862	0.0206	90940	0.235	0.0084	0.041	0.688	0.0053	529	10	190	0.999
10/13/2022	9:13:32	0.249	-0.0231	0.108	0.858	0.0227	87366	0.220	0.0093	0.041	0.589	0.0050	490	10	190	0.999
10/13/2022	9:14:32	0.158	-0.0081	0.121	0.747	0.0198	92077	0.231	0.0090	0.042	0.608	0.0053	501	10	190	0.999
10/13/2022	9:15:32	0.332	-0.0085	0.116	0.736	0.0206	87889	0.233	0.0081	0.041	0.660	0.0052	526	10	190	0.999
10/13/2022	9:16:32	0.337	-0.0019	0.108	0.803	0.0220	92694	0.240	0.0088	0.043	0.704	0.0055	539	10	190	0.999
10/13/2022	9:17:32	0.303	-0.0112	0.106	0.831	0.0240	92076	0.230	0.0089	0.043	0.613	0.0053	515	10	190	0.999
10/13/2022	9:18:32	0.255	-0.0122	0.100	0.784	0.0231	89828	0.238	0.0080	0.042	0.626	0.0054	536	10	190	0.999
10/13/2022	9:19:32	0.221	-0.0090	0.097	0.816	0.0241	86695	0.230	0.0087	0.042	0.626	0.0053	517	10	190	0.999
10/13/2022	9:20:32	0.236	-0.0096	0.092	0.823	0.0231	95031	0.243	0.0082	0.045	0.653	0.0055	553	10	190	0.999
10/13/2022	9:21:32	0.201	-0.0364	0.105	0.810	0.0225	85848	0.227	0.0081	0.039	0.579	0.0051	508	10	190	0.999
10/13/2022	9:22:32	0.222	-0.0327	0.090	0.738	0.0196	92641	0.233	0.0081	0.043	0.681	0.0053	514	10	190	0.999
10/13/2022	9:23:32	0.241	-0.0407	0.090	0.756	0.0229	83307	0.222	0.0079	0.040	0.593	0.0050	498	10	190	0.999
10/13/2022	9:24:32	0.244	-0.0056	0.102	0.709	0.0206	88134	0.232	0.0078	0.041	0.644	0.0053	500	10	190	0.999
10/13/2022	9:25:32	0.294	-0.0103	0.090	0.827	0.0260	92387	0.244	0.0083	0.044	0.764	0.0055	549	10	190	0.999
10/13/2022	9:26:32	0.194	0.0017	0.105	0.835	0.0245	88553	0.234	0.0081	0.043	0.681	0.0053	522	10	190	0.999
10/13/2022	9:27:32	0.187	-0.0009	0.106	0.804	0.0216	89005	0.234	0.0081	0.042	0.639	0.0053	529	10	190	0.999
10/13/2022	9:28:32	0.180	-0.0215	0.084	0.806	0.0225	92598	0.241	0.0083	0.044	0.620	0.0054	547	10	190	0.999
10/13/2022	9:29:32	0.263	0.0002	0.093	0.855	0.0226	91117	0.238	0.0082	0.043	0.746	0.0054	536	10	190	0.999
10/13/2022	9:30:32	0.265	-0.0219	0.069	0.792	0.0232	95564	0.247	0.0087	0.047	0.602	0.0055	555	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	9:31:35	0.222	-0.0083	0.085	0.835	0.0226	85161	0.230	0.0080	0.039	0.656	0.0052	514	10	190	0.999
10/13/2022	9:32:32	0.215	0.0124	0.096	0.831	0.0185	95792	0.221	0.0090	0.044	0.746	0.0056	531	10	190	0.999
10/13/2022	9:33:32	0.251	0.0053	0.090	0.775	0.0223	94851	0.246	0.0083	0.045	0.619	0.0056	555	10	190	0.999
Run Averages		0.248	-0.0141	0.105	0.805	0.0221	89936	0.234	0.0084	0.042	0.656	0.0053	523			
10/13/2022	9:34:32	0.270	-0.0121	0.070	0.902	0.0226	92397	0.240	0.0087	0.044	0.709	0.0054	537	10	190	0.999
10/13/2022	9:35:32	0.285	-0.0137	0.082	0.740	0.0195	838859	0.235	0.0080	0.043	0.561	0.0054	534	10	190	0.999
10/13/2022	9:36:32	0.261	-0.0250	0.085	0.811	0.0231	91996	0.238	0.0084	0.043	0.649	0.0054	543	10	190	0.999
10/13/2022	9:37:32	0.242	-0.0043	0.084	0.779	0.0235	84085	0.229	0.0079	0.040	0.578	0.0052	511	10	190	0.999
10/13/2022	9:38:32	0.263	-0.0145	0.099	0.688	0.0164	93903	0.238	0.0080	0.047	0.582	0.0052	526	10	190	0.999
10/13/2022	9:39:32	0.353	-0.0149	0.064	0.603	0.0177	54317	0.159	0.0062	0.028	0.452	0.0035	376	11	190	0.999
10/13/2022	9:40:32	0.276	-0.0256	0.070	0.383	0.0134	58681	0.168	0.0064	0.029	0.440	0.0037	331	10	190	0.999
10/13/2022	9:41:32	0.301	-0.0235	0.093	0.498	0.0137	86643	0.236	0.0082	0.041	0.648	0.0053	472	10	190	0.999
10/13/2022	9:42:32	0.223	-0.0016	0.088	0.694	0.0196	95263	0.215	0.0093	0.044	0.637	0.0055	522	10	190	0.999
10/13/2022	9:43:32	0.228	-0.0180	0.073	0.730	0.0216	96582	0.220	0.0088	0.046	0.570	0.0054	543	10	190	0.999
10/13/2022	9:44:32	0.230	-0.0038	0.083	0.792	0.0244	94717	0.220	0.0086	0.044	0.643	0.0054	545	10	190	0.999
10/13/2022	9:45:32	0.197	0.0014	0.101	0.755	0.0210	94926	0.242	0.0090	0.043	0.611	0.0054	541	10	190	0.999
10/13/2022	9:46:32	0.233	0.0180	0.080	0.769	0.0248	94695	0.240	0.0089	0.046	0.642	0.0054	541	10	190	0.999
10/13/2022	9:47:32	0.293	-0.0092	0.084	0.801	0.0224	93647	0.237	0.0088	0.043	0.691	0.0053	535	10	190	0.999
Start Run 2																
10/13/2022	9:48:32	0.253	0.0236	0.104	0.850	0.0225	92508	0.232	0.0091	0.042	0.652	0.0052	521	10	190	0.999
10/13/2022	9:49:33	0.278	0.0005	0.094	0.819	0.0200	92707	0.232	0.0090	0.043	0.708	0.0053	523	10	190	0.999
10/13/2022	9:50:32	0.282	-0.0004	0.105	0.761	0.0229	92638	0.235	0.0088	0.042	0.598	0.0053	533	10	190	0.999
10/13/2022	9:51:34	0.249	-0.0027	0.105	0.799	0.0224	92769	0.235	0.0090	0.043	0.745	0.0053	526	10	190	0.999
10/13/2022	9:52:32	0.262	-0.0068	0.088	0.739	0.0254	92095	0.234	0.0090	0.043	0.584	0.0054	523	10	190	0.999
10/13/2022	9:53:32	0.195	0.0045	0.109	0.807	0.0241	91555	0.232	0.0089	0.041	0.680	0.0053	524	10	190	0.999
10/13/2022	9:54:32	0.245	0.0154	0.101	0.805	0.0211	91613	0.229	0.0086	0.042	0.653	0.0052	520	10	190	0.999
10/13/2022	9:55:32	0.270	-0.0105	0.083	0.797	0.0216	91359	0.228	0.0089	0.044	0.605	0.0051	513	10	190	0.999
10/13/2022	9:56:34	0.303	0.0021	0.094	0.719	0.0205	91404	0.230	0.0087	0.043	0.567	0.0052	519	10	190	0.999
10/13/2022	9:57:32	0.159	0.0270	0.112	0.749	0.0225	91591	0.231	0.0091	0.042	0.621	0.0052	518	10	190	0.999
10/13/2022	9:58:34	0.244	-0.0012	0.112	0.892	0.0246	90941	0.227	0.0086	0.041	0.709	0.0052	516	10	190	0.999
10/13/2022	9:59:32	0.227	-0.0144	0.105	0.748	0.0230	91181	0.226	0.0091	0.042	0.561	0.0051	512	10	190	0.999
10/13/2022	10:00:32	0.256	0.0094	0.112	0.800	0.0252	90899	0.232	0.0088	0.042	0.802	0.0053	521	10	190	0.999
10/13/2022	10:01:32	0.266	0.0010	0.097	0.786	0.0231	91029	0.228	0.0094	0.044	0.588	0.0052	506	10	190	0.999
10/13/2022	10:02:35	0.272	0.0044	0.098	0.749	0.0213	91069	0.231	0.0091	0.042	0.560	0.0052	516	10	190	0.999
10/13/2022	10:03:32	0.283	0.0046	0.104	0.774	0.0227	91078	0.231	0.0087	0.043	0.694	0.0052	522	10	190	0.999
10/13/2022	10:04:32	0.192	-0.0159	0.089	0.719	0.0232	90888	0.234	0.0084	0.043	0.574	0.0052	524	10	190	0.999
10/13/2022	10:05:32	0.250	0.0067	0.116	0.834	0.0234	90719	0.234	0.0091	0.042	0.690	0.0053	521	10	190	0.999
10/13/2022	10:06:32	0.247	0.0027	0.092	0.812	0.0225	90534	0.229	0.0088	0.043	0.647	0.0052	515	10	190	0.999
10/13/2022	10:07:32	0.209	-0.0017	0.106	0.756	0.0230	90443	0.232	0.0088	0.043	0.612	0.0053	520	10	190	0.999
10/13/2022	10:08:33	0.258	-0.0153	0.100	0.803	0.0238	90438	0.232	0.0087	0.043	0.607	0.0052	521	10	190	0.999
10/13/2022	10:09:32	0.249	0.0186	0.109	0.814	0.0206	90310	0.231	0.0084	0.042	0.693	0.0053	524	10	190	0.999
10/13/2022	10:10:32	0.254	0.0046	0.102	0.762	0.0208	90818	0.233	0.0087	0.043	0.684	0.0053	525	10	190	0.999
10/13/2022	10:11:32	0.218	0.0245	0.105	0.835	0.0210	90367	0.233	0.0086	0.042	0.637	0.0052	523	10	190	0.999
10/13/2022	10:12:32	0.235	0.0179	0.090	0.762	0.0234	90393	0.234	0.0087	0.043	0.584	0.0054	527	10	190	0.999
10/13/2022	10:13:32	0.180	0.0022	0.115	0.835	0.0221	90250	0.236	0.0084	0.042	0.755	0.0054	531	10	190	0.999
10/13/2022	10:14:32	0.250	-0.0109	0.089	0.795	0.0272	90656	0.243	0.0082	0.043	0.706	0.0055	545	10	190	0.999
10/13/2022	10:15:32	0.192	-0.0023	0.121	0.809	0.0213	90313	0.240	0.0077	0.042	0.687	0.0055	552	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)	
10/13/2022	10:16:32	0.194	-0.0167	0.117	0.857	0.0233	89920	0.236	0.0080	0.042	0.704	0.0054	541	10	190	0.999	
10/13/2022	10:17:32	0.238	0.0029	0.142	0.822	0.0229	89993	0.240	0.0082	0.042	0.657	0.0054	538	10	190	0.999	
10/13/2022	10:18:32	0.246	0.0083	0.100	0.828	0.0248	89828	0.236	0.0084	0.043	0.626	0.0054	535	10	190	0.999	
10/13/2022	10:19:32	0.256	0.0061	0.107	0.745	0.0251	89964	0.237	0.0080	0.042	0.598	0.0054	538	10	190	0.999	
10/13/2022	10:20:32	0.216	-0.0174	0.107	0.805	0.0244	89714	0.234	0.0078	0.042	0.613	0.0053	532	10	190	0.999	
10/13/2022	10:21:34	0.206	-0.0315	0.126	0.817	0.0213	89868	0.242	0.0079	0.042	0.682	0.0055	543	10	190	0.999	
10/13/2022	10:22:32	0.218	-0.0179	0.125	0.796	0.0229	89810	0.242	0.0078	0.042	0.785	0.0055	545	10	190	0.999	
10/13/2022	10:23:35	0.245	-0.0090	0.109	0.774	0.0219	89836	0.236	0.0083	0.043	0.618	0.0054	534	10	190	0.999	
10/13/2022	10:24:32	0.212	0.0002	0.103	0.834	0.0240	89772	0.239	0.0079	0.042	0.672	0.0054	539	10	190	0.999	
10/13/2022	10:25:32	0.194	-0.0077	0.117	0.815	0.0246	89657	0.236	0.0087	0.042	0.672	0.0054	534	10	190	0.999	
10/13/2022	10:26:32	0.270	-0.0261	0.110	0.831	0.0237	89857	0.236	0.0082	0.043	0.667	0.0054	533	10	190	0.999	
10/13/2022	10:27:32	0.227	-0.0035	0.095	0.822	0.0246	89731	0.237	0.0083	0.043	0.626	0.0054	535	10	190	0.999	
10/13/2022	10:28:34	0.197	-0.0183	0.142	0.798	0.0218	89352	0.234	0.0087	0.041	0.612	0.0054	531	10	190	0.999	
10/13/2022	10:29:32	0.229	-0.0020	0.129	0.787	0.0227	89314	0.234	0.0082	0.041	0.632	0.0053	529	10	190	0.999	
10/13/2022	10:30:32	0.251	-0.0248	0.133	0.802	0.0200	89212	0.236	0.0081	0.042	0.569	0.0054	529	10	190	0.999	
10/13/2022	10:31:32	0.183	-0.0118	0.118	0.824	0.0241	89327	0.235	0.0081	0.041	0.656	0.0053	529	10	190	0.999	
10/13/2022	10:32:33	0.257	0.0026	0.109	0.824	0.0244	89682	0.235	0.0084	0.043	0.649	0.0054	530	10	190	0.999	
10/13/2022	10:33:32	0.228	0.0039	0.111	0.785	0.0229	89148	0.234	0.0079	0.043	0.600	0.0053	531	10	190	0.999	
10/13/2022	10:34:32	0.275	-0.0006	0.119	0.900	0.0218	89403	0.234	0.0081	0.043	0.646	0.0054	529	10	190	0.999	
10/13/2022	10:35:32	0.244	0.0006	0.126	0.829	0.0245	89380	0.239	0.0082	0.042	0.684	0.0054	533	10	190	0.999	
10/13/2022	10:36:32	0.270	0.0052	0.122	0.782	0.0224	89432	0.233	0.0083	0.043	0.669	0.0053	526	10	190	0.999	
10/13/2022	10:37:32	0.206	-0.0291	0.144	0.813	0.0205	89334	0.231	0.0085	0.042	0.596	0.0053	522	10	190	0.999	
10/13/2022	10:38:32	0.145	-0.0141	0.116	0.825	0.0265	89272	0.237	0.0082	0.042	0.639	0.0054	532	10	190	0.999	
10/13/2022	10:39:32	0.188	-0.0079	0.137	0.826	0.0237	89563	0.236	0.0078	0.042	0.711	0.0053	540	10	190	0.999	
10/13/2022	10:40:32	0.185	0.0054	0.142	0.791	0.0252	89505	0.232	0.0088	0.041	0.607	0.0054	531	10	190	0.999	
10/13/2022	10:41:32	0.188	0.0063	0.128	0.867	0.0236	89564	0.234	0.0087	0.042	0.739	0.0053	529	10	190	0.999	
10/13/2022	10:42:35	0.259	-0.0026	0.129	0.819	0.0229	89224	0.232	0.0082	0.042	0.636	0.0054	530	10	190	0.999	
10/13/2022	10:43:32	0.223	-0.0038	0.125	0.877	0.0206	89415	0.233	0.0086	0.041	0.711	0.0053	525	10	190	0.999	
10/13/2022	10:44:34	0.239	0.0066	0.123	0.794	0.0235	89399	0.230	0.0085	0.041	0.646	0.0053	524	10	190	0.999	
10/13/2022	10:45:32	0.207	-0.0005	0.114	0.829	0.0242	89981	0.231	0.0088	0.043	0.645	0.0053	521	10	190	0.999	
10/13/2022	10:46:32	0.278	-0.0092	0.129	0.784	0.0229	89918	0.231	0.0087	0.042	0.569	0.0052	517	10	190	0.999	
10/13/2022	10:47:32	0.215	0.0095	0.137	0.800	0.0236	89685	0.231	0.0087	0.041	0.608	0.0053	520	10	190	0.999	
10/13/2022	10:48:32	0.220	-0.0064	0.139	0.739	0.0231	89934	0.233	0.0087	0.042	0.619	0.0053	525	10	190	0.999	
Run Averages		0.233	-0.0014	0.113	0.803	0.0230	90321	0.234	0.0085	0.042	0.649	0.0053	527				
10/13/2022	10:49:32	0.291	0.0002	0.108	0.748	0.0216	89929	0.230	0.0084	0.043	0.585	0.0053	519	10	190	0.999	
10/13/2022	10:50:32	0.242	-0.0077	0.127	0.862	0.0244	90039	0.231	0.0088	0.042	0.670	0.0053	521	10	190	0.999	
10/13/2022	10:51:32	0.211	0.0087	0.110	0.809	0.0236	90054	0.231	0.0088	0.042	0.604	0.0052	523	10	190	0.999	
10/13/2022	10:52:32	0.251	0.0019	0.135	0.896	0.0219	90281	0.236	0.0091	0.042	0.791	0.0054	531	10	190	0.999	
10/13/2022	10:53:32	0.198	0.0248	0.123	0.801	0.0245	90127	0.237	0.0087	0.041	0.665	0.0054	529	10	190	0.999	
10/13/2022	10:54:32	0.235	0.0079	0.121	0.765	0.0220	90072	0.239	0.0083	0.042	0.605	0.0054	536	10	190	0.999	
10/13/2022	10:55:32	0.250	-0.0209	0.117	0.806	0.0241	89985	0.237	0.0084	0.042	0.741	0.0054	530	10	190	0.999	
10/13/2022	10:56:32	0.168	-0.0025	0.119	0.844	0.0266	89862	0.236	0.0081	0.042	0.726	0.0054	535	10	190	0.999	
10/13/2022	10:57:32	0.179	0.0003	0.094	0.867	0.0239	89915	0.233	0.0086	0.042	0.734	0.0053	529	10	190	0.999	
10/13/2022	10:58:32	0.247	-0.0052	0.109	0.765	0.0247	89748	0.235	0.0085	0.041	0.627	0.0053	529	10	190	0.999	
10/13/2022	10:59:32	0.242	0.0030	0.124	0.822	0.0222	89786	0.233	0.0083	0.042	0.695	0.0053	524	10	190	0.999	
Start Run 3				-0.0046	0.110	0.782	0.0228	89833	0.233	0.0083	0.042	0.643	0.0053	530	10	190	0.999
10/13/2022	11:00:32	0.261															

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	11:01:34	0.200	-0.0129	0.135	0.842	0.0212	89897	0.230	0.0088	0.042	0.747	0.0052	520	10	190	0.999
10/13/2022	11:02:32	0.265	0.0075	0.128	0.827	0.0231	89372	0.225	0.0090	0.041	0.651	0.0052	511	10	190	0.999
10/13/2022	11:03:33	0.210	-0.0051	0.140	0.857	0.0214	89481	0.230	0.0089	0.040	0.705	0.0052	513	10	190	0.999
10/13/2022	11:04:32	0.147	-0.0080	0.121	0.769	0.0254	89934	0.231	0.0087	0.042	0.612	0.0053	523	10	190	0.999
10/13/2022	11:05:32	0.199	-0.0042	0.131	0.743	0.0228	89298	0.224	0.0090	0.041	0.505	0.0051	504	10	190	0.999
10/13/2022	11:06:32	0.199	0.0035	0.121	0.724	0.0219	89155	0.224	0.0090	0.042	0.452	0.0051	503	10	190	0.999
10/13/2022	11:07:34	0.167	0.0010	0.115	0.786	0.0237	89593	0.231	0.0087	0.041	0.579	0.0052	517	10	190	0.999
10/13/2022	11:08:32	0.253	-0.0537	0.101	0.846	0.0237	89479	0.232	0.0085	0.042	0.736	0.0053	528	10	190	0.999
10/13/2022	11:09:32	0.214	0.0109	0.115	0.772	0.0219	89658	0.234	0.0083	0.041	0.602	0.0053	533	10	190	0.999
10/13/2022	11:10:32	0.156	-0.0073	0.117	0.817	0.0229	89889	0.236	0.0083	0.043	0.721	0.0055	538	10	190	0.999
10/13/2022	11:11:32	0.192	-0.0207	0.136	0.867	0.0221	89696	0.238	0.0079	0.041	0.721	0.0054	534	10	190	0.999
10/13/2022	11:12:32	0.234	-0.0065	0.126	0.778	0.0235	89732	0.237	0.0083	0.043	0.616	0.0054	533	10	190	0.999
10/13/2022	11:13:32	0.220	-0.0092	0.093	0.783	0.0265	89820	0.236	0.0082	0.043	0.694	0.0054	538	10	190	0.999
10/13/2022	11:14:32	0.241	-0.0168	0.117	0.813	0.0200	89272	0.237	0.0079	0.043	0.687	0.0053	530	10	190	0.999
10/13/2022	11:15:34	0.238	0.0141	0.093	0.790	0.0232	90000	0.235	0.0083	0.043	0.662	0.0054	533	10	190	0.999
10/13/2022	11:16:32	0.263	-0.0064	0.115	0.781	0.0245	90089	0.237	0.0082	0.043	0.684	0.0055	538	10	190	0.999
10/13/2022	11:17:32	0.229	-0.0113	0.103	0.771	0.0200	89602	0.234	0.0084	0.042	0.555	0.0053	521	10	190	0.999
10/13/2022	11:18:35	0.199	-0.0053	0.123	0.846	0.0232	89658	0.235	0.0084	0.042	0.816	0.0053	532	10	190	0.999
10/13/2022	11:19:32	0.247	-0.0056	0.110	0.727	0.0208	89806	0.231	0.0086	0.042	0.599	0.0053	523	10	190	0.999
10/13/2022	11:20:32	0.224	-0.0130	0.101	0.799	0.0247	89751	0.231	0.0085	0.042	0.622	0.0053	522	10	190	0.999
10/13/2022	11:21:32	0.254	-0.0192	0.114	0.784	0.0200	89109	0.232	0.0086	0.042	0.634	0.0054	521	10	190	0.999
10/13/2022	11:22:32	0.211	-0.0074	0.099	0.854	0.0229	89592	0.234	0.0086	0.041	0.718	0.0052	523	10	190	0.999
10/13/2022	11:23:32	0.219	-0.0043	0.106	0.857	0.0227	89563	0.233	0.0086	0.042	0.726	0.0053	519	10	190	0.999
10/13/2022	11:24:32	0.243	0.0033	0.110	0.792	0.0221	89798	0.232	0.0084	0.042	0.683	0.0053	526	10	190	0.999
10/13/2022	11:25:32	0.244	-0.0065	0.117	0.783	0.0211	89866	0.235	0.0080	0.042	0.750	0.0053	534	10	190	0.999
10/13/2022	11:26:32	0.217	-0.0158	0.098	0.700	0.0241	89042	0.226	0.0087	0.042	0.477	0.0051	504	10	190	0.999
10/13/2022	11:27:32	0.189	-0.0094	0.125	0.738	0.0216	89904	0.237	0.0082	0.042	0.703	0.0054	533	10	190	0.999
10/13/2022	11:28:32	0.186	-0.0247	0.115	0.872	0.0226	89730	0.228	0.0086	0.042	0.745	0.0052	513	10	190	0.999
10/13/2022	11:29:32	0.202	0.0027	0.104	0.768	0.0236	89789	0.234	0.0082	0.043	0.638	0.0053	523	10	190	0.999
10/13/2022	11:30:32	0.249	-0.0174	0.091	0.745	0.0224	89462	0.230	0.0086	0.043	0.569	0.0052	517	10	190	0.999
10/13/2022	11:31:32	0.167	-0.0159	0.095	0.713	0.0263	89763	0.232	0.0086	0.042	0.592	0.0052	520	10	190	0.999
10/13/2022	11:32:32	0.271	-0.0178	0.119	0.758	0.0234	90238	0.231	0.0087	0.042	0.644	0.0052	520	10	190	0.999
10/13/2022	11:33:34	0.257	0.0000	0.105	0.753	0.0226	89762	0.228	0.0089	0.041	0.538	0.0052	510	10	190	0.999
10/13/2022	11:34:32	0.301	-0.0152	0.117	0.733	0.0230	90071	0.227	0.0088	0.042	0.588	0.0052	515	10	190	0.999
10/13/2022	11:35:34	0.270	0.0091	0.120	0.818	0.0216	89928	0.225	0.0094	0.041	0.762	0.0051	504	10	190	0.999
10/13/2022	11:36:32	0.236	-0.0055	0.129	0.775	0.0220	89920	0.225	0.0088	0.041	0.586	0.0051	506	10	190	0.999
10/13/2022	11:37:32	0.245	-0.0024	0.102	0.717	0.0240	90109	0.227	0.0090	0.041	0.552	0.0051	506	10	190	0.999
10/13/2022	11:38:33	0.292	-0.0319	0.113	0.757	0.0225	90335	0.226	0.0091	0.041	0.618	0.0052	511	10	190	0.999
10/13/2022	11:39:32	0.164	-0.0183	0.084	0.763	0.0243	89952	0.227	0.0089	0.043	0.600	0.0051	508	10	190	0.999
10/13/2022	11:40:32	0.205	-0.0073	0.095	0.790	0.0223	90066	0.229	0.0090	0.042	0.728	0.0051	504	10	190	0.999
10/13/2022	11:41:32	0.185	0.0001	0.117	0.772	0.0228	89851	0.227	0.0094	0.041	0.670	0.0051	508	10	190	0.999
10/13/2022	11:42:32	0.175	-0.0066	0.101	0.794	0.0238	89797	0.227	0.0088	0.042	0.769	0.0052	511	10	190	0.999
10/13/2022	11:43:32	0.202	-0.0087	0.099	0.829	0.0216	90220	0.227	0.0090	0.042	0.847	0.0052	510	10	190	0.999
10/13/2022	11:44:35	0.193	-0.0003	0.101	0.783	0.0203	89453	0.225	0.0088	0.041	0.609	0.0051	508	10	190	0.999
10/13/2022	11:45:32	0.161	-0.0193	0.106	0.674	0.0228	89565	0.229	0.0084	0.041	0.613	0.0052	521	10	190	0.999
10/13/2022	11:46:32	0.279	-0.0165	0.080	0.762	0.0199	89345	0.222	0.0092	0.042	0.498	0.0051	499	10	190	0.999
10/13/2022	11:47:32	0.256	-0.0081	0.096	0.862	0.0225	89552	0.224	0.0090	0.042	0.780	0.0051	507	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	11:48:32	0.257	-0.0272	0.077	0.754	0.0218	89543	0.226	0.0087	0.042	0.558	0.0052	508	10	190	0.999
10/13/2022	11:49:32	0.243	0.0125	0.091	0.795	0.0199	89657	0.227	0.0087	0.041	0.724	0.0052	513	10	190	0.999
10/13/2022	11:50:34	0.190	-0.0044	0.084	0.714	0.0223	89815	0.225	0.0089	0.042	0.573	0.0051	509	10	190	0.999
10/13/2022	11:51:32	0.211	0.0105	0.088	0.755	0.0210	89550	0.227	0.0093	0.041	0.567	0.0051	507	10	190	0.999
10/13/2022	11:52:32	0.166	-0.0332	0.108	0.763	0.0202	89443	0.226	0.0092	0.040	0.578	0.0051	506	10	190	0.999
10/13/2022	11:53:32	0.204	-0.0283	0.086	0.796	0.0217	89545	0.229	0.0090	0.042	0.620	0.0051	509	10	190	0.999
10/13/2022	11:54:32	0.262	-0.0296	0.059	0.705	0.0231	89262	0.224	0.0087	0.041	0.500	0.0051	504	10	190	0.999
10/13/2022	11:55:32	0.173	0.0159	0.101	0.714	0.0234	89286	0.227	0.0090	0.041	0.531	0.0051	504	10	190	0.999
10/13/2022	11:56:32	0.226	-0.0265	0.084	0.752	0.0259	89131	0.227	0.0091	0.042	0.560	0.0051	507	10	190	0.999
10/13/2022	11:57:32	0.142	-0.0091	0.076	0.747	0.0258	89289	0.226	0.0091	0.042	0.557	0.0051	506	10	190	0.999
10/13/2022	11:58:32	0.167	-0.0208	0.107	0.790	0.0209	89405	0.221	0.0093	0.040	0.548	0.0050	495	10	190	0.999
10/13/2022	11:59:32	0.248	-0.0087	0.084	0.830	0.0225	89200	0.227	0.0093	0.043	0.699	0.0051	505	10	190	0.999
10/13/2022	12:00:32	0.174	-0.0030	0.099	0.766	0.0227	89309	0.224	0.0091	0.041	0.593	0.0051	511	10	190	0.999
Run Averages		0.218	-0.0093	0.106	0.779	0.0226	89660	0.229	0.0087	0.042	0.637	0.0052	516			
10/13/2022	12:01:32	0.254	-0.0159	0.085	0.782	0.0238	89046	0.227	0.0090	0.041	0.581	0.0051	506	10	190	0.999
10/13/2022	12:02:32	0.165	-0.0122	0.070	0.726	0.0269	89269	0.225	0.0085	0.043	0.638	0.0051	512	10	190	0.999
10/13/2022	12:03:32	0.278	-0.0298	0.053	0.799	0.0211	89383	0.224	0.0093	0.043	0.601	0.0050	502	10	190	0.999
10/13/2022	12:04:32	0.197	-0.0176	0.099	0.780	0.0216	88604	0.223	0.0090	0.041	0.643	0.0051	504	10	190	0.999
10/13/2022	12:05:32	0.174	-0.0162	0.081	0.734	0.0242	89997	0.228	0.0094	0.042	0.659	0.0052	518	10	190	0.999
10/13/2022	12:06:32	0.238	-0.0272	0.111	0.806	0.0190	89526	0.222	0.0099	0.042	0.715	0.0051	502	10	190	0.999
10/13/2022	12:07:32	0.184	-0.0113	0.089	0.778	0.0216	89226	0.223	0.0088	0.040	0.702	0.0051	508	10	190	0.999
10/13/2022	12:08:34	0.179	-0.0148	0.080	0.760	0.0229	89419	0.226	0.0089	0.042	0.605	0.0051	507	10	190	0.999
10/13/2022	12:09:32	0.266	-0.0233	0.070	0.825	0.0217	89669	0.228	0.0091	0.042	0.675	0.0052	508	10	190	0.999
10/13/2022	12:10:32	0.179	-0.0220	0.074	0.878	0.0242	89492	0.226	0.0086	0.040	0.728	0.0051	507	10	190	0.999
10/13/2022	12:11:32	0.229	-0.0027	0.071	0.749	0.0226	89453	0.227	0.0084	0.042	0.593	0.0052	514	10	190	0.999
10/13/2022	12:12:32	0.142	-0.0132	0.086	0.782	0.0233	89347	0.231	0.0086	0.042	0.554	0.0052	515	10	190	0.999
10/13/2022	12:13:32	0.238	-0.0051	0.082	0.867	0.0218	89281	0.227	0.0088	0.041	0.735	0.0052	512	10	190	0.999
10/13/2022	12:14:32	0.236	-0.0141	0.079	0.745	0.0233	89172	0.226	0.0090	0.042	0.564	0.0052	511	10	190	0.999
10/13/2022	12:15:32	0.230	-0.0218	0.090	0.858	0.0215	89537	0.231	0.0087	0.043	0.791	0.0053	521	10	190	0.999
10/13/2022	12:16:32	0.184	0.0000	0.841	0.0232	89109	0.229	0.0087	0.041	0.690	0.0053	517	10	190	0.999	
10/13/2022	12:17:32	0.163	-0.0254	0.059	0.742	0.0219	89446	0.234	0.0086	0.042	0.613	0.0052	522	10	190	0.999
10/13/2022	12:18:32	0.209	-0.0124	0.077	0.757	0.0218	89233	0.236	0.0085	0.042	0.593	0.0054	526	10	190	0.999
10/13/2022	12:19:32	0.201	-0.0042	0.069	0.790	0.0240	89606	0.231	0.0085	0.042	0.689	0.0053	521	10	190	0.999
10/13/2022	12:20:32	0.293	0.0025	0.076	0.761	0.0207	89550	0.231	0.0088	0.042	0.579	0.0052	519	10	190	0.999
Start Run 4																
10/13/2022	12:21:32	0.184	-0.0070	0.075	0.859	0.0220	89627	0.230	0.0086	0.042	0.744	0.0052	522	10	190	0.999
10/13/2022	12:22:32	0.210	-0.0173	0.072	0.741	0.0207	89894	0.238	0.0082	0.043	0.691	0.0054	532	10	190	0.999
10/13/2022	12:23:32	0.223	-0.0401	0.055	0.867	0.0206	89476	0.235	0.0082	0.044	0.740	0.0053	527	10	190	0.999
10/13/2022	12:24:32	0.178	-0.0212	0.095	0.834	0.0198	89831	0.239	0.0086	0.041	0.802	0.0054	535	10	190	0.999
10/13/2022	12:25:32	0.209	-0.0192	0.073	0.736	0.0220	89794	0.236	0.0087	0.042	0.580	0.0053	527	10	190	0.999
10/13/2022	12:26:32	0.169	-0.0208	0.063	0.779	0.0247	89271	0.233	0.0082	0.044	0.645	0.0053	531	10	190	0.999
10/13/2022	12:27:34	0.094	-0.0074	0.067	0.739	0.0207	89042	0.233	0.0081	0.041	0.577	0.0053	524	10	190	0.999
10/13/2022	12:28:32	0.127	-0.0263	0.054	0.746	0.0272	90200	0.238	0.0086	0.044	0.779	0.0054	533	10	190	0.999
10/13/2022	12:29:32	0.178	-0.0174	0.073	0.760	0.0238	89844	0.230	0.0085	0.042	0.564	0.0052	519	10	190	0.999
10/13/2022	12:30:32	0.214	0.0065	0.076	0.785	0.0212	89735	0.229	0.0086	0.042	0.576	0.0053	518	10	190	0.999
10/13/2022	12:31:32	0.138	-0.0053	0.075	0.759	0.0208	89678	0.233	0.0085	0.041	0.598	0.0053	522	10	190	0.999
10/13/2022	12:32:32	0.193	-0.0061	0.052	0.762	0.0225	90023	0.236	0.0082	0.043	0.645	0.0053	534	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	12:33:32	0.213	-0.0167	0.759	0.0226	89795	0.232	0.0084	0.043	0.610	0.0053	525	10	190	0.999	
10/13/2022	12:34:32	0.238	-0.0421	0.053	0.756	0.0233	89025	0.233	0.0083	0.042	0.584	0.0054	521	10	190	0.999
10/13/2022	12:35:32	0.230	-0.0289	0.070	0.832	0.0224	89123	0.231	0.0085	0.042	0.651	0.0053	521	10	190	0.999
10/13/2022	12:36:32	0.228	0.0011	0.078	0.833	0.0206	89074	0.236	0.0085	0.040	0.758	0.0054	526	10	190	0.999
10/13/2022	12:37:32	0.298	-0.0136	0.062	0.720	0.0228	88672	0.232	0.0084	0.043	0.601	0.0053	524	10	190	0.999
10/13/2022	12:38:32	0.202	-0.0090	0.050	0.748	0.0200	88899	0.233	0.0083	0.042	0.586	0.0053	523	10	190	0.999
10/13/2022	12:39:32	0.227	-0.0182	0.022	0.781	0.0210	89447	0.237	0.0082	0.043	0.600	0.0054	529	10	190	0.999
10/13/2022	12:40:32	0.152	-0.0162	0.062	0.884	0.0236	89373	0.238	0.0087	0.040	0.788	0.0054	530	10	190	0.999
10/13/2022	12:41:32	0.183	-0.0092	0.076	0.739	0.0239	89323	0.239	0.0078	0.041	0.682	0.0055	542	10	190	0.999
10/13/2022	12:42:32	0.141	-0.0139	0.046	0.720	0.0233	89463	0.240	0.0085	0.042	0.726	0.0054	536	10	190	0.999
10/13/2022	12:43:32	0.216	-0.0126	0.072	0.818	0.0214	89013	0.227	0.0092	0.041	0.745	0.0052	514	10	190	0.999
10/13/2022	12:44:32	0.257	-0.0287	0.058	0.787	0.0230	89173	0.237	0.0084	0.042	0.723	0.0054	529	10	190	0.999
10/13/2022	12:45:32	0.114	-0.0065	0.072	0.768	0.0240	89239	0.237	0.0082	0.040	0.609	0.0054	529	10	190	0.999
10/13/2022	12:46:32	0.208	-0.0138	0.073	0.794	0.0243	88826	0.228	0.0087	0.041	0.593	0.0052	517	10	190	0.999
10/13/2022	12:47:32	0.207	-0.0005	0.052	0.798	0.0232	88980	0.229	0.0086	0.042	0.675	0.0053	521	10	190	0.999
10/13/2022	12:48:33	0.123	-0.0158	0.069	0.738	0.0241	89213	0.229	0.0087	0.042	0.615	0.0052	519	10	190	0.999
10/13/2022	12:49:32	0.221	-0.0224	0.054	0.817	0.0221	89179	0.229	0.0087	0.041	0.680	0.0052	517	10	190	0.999
10/13/2022	12:50:32	0.193	-0.0228	0.060	0.745	0.0226	89190	0.232	0.0085	0.042	0.615	0.0052	521	10	190	0.999
10/13/2022	12:51:32	0.200	0.0052	0.045	0.810	0.0253	89228	0.230	0.0086	0.042	0.644	0.0052	519	10	190	0.999
10/13/2022	12:52:32	0.260	-0.0151	0.056	0.766	0.0244	89231	0.227	0.0085	0.041	0.626	0.0052	513	10	190	0.999
10/13/2022	12:53:32	0.167	-0.0033	0.052	0.812	0.0255	89000	0.231	0.0086	0.041	0.713	0.0053	520	10	190	0.999
10/13/2022	12:54:32	0.225	-0.0229	0.052	0.841	0.0218	89061	0.231	0.0084	0.042	0.772	0.0051	522	10	190	0.999
10/13/2022	12:55:32	0.280	-0.0028	0.070	0.816	0.0241	88968	0.231	0.0083	0.042	0.726	0.0053	522	10	190	0.999
10/13/2022	12:56:32	0.135	-0.0007	0.057	0.820	0.0260	88753	0.233	0.0081	0.040	0.600	0.0053	523	10	190	0.999
10/13/2022	12:57:32	0.211	-0.0313	0.068	0.833	0.0243	88831	0.228	0.0082	0.042	0.649	0.0052	519	10	190	0.999
10/13/2022	12:58:32	0.223	-0.0097	0.059	0.780	0.0234	89051	0.231	0.0088	0.041	0.599	0.0053	520	10	190	0.999
10/13/2022	12:59:32	0.225	-0.0071	0.056	0.763	0.0219	89061	0.228	0.0090	0.041	0.509	0.0052	514	10	190	0.999
10/13/2022	13:00:32	0.221	-0.0347	0.048	0.813	0.0240	88889	0.230	0.0087	0.043	0.686	0.0052	515	10	190	0.999
10/13/2022	13:01:32	0.178	-0.0143	0.062	0.772	0.0237	88963	0.229	0.0084	0.042	0.611	0.0052	516	10	190	0.999
10/13/2022	13:02:32	0.191	-0.0202	0.078	0.833	0.0210	88897	0.230	0.0085	0.041	0.701	0.0053	520	10	190	0.999
10/13/2022	13:03:32	0.217	-0.0038	0.056	0.763	0.0231	88743	0.228	0.0088	0.041	0.737	0.0052	515	10	190	0.999
10/13/2022	13:04:32	0.154	0.0031	0.075	0.790	0.0225	88587	0.227	0.0086	0.040	0.619	0.0052	512	10	190	0.999
10/13/2022	13:05:32	0.237	0.0079	0.056	0.753	0.0236	88477	0.227	0.0089	0.042	0.607	0.0052	516	10	190	0.999
10/13/2022	13:06:32	0.155	-0.0245	0.037	0.710	0.0252	89685	0.229	0.0084	0.043	0.584	0.0053	520	10	190	0.999
10/13/2022	13:07:32	0.200	-0.0419	0.087	0.747	0.0215	89931	0.231	0.0087	0.042	0.584	0.0053	522	10	190	0.999
10/13/2022	13:08:32	0.096	0.0082	0.076	0.788	0.0246	89954	0.238	0.0090	0.042	0.774	0.0053	529	10	190	0.999
10/13/2022	13:09:34	0.241	-0.0071	0.063	0.709	0.0248	89144	0.228	0.0086	0.040	0.528	0.0051	516	10	190	0.999
10/13/2022	13:10:32	0.219	-0.0082	0.076	0.748	0.0233	89691	0.234	0.0088	0.041	0.623	0.0053	518	10	190	0.999
10/13/2022	13:11:32	0.228	0.0065	0.064	0.805	0.0216	89578	0.229	0.0088	0.042	0.667	0.0052	520	10	190	0.999
10/13/2022	13:12:32	0.178	-0.0027	0.062	0.845	0.0240	89490	0.237	0.0084	0.042	0.702	0.0053	527	10	190	0.999
10/13/2022	13:13:32	0.224	-0.0126	0.061	0.743	0.0250	89448	0.236	0.0082	0.042	0.600	0.0054	525	10	190	0.999
10/13/2022	13:14:32	0.222	-0.0083	0.080	0.826	0.0223	89469	0.229	0.0089	0.042	0.746	0.0053	517	10	190	0.999
10/13/2022	13:15:32	0.216	-0.0101	0.041	0.800	0.0241	89541	0.234	0.0085	0.042	0.629	0.0053	522	10	190	0.999
10/13/2022	13:16:35	0.170	0.0147	0.047	0.807	0.0225	89329	0.239	0.0084	0.043	0.701	0.0054	534	10	190	0.999
10/13/2022	13:17:32	0.328	-0.0032	0.041	0.749	0.0222	88876	0.235	0.0084	0.042	0.578	0.0053	525	10	190	0.999
10/13/2022	13:18:32	0.199	-0.0308	0.051	0.859	0.0215	89542	0.232	0.0082	0.044	0.709	0.0053	530	10	190	0.999
10/13/2022	13:19:32	0.175	-0.0217	0.044	0.821	0.0226	89219	0.235	0.0082	0.043	0.701	0.0054	533	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	13:20:32	0.180	-0.0213	0.044	0.764	0.0260	89171	0.242	0.0081	0.042	0.726	0.0055	541	10	190	0.999
10/13/2022	13:21:32	0.197	-0.0028	0.075	0.724	0.0209	88287	0.227	0.0087	0.041	0.482	0.0052	510	10	190	0.999
Run Averages		0.199	-0.0127	0.062	0.784	0.0230	89271	0.232	0.0085	0.042	0.654	0.0053	523			
10/13/2022	13:22:32	0.250	-0.0167	0.028	0.780	0.0238	89007	0.233	0.0086	0.042	0.630	0.0053	527	10	190	0.999
10/13/2022	13:23:32	0.219	-0.0008	0.049	0.709	0.0236	88112	0.228	0.0088	0.041	0.494	0.0052	508	10	190	0.999
10/13/2022	13:24:37	0.160	-0.0052	0.069	0.759	0.0197	88453	0.225	0.0091	0.041	0.508	0.0051	506	10	190	0.999
10/13/2022	13:25:34	0.240	-0.0141	0.054	0.761	0.0237	89252	0.232	0.0085	0.042	0.626	0.0053	530	10	190	0.999
10/13/2022	13:26:32	0.123	-0.0349	0.047	0.759	0.0262	89316	0.235	0.0086	0.042	0.600	0.0053	528	10	190	0.999
10/13/2022	13:27:32	0.162	-0.0257	0.064	0.882	0.0213	88916	0.232	0.0086	0.041	0.816	0.0053	526	10	190	0.999
10/13/2022	13:28:32	0.173	0.0065	0.058	0.774	0.0244	89042	0.231	0.0083	0.042	0.592	0.0053	525	10	190	0.999
10/13/2022	13:29:32	0.165	-0.0204	0.047	0.825	0.0246	88620	0.234	0.0084	0.042	0.626	0.0053	520	10	190	0.999
10/13/2022	13:30:32	0.210	-0.0137	0.055	0.854	0.0216	89443	0.233	0.0083	0.042	0.808	0.0054	528	10	190	0.999
10/13/2022	13:31:32	0.141	-0.0105	0.038	0.808	0.0265	89476	0.232	0.0083	0.043	0.604	0.0053	531	10	190	0.999
10/13/2022	13:32:32	0.200	-0.0188	0.065	0.721	0.0237	89420	0.239	0.0080	0.042	0.650	0.0054	539	10	190	0.999
Start Run 5																
10/13/2022	13:33:32	0.167	0.0109	0.060	0.746	0.0196	88800	0.232	0.0085	0.041	0.520	0.0052	520	10	190	0.999
10/13/2022	13:34:32	0.157	-0.0046	0.076	0.788	0.0231	89074	0.230	0.0086	0.042	0.574	0.0053	524	10	190	0.999
10/13/2022	13:35:32	0.210	-0.0075	0.063	0.815	0.0235	89622	0.238	0.0081	0.043	0.861	0.0054	539	10	190	0.999
10/13/2022	13:36:34	0.145	-0.0178	0.049	0.847	0.0254	89980	0.235	0.0087	0.042	0.683	0.0053	525	10	190	0.999
10/13/2022	13:37:32	0.127	0.0263	0.069	0.831	0.0221	91148	0.232	0.0090	0.042	0.662	0.0053	531	10	190	0.999
10/13/2022	13:38:32	0.195	-0.0279	0.043	0.791	0.0280	90488	0.232	0.0088	0.043	0.586	0.0053	527	10	190	0.999
10/13/2022	13:39:32	0.183	-0.0001	0.064	0.731	0.0217	90740	0.234	0.0085	0.043	0.672	0.0054	532	10	190	0.999
10/13/2022	13:40:32	0.132	-0.0018	0.062	0.772	0.0256	89534	0.232	0.0085	0.041	0.589	0.0052	525	10	190	0.999
10/13/2022	13:41:32	0.177	-0.0085	0.071	0.775	0.0205	89907	0.231	0.0088	0.042	0.590	0.0053	520	10	190	0.999
10/13/2022	13:42:32	0.213	-0.0002	0.050	0.732	0.0232	89230	0.229	0.0088	0.041	0.524	0.0052	511	10	190	0.999
10/13/2022	13:43:33	0.096	-0.0316	0.054	0.807	0.0236	89264	0.233	0.0083	0.041	0.627	0.0053	530	10	190	0.999
10/13/2022	13:44:34	0.160	-0.0153	0.057	0.853	0.0279	89220	0.231	0.0094	0.041	0.709	0.0053	523	10	190	0.999
10/13/2022	13:45:32	0.205	-0.0101	0.041	0.759	0.0228	89163	0.232	0.0086	0.042	0.669	0.0052	524	10	190	0.999
10/13/2022	13:46:33	0.114	-0.0105	0.069	0.768	0.0241	89021	0.228	0.0086	0.041	0.599	0.0052	515	10	190	0.999
10/13/2022	13:47:32	0.182	0.0009	0.044	0.758	0.0236	88929	0.230	0.0085	0.041	0.713	0.0052	524	10	190	0.999
10/13/2022	13:48:32	0.162	0.0065	0.054	0.849	0.0235	89587	0.230	0.0085	0.042	0.726	0.0052	520	10	190	0.999
10/13/2022	13:49:32	0.203	0.0014	0.050	0.738	0.0232	89425	0.229	0.0085	0.042	0.613	0.0052	518	10	190	0.999
10/13/2022	13:50:32	0.193	-0.0101	0.034	0.802	0.0243	89244	0.229	0.0084	0.043	0.715	0.0052	520	10	190	0.999
10/13/2022	13:51:32	0.193	-0.0070	0.064	0.739	0.0242	89202	0.230	0.0087	0.042	0.612	0.0052	521	10	190	0.999
10/13/2022	13:52:32	0.205	-0.0153	0.033	0.774	0.0225	89045	0.228	0.0086	0.042	0.577	0.0052	514	10	190	0.999
10/13/2022	13:53:32	0.150	-0.0035	0.054	0.764	0.0243	88530	0.227	0.0087	0.041	0.537	0.0052	513	10	190	0.999
10/13/2022	13:54:32	0.140	-0.0080	0.055	0.787	0.0227	89232	0.231	0.0088	0.042	0.660	0.0053	519	10	190	0.999
10/13/2022	13:55:32	0.159	-0.0096	0.047	0.792	0.0254	89354	0.234	0.0086	0.041	0.608	0.0052	521	10	190	0.999
10/13/2022	13:56:32	0.166	-0.0119	0.059	0.737	0.0224	89423	0.228	0.0087	0.041	0.593	0.0052	518	10	190	0.999
10/13/2022	13:57:32	0.183	0.0080	0.040	0.769	0.0221	89181	0.226	0.0086	0.042	0.576	0.0052	515	10	190	0.999
10/13/2022	13:58:32	0.171	-0.0347	0.046	0.722	0.0267	89155	0.230	0.0087	0.041	0.602	0.0052	517	10	190	0.999
10/13/2022	13:59:32	0.170	-0.0332	0.052	0.808	0.0214	88843	0.229	0.0082	0.042	0.635	0.0053	513	10	190	0.999
10/13/2022	14:00:32	0.187	-0.0199	0.044	0.756	0.0249	89065	0.229	0.0086	0.042	0.628	0.0052	515	10	190	0.999
10/13/2022	14:01:35	0.131	-0.0099	0.066	0.814	0.0238	88955	0.227	0.0084	0.041	0.675	0.0052	513	10	190	0.999
10/13/2022	14:02:32	0.203	-0.0161	0.046	0.749	0.0221	89035	0.227	0.0087	0.042	0.583	0.0052	514	10	190	0.999
10/13/2022	14:03:32	0.088	-0.0093	0.029	0.748	0.0237	88579	0.229	0.0087	0.041	0.544	0.0052	510	10	190	0.999
10/13/2022	14:04:32	0.204	-0.0067	0.046	0.852	0.0250	88818	0.227	0.0088	0.042	0.812	0.0050	510	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	14:05:32	0.118	-0.0062	0.054	0.733	0.0234	89244	0.225	0.0091	0.041	0.608	0.0051	51.1	10	190	0.999
10/13/2022	14:06:32	0.153	-0.0182	0.051	0.743	0.0262	88748	0.229	0.0085	0.042	0.585	0.0051	51.4	10	190	0.999
10/13/2022	14:07:32	0.165	0.0029	0.071	0.777	0.0229	88731	0.227	0.0087	0.039	0.727	0.0051	51.1	10	190	0.999
10/13/2022	14:08:32	0.107	-0.0074	0.066	0.753	0.0233	88965	0.224	0.0090	0.041	0.561	0.0051	50.7	10	190	0.999
10/13/2022	14:09:34	0.157	0.0003	0.051	0.777	0.0240	89238	0.228	0.0088	0.042	0.625	0.0052	51.1	10	190	0.999
10/13/2022	14:10:32	0.197	-0.0342	0.057	0.747	0.0233	89089	0.228	0.0088	0.042	0.599	0.0052	51.6	10	190	0.999
10/13/2022	14:11:32	0.162	0.0001	0.038	0.844	0.0253	88873	0.229	0.0086	0.042	0.712	0.0052	51.5	10	190	0.999
10/13/2022	14:12:32	0.150	-0.0220	0.046	0.776	0.0236	88990	0.229	0.0089	0.042	0.758	0.0052	51.2	10	190	0.999
10/13/2022	14:13:32	0.143	-0.0348	0.046	0.790	0.0239	89048	0.226	0.0087	0.042	0.686	0.0051	51.2	10	190	0.999
10/13/2022	14:14:32	0.175	-0.0002	0.050	0.783	0.0245	88659	0.223	0.0088	0.041	0.593	0.0050	50.5	10	190	0.999
10/13/2022	14:15:32	0.204	-0.0120	0.051	0.815	0.0218	88598	0.224	0.0087	0.041	0.649	0.0052	50.8	10	190	0.999
10/13/2022	14:16:32	0.169	-0.0224	0.055	0.938	0.0239	89086	0.225	0.0091	0.041	0.761	0.0051	50.9	10	190	0.999
10/13/2022	14:17:32	0.217	-0.0226	0.057	0.817	0.0260	89017	0.226	0.0090	0.042	0.720	0.0051	51.1	10	190	0.999
10/13/2022	14:18:32	0.199	-0.0020	0.067	0.826	0.0221	89186	0.226	0.0088	0.041	0.735	0.0051	50.6	10	190	0.999
10/13/2022	14:19:34	0.132	-0.0038	0.064	0.825	0.0250	89492	0.228	0.0087	0.041	0.778	0.0052	51.4	10	190	0.999
10/13/2022	14:20:32	0.118	-0.0034	0.024	0.805	0.0253	88910	0.226	0.0094	0.041	0.603	0.0051	50.4	10	190	0.999
10/13/2022	14:21:32	0.110	-0.0114	0.048	0.802	0.0253	89099	0.229	0.0087	0.041	0.643	0.0052	51.8	10	190	0.999
10/13/2022	14:22:32	0.272	-0.0234	0.053	0.783	0.0228	89081	0.223	0.0086	0.043	0.599	0.0051	50.9	10	190	0.999
10/13/2022	14:23:32	0.189	-0.0130	0.074	0.792	0.0239	89419	0.228	0.0087	0.041	0.726	0.0052	51.4	10	190	0.999
10/13/2022	14:24:32	0.162	-0.0023	0.074	0.807	0.0239	89175	0.227	0.0090	0.041	0.708	0.0052	50.8	10	190	0.999
10/13/2022	14:25:32	0.134	-0.0170	0.076	0.859	0.0226	89194	0.225	0.0092	0.041	0.669	0.0051	50.3	10	190	0.999
10/13/2022	14:26:32	0.168	-0.0079	0.040	0.823	0.0279	88974	0.231	0.0090	0.041	0.660	0.0052	51.9	10	190	0.999
10/13/2022	14:27:32	0.148	-0.0221	0.044	0.773	0.0231	89291	0.225	0.0089	0.041	0.581	0.0051	50.8	10	190	0.999
10/13/2022	14:28:32	0.167	-0.0088	0.078	0.790	0.0212	88780	0.224	0.0092	0.041	0.591	0.0050	50.0	10	190	0.999
10/13/2022	14:29:32	0.110	-0.0052	0.052	0.815	0.0254	89168	0.222	0.0092	0.042	0.705	0.0051	50.2	10	190	0.999
10/13/2022	14:30:32	0.178	-0.0161	0.053	0.752	0.0197	88776	0.219	0.0094	0.042	0.562	0.0050	49.7	10	190	0.999
10/13/2022	14:31:32	0.186	-0.0143	0.049	0.769	0.0224	88991	0.221	0.0094	0.041	0.681	0.0050	49.7	10	190	0.999
10/13/2022	14:32:32	0.196	0.0043	0.033	0.812	0.0250	88872	0.223	0.0092	0.041	0.606	0.0051	50.7	10	190	0.999
10/13/2022	14:33:34	0.144	-0.0041	0.037	0.758	0.0263	88815	0.227	0.0086	0.041	0.625	0.0051	50.7	10	190	0.999
Run Averages		0.166	-0.0099	0.054	0.788	0.0238	89185	0.228	0.0088	0.042	0.645	0.0052	51.5			
10/13/2022	14:34:32	0.169	-0.0017	0.053	0.763	0.0253	89329	0.223	0.0090	0.041	0.591	0.0051	51.1	10	190	0.999
10/13/2022	14:35:33	0.202	0.0007	0.051	0.830	0.0252	88741	0.223	0.0091	0.041	0.709	0.0050	50.2	10	190	0.999
10/13/2022	14:36:32	0.204	-0.0215	0.032	0.758	0.0255	88735	0.228	0.0087	0.041	0.634	0.0051	50.6	10	190	0.999
10/13/2022	14:37:32	0.160	-0.0047	0.055	0.845	0.0219	88602	0.222	0.0089	0.040	0.712	0.0051	50.4	10	190	0.999
10/13/2022	14:38:32	0.144	-0.0086	0.024	0.812	0.0227	88611	0.226	0.0087	0.040	0.658	0.0051	50.7	10	190	0.999
10/13/2022	14:39:32	0.154	-0.0186	0.046	0.770	0.0251	89043	0.225	0.0088	0.043	0.663	0.0051	51.0	10	190	0.999
10/13/2022	14:40:33	0.164	-0.0145	0.059	0.750	0.0236	88763	0.223	0.0092	0.041	0.505	0.0051	50.5	10	190	0.999
10/13/2022	14:41:35	0.195	-0.0303	0.045	0.855	0.0258	88576	0.227	0.0089	0.041	0.669	0.0052	51.0	10	190	0.999
10/13/2022	14:42:32	0.222	-0.0240	0.038	0.752	0.0206	89188	0.224	0.0091	0.042	0.649	0.0052	50.7	10	190	0.999
10/13/2022	14:43:34	0.135	-0.0285	0.055	0.710	0.0240	87892	0.217	0.0092	0.041	0.471	0.0050	49.3	10	190	0.999
10/13/2022	14:44:36	0.180	-0.0125	0.047	0.826	0.0246	88327	0.219	0.0096	0.041	0.712	0.0050	48.9	10	190	0.999
10/13/2022	14:45:32	0.195	-0.0027	0.050	0.693	0.0237	87870	0.220	0.0095	0.041	0.442	0.0050	48.9	10	190	0.999
Start Run 6																
10/13/2022	14:46:32	0.192	-0.0083	0.046	0.717	0.0239	88388	0.222	0.0085	0.042	0.599	0.0051	50.7	10	190	0.999
10/13/2022	14:47:32	0.208	-0.0290	0.058	0.761	0.0219	88519	0.224	0.0091	0.041	0.562	0.0050	50.3	10	190	0.999
10/13/2022	14:48:35	0.155	-0.0237	0.042	0.763	0.0229	88554	0.226	0.0089	0.042	0.563	0.0051	50.5	10	190	0.999
10/13/2022	14:49:32	0.154	-0.0210	0.034	0.817	0.0266	88757	0.226	0.0087	0.042	0.670	0.0051	51.1	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	14:50:32	0.191	-0.0084	0.047	0.739	0.0243	88620	0.220	0.0090	0.042	0.581	0.0050	500	10	190	0.999
10/13/2022	14:51:32	0.195	-0.0208	0.058	0.821	0.0253	89094	0.230	0.0090	0.042	0.722	0.0052	514	10	190	0.999
10/13/2022	14:52:32	0.183	-0.0183	0.043	0.798	0.0218	88741	0.222	0.0089	0.041	0.616	0.0051	500	10	190	0.999
10/13/2022	14:53:32	0.097	-0.0273	0.058	0.778	0.0228	88957	0.224	0.0092	0.041	0.571	0.0051	508	10	190	0.999
10/13/2022	14:54:32	0.106	-0.0078	0.066	0.786	0.0229	89655	0.225	0.0093	0.041	0.597	0.0052	516	10	190	0.999
10/13/2022	14:55:32	0.198	-0.0033	0.024	0.753	0.0245	88706	0.227	0.0091	0.041	0.640	0.0052	509	10	190	0.999
10/13/2022	14:56:32	0.130	-0.0084	0.042	0.711	0.0232	88725	0.225	0.0090	0.043	0.486	0.0050	497	10	190	0.999
10/13/2022	14:57:32	0.148	-0.0009	0.057	0.752	0.0256	88751	0.231	0.0089	0.042	0.604	0.0052	516	10	190	0.999
10/13/2022	14:58:32	0.142	-0.0104	0.053	0.786	0.0232	89404	0.226	0.0094	0.042	0.623	0.0052	512	10	190	0.999
10/13/2022	14:59:32	0.184	-0.0149	0.056	0.766	0.0260	88656	0.228	0.0089	0.041	0.674	0.0051	511	10	190	0.999
10/13/2022	15:00:32	0.183	-0.0042	0.051	0.750	0.0229	89171	0.228	0.0087	0.040	0.592	0.0051	512	10	190	0.999
10/13/2022	15:01:32	0.180	-0.0132	0.039	0.853	0.0236	88922	0.230	0.0089	0.043	0.760	0.0052	513	10	190	0.999
10/13/2022	15:02:32	0.144	-0.0019	0.052	0.776	0.0244	89145	0.231	0.0082	0.041	0.700	0.0053	524	10	190	0.999
10/13/2022	15:03:32	0.153	-0.0019	0.053	0.771	0.0238	88812	0.232	0.0082	0.041	0.570	0.0053	522	10	190	0.999
10/13/2022	15:04:32	0.214	-0.0159	0.056	0.791	0.0230	89439	0.234	0.0088	0.041	0.642	0.0053	528	10	190	0.999
10/13/2022	15:05:32	0.119	-0.0108	0.063	0.773	0.0229	88548	0.234	0.0083	0.040	0.613	0.0054	528	10	190	0.999
10/13/2022	15:06:32	0.144	-0.0057	0.046	0.812	0.0257	88331	0.233	0.0084	0.041	0.655	0.0054	528	10	190	0.999
10/13/2022	15:07:32	0.183	-0.0298	0.044	0.798	0.0252	88099	0.234	0.0080	0.042	0.599	0.0054	529	10	190	0.999
10/13/2022	15:08:32	0.175	-0.0244	0.039	0.739	0.0248	88431	0.237	0.0080	0.042	0.631	0.0054	536	10	190	0.999
10/13/2022	15:09:32	0.178	-0.0374	0.059	0.800	0.0254	88283	0.231	0.0080	0.041	0.588	0.0053	525	10	190	0.999
10/13/2022	15:10:32	0.120	-0.0165	0.040	0.808	0.0250	88470	0.232	0.0081	0.041	0.645	0.0053	524	10	190	0.999
10/13/2022	15:11:32	0.174	-0.0210	0.044	0.823	0.0242	88465	0.234	0.0082	0.042	0.735	0.0054	531	10	190	0.999
10/13/2022	15:12:32	0.143	-0.0185	0.053	0.825	0.0216	88117	0.230	0.0080	0.041	0.659	0.0053	525	10	190	0.999
10/13/2022	15:13:32	0.159	-0.0223	0.050	0.749	0.0248	88531	0.232	0.0083	0.041	0.671	0.0053	526	10	190	0.999
10/13/2022	15:14:32	0.206	-0.0217	0.054	0.802	0.0240	88175	0.232	0.0082	0.041	0.627	0.0054	528	10	190	0.999
10/13/2022	15:15:32	0.128	0.0091	0.054	0.764	0.0265	88461	0.229	0.0083	0.041	0.627	0.0053	519	10	190	0.999
10/13/2022	15:16:32	0.138	-0.0472	0.036	0.813	0.0226	88456	0.228	0.0083	0.043	0.654	0.0052	523	10	190	0.999
10/13/2022	15:17:32	0.148	-0.0311	0.024	0.718	0.0238	88526	0.235	0.0082	0.042	0.597	0.0053	528	10	190	0.999
10/13/2022	15:18:32	0.193	-0.0040	0.042	0.846	0.0228	88600	0.233	0.0082	0.042	0.691	0.0053	526	10	190	0.999
10/13/2022	15:19:32	0.191	-0.0268	0.052	0.748	0.0225	88818	0.230	0.0084	0.042	0.567	0.0052	522	10	190	0.999
10/13/2022	15:20:32	0.143	-0.0287	0.040	0.779	0.0243	88460	0.233	0.0081	0.042	0.625	0.0053	525	10	190	0.999
10/13/2022	15:21:32	0.120	0.0036	0.047	0.838	0.0249	88602	0.232	0.0083	0.041	0.744	0.0054	528	10	190	0.999
10/13/2022	15:22:32	0.123	-0.0407	0.040	0.828	0.0236	88100	0.231	0.0083	0.041	0.642	0.0052	522	10	190	0.999
10/13/2022	15:23:32	0.112	-0.0235	0.056	0.915	0.0227	88316	0.231	0.0083	0.041	0.776	0.0053	527	10	190	0.999
10/13/2022	15:24:32	0.185	-0.0163	0.057	0.780	0.0264	88500	0.235	0.0083	0.042	0.599	0.0053	529	10	190	0.999
10/13/2022	15:25:35	0.207	-0.0185	0.055	0.786	0.0230	87918	0.234	0.0081	0.041	0.633	0.0053	527	10	190	0.999
10/13/2022	15:26:32	0.185	-0.0153	0.045	0.767	0.0213	88140	0.229	0.0081	0.042	0.664	0.0052	521	10	190	0.999
10/13/2022	15:27:32	0.162	-0.0239	0.041	0.758	0.0227	88151	0.230	0.0085	0.042	0.594	0.0053	521	10	190	0.999
10/13/2022	15:28:32	0.145	-0.0072	0.026	0.802	0.0238	88372	0.232	0.0087	0.042	0.690	0.0053	521	10	190	0.999
10/13/2022	15:29:32	0.132	-0.0041	0.043	0.816	0.0243	88233	0.225	0.0087	0.041	0.701	0.0051	510	10	190	0.999
10/13/2022	15:30:35	0.195	-0.0059	0.043	0.746	0.0233	88118	0.227	0.0085	0.041	0.590	0.0051	505	10	190	0.999
10/13/2022	15:31:32	0.113	-0.0170	0.055	0.743	0.0264	88001	0.229	0.0086	0.040	0.616	0.0052	510	10	190	0.999
10/13/2022	15:32:32	0.061	-0.0378	0.049	0.743	0.0248	88039	0.226	0.0087	0.042	0.556	0.0052	509	10	190	0.999
10/13/2022	15:33:32	0.075	-0.0219	0.051	0.868	0.0249	87965	0.225	0.0084	0.041	0.743	0.0051	508	10	190	0.999
10/13/2022	15:34:32	0.162	-0.0027	0.046	0.777	0.0257	87849	0.226	0.0089	0.042	0.595	0.0051	504	10	190	0.999
10/13/2022	15:35:32	0.191	-0.0063	0.032	0.787	0.0231	88117	0.225	0.0092	0.041	0.596	0.0051	502	10	190	0.999
10/13/2022	15:36:32	0.181	-0.0032	0.039	0.808	0.0247	88263	0.223	0.0088	0.042	0.742	0.0050	503	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	15:37:34	0.150	-0.0120	0.034	0.838	0.0228	88016	0.223	0.0087	0.042	0.730	0.0051	502	10	190	0.999
10/13/2022	15:38:32	0.126	-0.0222	0.042	0.747	0.0234	87664	0.223	0.0087	0.040	0.633	0.0051	502	10	190	0.999
10/13/2022	15:39:32	0.095	-0.0350	0.023	0.777	0.0244	87581	0.225	0.0088	0.041	0.611	0.0050	507	10	190	0.999
10/13/2022	15:40:32	0.121	-0.0231	0.028	0.769	0.0246	87486	0.225	0.0091	0.041	0.612	0.0051	508	10	190	0.999
10/13/2022	15:41:33	0.193	-0.0328	0.030	0.731	0.0227	87781	0.221	0.0090	0.041	0.542	0.0049	503	10	190	0.999
10/13/2022	15:42:32	0.141	-0.0216	0.056	0.738	0.0222	87729	0.223	0.0089	0.040	0.584	0.0051	499	10	190	0.999
10/13/2022	15:43:33	0.149	0.0002	0.060	0.722	0.0234	87870	0.226	0.0090	0.040	0.560	0.0052	498	10	190	0.999
10/13/2022	15:44:32	0.155	-0.0197	0.051	0.737	0.0224	87699	0.222	0.0085	0.041	0.606	0.0051	501	10	190	0.999
10/13/2022	15:45:32	0.145	-0.0362	0.042	0.737	0.0235	87314	0.217	0.0088	0.041	0.563	0.0050	490	10	190	0.999
10/13/2022	15:46:32	0.104	-0.0209	0.042	0.781	0.0193	88049	0.216	0.0092	0.041	0.769	0.0050	470	10	190	0.999
Run Averages		0.155	-0.0171	0.047	0.781	0.0238	88388	0.228	0.0086	0.041	0.634	0.0052	514			
10/13/2022	15:47:32	0.131	-0.0261	0.030	0.833	0.0239	87870	0.224	0.0095	0.041	0.680	0.0051	503	10	190	0.999
10/13/2022	15:48:32	0.177	-0.0041	0.027	0.778	0.0256	87502	0.225	0.0089	0.041	0.628	0.0051	506	10	190	0.999
10/13/2022	15:49:35	0.162	-0.0375	0.024	0.750	0.0257	87334	0.226	0.0084	0.042	0.684	0.0052	507	10	190	0.999
10/13/2022	15:50:32	0.106	-0.0212	0.028	0.768	0.0223	87665	0.227	0.0085	0.042	0.800	0.0052	492	10	190	0.999
10/13/2022	15:51:32	0.149	-0.0262	0.047	0.793	0.0241	87756	0.225	0.0084	0.040	0.750	0.0051	516	10	190	0.999
10/13/2022	15:52:32	0.207	-0.0284	0.053	0.790	0.0208	87894	0.230	0.0084	0.040	0.661	0.0053	523	10	190	0.999
10/13/2022	15:53:32	0.169	-0.0290	0.012	0.699	0.0268	87813	0.231	0.0086	0.043	0.566	0.0053	522	10	190	0.999
10/13/2022	15:54:32	0.089	-0.0224	0.037	0.767	0.0236	87434	0.233	0.0079	0.042	0.562	0.0053	529	10	190	0.999
10/13/2022	15:55:32	0.121	-0.0048	0.046	0.682	0.0257	87824	0.235	0.0083	0.043	0.608	0.0054	516	10	190	0.999
10/13/2022	15:56:32	0.151	-0.0175	0.051	0.896	0.0251	87672	0.241	0.0077	0.041	0.886	0.0056	544	10	190	0.999
10/13/2022	15:57:32	0.102	0.0041	0.042	0.777	0.0270	87809	0.241	0.0078	0.042	0.647	0.0055	546	10	190	0.999
Start Run 7																
10/13/2022	15:58:32	0.164	-0.0324	0.036	0.820	0.0235	87747	0.240	0.0076	0.042	0.742	0.0055	543	10	190	0.999
10/13/2022	15:59:32	0.107	-0.0282	0.049	0.819	0.0216	87740	0.237	0.0080	0.041	0.639	0.0054	534	10	190	0.999
10/13/2022	16:00:32	0.125	-0.0109	0.050	0.754	0.0237	87645	0.239	0.0080	0.041	0.593	0.0054	538	10	190	0.999
10/13/2022	16:01:32	0.118	-0.0218	0.057	0.772	0.0251	87690	0.233	0.0078	0.041	0.616	0.0054	538	10	190	0.999
10/13/2022	16:02:35	0.137	-0.0333	0.060	0.757	0.0232	87756	0.238	0.0080	0.041	0.681	0.0054	540	10	190	0.999
10/13/2022	16:03:32	0.119	-0.0073	0.055	0.803	0.0241	87286	0.235	0.0084	0.041	0.635	0.0053	528	10	190	0.999
10/13/2022	16:04:32	0.067	-0.0183	0.054	0.704	0.0202	87588	0.225	0.0081	0.040	0.552	0.0052	496	10	190	0.999
10/13/2022	16:05:32	0.224	-0.0211	0.038	0.756	0.0226	87681	0.233	0.0084	0.042	0.619	0.0053	523	10	190	0.999
10/13/2022	16:06:32	0.197	-0.0223	0.054	0.843	0.0215	87479	0.231	0.0083	0.041	0.704	0.0053	523	10	190	0.999
10/13/2022	16:07:35	0.131	-0.0236	0.043	0.794	0.0257	87201	0.232	0.0080	0.041	0.662	0.0053	526	10	190	0.999
10/13/2022	16:08:32	0.148	-0.0011	0.047	0.705	0.0215	87636	0.228	0.0093	0.040	0.612	0.0052	494	10	190	0.999
10/13/2022	16:09:32	0.140	-0.0351	0.048	0.769	0.0232	87657	0.233	0.0083	0.041	0.629	0.0052	521	10	190	0.999
10/13/2022	16:10:32	0.209	-0.0021	0.049	0.740	0.0255	87645	0.231	0.0085	0.041	0.588	0.0052	517	10	190	0.999
10/13/2022	16:11:32	0.125	-0.0324	0.033	0.740	0.0240	87579	0.226	0.0084	0.042	0.567	0.0052	515	10	190	0.999
10/13/2022	16:12:32	0.147	-0.0182	0.042	0.770	0.0247	87543	0.231	0.0092	0.042	0.589	0.0053	522	10	190	0.999
10/13/2022	16:13:32	0.136	-0.0216	0.022	0.806	0.0260	87241	0.231	0.0084	0.041	0.698	0.0052	519	10	190	0.999
10/13/2022	16:14:32	0.098	-0.0397	0.059	0.653	0.0190	87804	0.226	0.0088	0.040	0.590	0.0051	490	10	190	0.999
10/13/2022	16:15:35	0.169	-0.0164	0.042	0.767	0.0234	87389	0.226	0.0086	0.040	0.590	0.0051	513	10	190	0.999
10/13/2022	16:16:32	0.093	-0.0171	0.042	0.688	0.0205	87385	0.224	0.0086	0.041	0.598	0.0051	488	10	190	0.999
10/13/2022	16:17:34	0.182	-0.0247	0.042	0.630	0.0228	87463	0.224	0.0086	0.041	0.592	0.0052	488	10	190	0.999
10/13/2022	16:18:32	0.135	-0.0162	0.042	0.761	0.0245	87564	0.227	0.0085	0.040	0.660	0.0052	513	10	190	0.999
10/13/2022	16:19:32	0.172	-0.0134	0.051	0.710	0.0233	87146	0.225	0.0086	0.040	0.541	0.0051	510	10	190	0.999
10/13/2022	16:20:32	0.124	-0.0187	0.057	0.690	0.0212	87312	0.204	0.0090	0.039	0.616	0.0051	484	10	190	0.999
10/13/2022	16:21:32	0.149	-0.0133	0.035	0.676	0.0209	87584	0.204	0.0088	0.041	0.599	0.0051	486	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	16:22:32	0.106	-0.0414	0.045	0.724	0.0199	87267	0.208	0.0089	0.040	0.553	0.0052	504	10	190	0.999
10/13/2022	16:23:32	0.124	-0.0210	0.051	0.661	0.0194	87376	0.201	0.0093	0.041	0.598	0.0050	477	10	190	0.999
10/13/2022	16:24:32	0.137	-0.0399	0.056	0.605	0.0169	87843	0.206	0.0095	0.041	0.633	0.0052	485	9	190	0.999
10/13/2022	16:25:32	0.091	-0.0195	0.030	0.758	0.0193	87484	0.204	0.0094	0.042	0.701	0.0051	509	10	190	0.999
10/13/2022	16:26:35	0.108	-0.0109	0.036	0.645	0.0169	83577	0.187	0.0089	0.040	0.452	0.0046	457	10	190	0.999
10/13/2022	16:27:32	-0.014	-0.0036	0.031	0.564	0.0114	83781	0.180	0.0086	0.040	0.466	0.0045	432	10	190	0.999
10/13/2022	16:28:32	0.073	-0.0036	0.042	0.630	0.0099	83749	0.181	0.0086	0.040	0.545	0.0046	438	10	190	0.999
10/13/2022	16:29:32	0.142	-0.0010	0.076	0.614	0.0110	83918	0.183	0.0087	0.040	0.585	0.0045	439	10	190	0.999
10/13/2022	16:30:32	-0.026	0.0156	0.044	0.483	0.0113	83596	0.181	0.0082	0.040	0.444	0.0043	434	10	190	0.999
10/13/2022	16:31:35	-0.072	0.0016	0.039	0.503	0.0064	83697	0.179	0.0079	0.040	0.450	0.0048	436	10	190	0.999
10/13/2022	16:32:32	-0.128	-0.0289	0.046	0.631	0.0056	84059	0.165	0.0082	0.039	0.539	0.0046	436	10	190	0.999
10/13/2022	16:33:32	0.114	-0.0290	0.024	0.557	0.0173	83944	0.204	0.0079	0.038	0.487	0.0046	448	10	190	0.999
10/13/2022	16:34:32	0.106	-0.0324	0.040	0.681	0.0179	87740	0.224	0.0090	0.040	0.548	0.0051	484	10	190	0.999
10/13/2022	16:35:32	0.100	-0.0230	0.058	0.810	0.0228	87785	0.234	0.0091	0.040	0.638	0.0054	523	10	191	0.999
10/13/2022	16:36:32	0.125	-0.0376	0.042	0.814	0.0221	87854	0.224	0.0095	0.040	0.626	0.0051	502	10	190	0.999
10/13/2022	16:37:32	0.054	-0.0285	0.030	0.842	0.0239	87726	0.229	0.0090	0.040	0.700	0.0052	513	10	190	0.999
10/13/2022	16:38:32	0.104	-0.0350	0.022	0.795	0.0235	87765	0.227	0.0090	0.041	0.619	0.0052	512	10	190	0.999
10/13/2022	16:39:32	0.043	-0.0139	0.017	0.766	0.0265	87555	0.227	0.0094	0.042	0.549	0.0051	506	10	190	0.999
10/13/2022	16:40:32	0.086	-0.0316	0.027	0.781	0.0256	87478	0.227	0.0090	0.041	0.681	0.0052	509	10	190	0.999
10/13/2022	16:41:32	0.123	-0.0055	0.031	0.780	0.0257	87620	0.224	0.0092	0.041	0.721	0.0052	506	10	190	0.999
10/13/2022	16:42:32	0.101	-0.0229	0.027	0.787	0.0248	87140	0.226	0.0092	0.041	0.601	0.0052	503	10	190	0.999
10/13/2022	16:43:32	0.052	-0.0124	0.036	0.695	0.0217	87248	0.221	0.0099	0.041	0.603	0.0050	470	10	190	0.999
10/13/2022	16:44:32	0.095	-0.0340	0.043	0.639	0.0228	87236	0.223	0.0087	0.041	0.633	0.0051	484	10	190	0.999
10/13/2022	16:45:32	0.030	-0.0291	0.044	0.669	0.0219	87369	0.221	0.0093	0.041	0.621	0.0051	476	10	190	0.999
10/13/2022	16:46:32	0.044	-0.0044	0.028	0.776	0.0249	87131	0.221	0.0093	0.040	0.588	0.0050	499	10	190	0.999
10/13/2022	16:47:32	0.101	-0.0379	0.031	0.655	0.0205	87790	0.222	0.0097	0.041	0.622	0.0050	475	10	190	0.999
10/13/2022	16:48:33	-0.006	0.0011	0.042	0.737	0.0218	87230	0.222	0.0092	0.039	0.549	0.0050	498	10	190	0.999
10/13/2022	16:49:32	0.025	-0.0195	0.039	0.687	0.0210	87182	0.219	0.0098	0.039	0.603	0.0051	474	10	190	0.999
10/13/2022	16:50:32	0.092	-0.0332	0.031	0.677	0.0223	87450	0.221	0.0094	0.041	0.648	0.0051	481	10	190	0.999
10/13/2022	16:51:32	0.112	-0.0326	0.029	0.755	0.0211	87033	0.218	0.0095	0.041	0.532	0.0050	494	10	190	0.999
10/13/2022	16:52:32	0.033	-0.0204	0.034	0.688	0.0199	87245	0.219	0.0092	0.041	0.577	0.0051	474	10	190	0.999
10/13/2022	16:53:32	0.130	-0.0265	0.028	0.687	0.0224	87277	0.218	0.0091	0.041	0.674	0.0050	473	10	190	0.999
10/13/2022	16:54:32	0.028	-0.0229	0.012	0.745	0.0223	87232	0.220	0.0095	0.042	0.714	0.0050	470	10	190	0.999
10/13/2022	16:55:32	0.012	-0.0114	0.049	0.741	0.0227	87251	0.221	0.0096	0.040	0.748	0.0051	477	10	190	0.999
10/13/2022	16:56:32	0.046	-0.0044	0.039	0.728	0.0190	87219	0.219	0.0096	0.040	0.674	0.0051	473	10	190	0.999
10/13/2022	16:57:32	0.000	-0.0024	0.016	0.677	0.0201	87159	0.219	0.0092	0.040	0.585	0.0051	475	10	190	0.999
10/13/2022	16:58:32	0.083	-0.0225	0.024	0.697	0.0185	87097	0.219	0.0092	0.040	0.557	0.0050	477	10	190	0.999
Run Averages		0.095	-0.0199	0.040	0.715	0.0209	85981	0.248	0.0088	0.041	0.606	0.0051	493			
10/13/2022	16:59:34	0.132	-0.0403	0.019	0.750	0.0194	87054	0.220	0.0091	0.041	0.655	0.0050	478	10	190	0.999
10/13/2022	17:00:32	0.015	-0.0152	0.049	0.615	0.0228	87229	0.221	0.0093	0.041	0.583	0.0050	477	10	190	0.999
10/13/2022	17:01:35	0.075	-0.0202	0.027	0.656	0.0226	87072	0.220	0.0093	0.041	0.572	0.0050	476	10	190	0.999
10/13/2022	17:02:32	0.034	-0.0124	0.039	0.708	0.0205	87194	0.222	0.0099	0.040	0.658	0.0050	471	10	190	0.999
10/13/2022	17:03:32	0.013	-0.0295	0.030	0.687	0.0211	87215	0.221	0.0091	0.040	0.666	0.0051	479	10	190	0.999
10/13/2022	17:04:32	0.056	-0.0309	0.036	0.670	0.0213	87374	0.221	0.0093	0.041	0.609	0.0050	475	10	190	0.999
10/13/2022	17:05:32	0.041	-0.0076	0.042	0.710	0.0206	87109	0.223	0.0096	0.040	0.610	0.0050	478	10	190	0.999
10/13/2022	17:06:32	0.023	-0.0095	0.050	0.664	0.0197	87462	0.224	0.0095	0.041	0.637	0.0050	482	10	190	0.999
10/13/2022	17:07:32	0.117	-0.0214	0.017	0.815	0.0227	87190	0.228	0.0091	0.040	0.717	0.0051	505	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	17:08:32	0.060	-0.0551	0.015	0.692	0.0213	87130	0.223	0.0092	0.042	0.642	0.0051	483	10	190	0.999
10/13/2022	17:09:32	0.045	-0.0121	0.028	0.722	0.0250	87542	0.224	0.0092	0.041	0.694	0.0051	483	10	190	0.999
10/13/2022	17:10:32	0.068	-0.0325	0.031	0.794	0.0261	87242	0.225	0.0094	0.042	0.662	0.0051	505	10	190	0.999
10/13/2022	17:11:32	0.078	-0.0389	0.018	0.678	0.0207	87121	0.222	0.0091	0.042	0.593	0.0051	483	10	190	0.999
10/13/2022	17:12:32	0.090	-0.0256	0.040	0.666	0.0241	87307	0.227	0.0089	0.042	0.783	0.0052	492	10	190	0.999
10/13/2022	17:13:32	0.084	-0.0278	0.038	0.678	0.0206	87136	0.222	0.0093	0.040	0.608	0.0052	481	10	190	0.999
10/13/2022	17:14:35	0.080	-0.0339	0.029	0.649	0.0207	87104	0.221	0.0091	0.041	0.605	0.0051	485	10	190	0.999
10/13/2022	17:15:32	-0.011	-0.0224	0.057	0.704	0.0211	87444	0.225	0.0094	0.040	0.698	0.0051	486	10	190	0.999
10/13/2022	17:16:34	0.079	-0.0037	0.028	0.762	0.0251	87194	0.228	0.0093	0.041	0.604	0.0052	510	10	190	0.999
10/13/2022	17:17:33	0.103	-0.0213	0.025	0.652	0.0229	87376	0.226	0.0096	0.041	0.589	0.0051	481	10	190	0.999
10/13/2022	17:18:33	0.040	-0.0078	0.041	0.671	0.0221	87268	0.223	0.0094	0.041	0.617	0.0050	488	10	190	0.999
10/13/2022	17:19:32	0.088	-0.0450	0.031	0.669	0.0199	87014	0.225	0.0093	0.040	0.593	0.0052	487	10	190	0.999
10/13/2022	17:20:32	0.086	-0.0340	0.043	0.677	0.0213	86942	0.226	0.0093	0.040	0.601	0.0052	487	10	190	0.999
10/13/2022	17:21:33	0.079	-0.0300	0.047	0.732	0.0210	87130	0.228	0.0088	0.040	0.805	0.0051	490	10	190	0.999
10/13/2022	17:22:32	0.129	-0.0430	0.034	0.690	0.0223	86885	0.222	0.0094	0.040	0.580	0.0050	478	10	190	0.999
10/13/2022	17:23:32	0.088	-0.0251	0.035	0.656	0.0216	86927	0.221	0.0092	0.041	0.608	0.0051	479	10	190	0.999
10/13/2022	17:24:32	0.070	-0.0119	0.035	0.744	0.0224	87226	0.225	0.0093	0.043	0.654	0.0051	486	10	190	0.999
10/13/2022	17:25:35	0.020	-0.0327	0.042	0.632	0.0217	87054	0.225	0.0091	0.040	0.581	0.0051	488	10	190	0.999
10/13/2022	17:26:32	0.100	-0.0230	0.031	0.639	0.0226	86695	0.223	0.0087	0.042	0.533	0.0051	486	10	190	0.999
10/13/2022	17:27:32	0.098	-0.0265	0.017	0.728	0.0220	86764	0.226	0.0088	0.041	0.695	0.0051	492	10	190	0.999
10/13/2022	17:28:32	0.026	-0.0249	0.043	0.724	0.0210	86859	0.231	0.0088	0.040	0.708	0.0052	496	10	190	0.999
10/13/2022	17:29:32	0.097	-0.0229	0.025	0.635	0.0188	86910	0.228	0.0087	0.040	0.626	0.0053	497	10	190	0.999
10/13/2022	17:30:32	0.087	-0.0455	0.013	0.759	0.0206	86678	0.228	0.0089	0.040	0.684	0.0052	495	10	190	0.999
10/13/2022	17:31:32	0.049	-0.0291	0.037	0.694	0.0219	86451	0.226	0.0091	0.039	0.599	0.0051	490	10	190	0.999
10/13/2022	17:32:32	0.011	-0.0231	0.027	0.761	0.0222	86585	0.225	0.0090	0.040	0.858	0.0051	488	10	190	0.999
10/13/2022	17:33:32	0.045	-0.0212	0.057	0.608	0.0218	86253	0.222	0.0096	0.040	0.544	0.0052	485	10	190	0.999
10/13/2022	17:34:32	0.016	-0.0114	0.039	0.690	0.0218	86641	0.223	0.0097	0.041	0.594	0.0051	480	10	190	0.999
10/13/2022	17:35:32	0.101	-0.0208	0.035	0.672	0.0207	86614	0.223	0.0092	0.040	0.657	0.0051	483	10	190	0.999
10/13/2022	17:36:32	0.014	-0.0318	0.050	0.716	0.0215	86545	0.221	0.0092	0.040	0.677	0.0050	477	10	190	0.999
10/13/2022	17:37:32	0.057	-0.0329	0.024	0.720	0.0191	86387	0.219	0.0089	0.040	0.645	0.0050	473	10	190	0.999
10/13/2022	17:38:32	0.051	-0.0215	0.025	0.691	0.0220	86269	0.217	0.0096	0.040	0.600	0.0050	468	10	190	0.999
10/13/2022	17:39:32	0.053	-0.0099	0.037	0.658	0.0214	86140	0.217	0.0095	0.040	0.599	0.0049	467	10	190	0.999
10/13/2022	17:40:32	0.098	-0.0119	0.016	0.655	0.0207	86211	0.217	0.0094	0.041	0.554	0.0050	467	10	190	0.999
10/13/2022	17:41:32	0.083	-0.0282	0.020	0.624	0.0204	86070	0.214	0.0095	0.040	0.500	0.0049	461	10	190	0.999
10/13/2022	17:42:32	0.088	-0.0109	0.026	0.654	0.0187	86306	0.218	0.0093	0.041	0.573	0.0049	466	10	190	0.999
10/13/2022	17:43:35	0.029	-0.0154	0.035	0.676	0.0233	86134	0.219	0.0095	0.041	0.598	0.0050	467	10	190	0.999
10/13/2022	17:44:32	0.096	-0.0102	0.046	0.675	0.0189	86036	0.216	0.0098	0.039	0.612	0.0049	464	10	190	0.999
10/13/2022	17:45:32	0.073	-0.0446	0.025	0.604	0.0204	85804	0.216	0.0098	0.040	0.503	0.0049	467	10	190	0.999
10/13/2022	17:46:32	-0.008	-0.0410	0.027	0.661	0.0221	85920	0.219	0.0093	0.041	0.759	0.0050	469	10	190	0.999
10/13/2022	17:47:32	0.048	-0.0194	0.045	0.640	0.0227	85853	0.218	0.0096	0.039	0.544	0.0050	466	10	190	0.999
10/13/2022	17:48:32	0.094	-0.0220	0.030	0.664	0.0253	85867	0.219	0.0092	0.040	0.623	0.0050	470	10	190	0.999
10/13/2022	17:49:32	0.024	-0.0202	0.021	0.651	0.0227	85825	0.216	0.0097	0.041	0.586	0.0050	467	10	190	0.999
10/13/2022	17:50:32	0.060	-0.0358	0.014	0.682	0.0218	85861	0.213	0.0095	0.041	0.605	0.0049	460	10	190	0.999
10/13/2022	17:51:32	0.094	-0.0284	0.002	0.650	0.0210	85926	0.217	0.0098	0.041	0.609	0.0050	468	10	190	0.999
10/13/2022	17:52:32	0.074	-0.0186	0.018	0.711	0.0224	85723	0.217	0.0096	0.041	0.692	0.0050	463	10	190	0.999
10/13/2022	17:53:32	0.063	-0.0187	0.032	0.656	0.0208	85424	0.212	0.0096	0.039	0.610	0.0048	452	10	190	0.999
10/13/2022	17:54:32	0.117	-0.0254	0.027	0.753	0.0193	85699	0.213	0.0094	0.039	0.748	0.0050	461	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	17:55:32	0.081	-0.0155	0.032	0.616	0.0219	85395	0.211	0.0095	0.040	0.478	0.0047	457	10	190	0.999
10/13/2022	17:56:34	0.118	-0.0261	0.030	0.633	0.0213	85542	0.213	0.0093	0.039	0.564	0.0049	463	10	190	0.999
10/13/2022	17:57:32	0.061	-0.0074	0.014	0.648	0.0225	85576	0.215	0.0095	0.040	0.588	0.0048	461	10	190	0.999
10/13/2022	17:58:32	0.054	-0.0204	0.016	0.697	0.0234	85429	0.216	0.0102	0.041	0.697	0.0049	459	10	190	0.999
10/13/2022	17:59:32	0.098	-0.0192	0.035	0.715	0.0200	85441	0.211	0.0093	0.041	0.658	0.0048	457	10	190	0.999
10/13/2022	18:00:35	0.004	-0.0100	0.030	0.734	0.0242	85812	0.216	0.0098	0.040	0.665	0.0049	460	10	190	0.999
10/13/2022	18:01:32	0.063	-0.0218	0.036	0.698	0.0210	85689	0.214	0.0096	0.040	0.639	0.0048	458	10	190	0.999
10/13/2022	18:02:32	0.041	-0.0138	0.029	0.659	0.0224	85428	0.212	0.0097	0.040	0.555	0.0049	456	10	190	0.999
10/13/2022	18:03:32	0.047	-0.0209	0.018	0.667	0.0214	85365	0.218	0.0094	0.040	0.601	0.0050	466	10	190	0.999
10/13/2022	18:04:32	0.075	-0.0112	0.018	0.735	0.0189	85816	0.215	0.0095	0.040	0.659	0.0049	460	10	190	0.999
10/13/2022	18:05:32	0.093	-0.0218	0.017	0.630	0.0238	85567	0.218	0.0094	0.042	0.553	0.0049	466	10	190	0.999
10/13/2022	18:06:32	0.066	-0.0075	0.016	0.628	0.0226	85326	0.216	0.0097	0.041	0.513	0.0049	463	10	190	0.999
10/13/2022	18:07:32	0.035	-0.0168	0.015	0.709	0.0237	85553	0.220	0.0096	0.040	0.669	0.0050	467	10	190	0.999
10/13/2022	18:08:32	0.053	-0.0003	0.033	0.702	0.0189	84992	0.214	0.0097	0.039	0.563	0.0049	456	10	190	0.999
10/13/2022	18:09:32	0.084	-0.0314	0.023	0.649	0.0237	85713	0.220	0.0094	0.041	0.614	0.0051	474	10	190	0.999
10/13/2022	18:10:32	0.042	-0.0036	0.019	0.635	0.0211	85721	0.222	0.0092	0.040	0.604	0.0051	470	10	190	0.999
10/13/2022	18:11:32	0.075	-0.0149	0.034	0.655	0.0220	85718	0.217	0.0097	0.041	0.555	0.0049	465	10	190	0.999
10/13/2022	18:12:32	0.076	-0.0207	0.030	0.653	0.0180	85222	0.217	0.0096	0.040	0.527	0.0049	465	10	190	0.999
10/13/2022	18:13:32	0.067	-0.0317	0.035	0.608	0.0209	85360	0.218	0.0094	0.039	0.552	0.0050	468	10	190	0.999
10/13/2022	18:14:32	0.085	-0.0317	0.025	0.659	0.0219	85138	0.212	0.0093	0.039	0.526	0.0049	464	10	190	0.999
10/13/2022	18:15:33	0.050	-0.0211	0.018	0.579	0.0212	84880	0.217	0.0089	0.041	0.510	0.0049	467	10	190	0.999
10/13/2022	18:16:32	0.116	-0.0156	0.015	0.669	0.0225	85216	0.215	0.0097	0.041	0.575	0.0049	463	10	190	0.999
10/13/2022	18:17:32	0.058	-0.0292	0.021	0.615	0.0238	85243	0.216	0.0093	0.040	0.548	0.0049	463	10	190	0.999
10/13/2022	18:18:32	0.002	-0.0262	0.022	0.687	0.0233	85133	0.215	0.0095	0.040	0.598	0.0049	462	10	190	0.999
10/13/2022	18:19:33	0.103	-0.0215	0.021	0.678	0.0213	84958	0.217	0.0093	0.040	0.599	0.0049	464	10	190	0.999
10/13/2022	18:20:32	0.058	-0.0012	0.018	0.660	0.0211	84907	0.217	0.0094	0.040	0.567	0.0049	469	10	190	0.999
10/13/2022	18:21:32	0.082	-0.0306	0.026	0.746	0.0191	85089	0.214	0.0093	0.040	0.742	0.0049	464	10	190	0.999
10/13/2022	18:22:34	0.056	-0.0210	0.026	0.690	0.0224	84955	0.216	0.0090	0.039	0.622	0.0049	465	10	190	0.999
10/13/2022	18:23:32	-0.005	-0.0040	0.027	0.693	0.0218	85032	0.216	0.0097	0.040	0.605	0.0049	462	10	190	0.999
10/13/2022	18:24:32	0.094	-0.0269	0.038	0.560	0.0204	84757	0.211	0.0091	0.040	0.472	0.0049	455	10	190	0.999
10/13/2022	18:25:32	0.080	-0.0193	0.019	0.723	0.0244	85022	0.215	0.0094	0.038	0.731	0.0049	462	10	190	0.999
10/13/2022	18:26:32	0.009	-0.0063	0.045	0.633	0.0191	84572	0.217	0.0092	0.038	0.519	0.0050	467	10	190	0.999
10/13/2022	18:27:34	0.056	-0.0349	0.037	0.715	0.0208	84740	0.217	0.0094	0.039	0.679	0.0050	467	10	190	0.999
10/13/2022	18:28:32	0.039	-0.0018	0.026	0.730	0.0220	84876	0.215	0.0093	0.040	0.662	0.0049	462	10	190	0.999
10/13/2022	18:29:32	0.022	-0.0245	0.020	0.645	0.0229	84871	0.214	0.0089	0.040	0.555	0.0049	465	10	190	0.999
10/13/2022	18:30:32	0.006	-0.0329	0.055	0.677	0.0220	84674	0.215	0.0096	0.039	0.620	0.0049	462	10	190	0.999
10/13/2022	18:31:32	-0.003	-0.0207	0.028	0.686	0.0226	84699	0.215	0.0092	0.039	0.563	0.0050	466	10	190	0.999
10/13/2022	18:32:32	0.008	-0.0126	0.031	0.730	0.0200	84591	0.218	0.0092	0.039	0.760	0.0050	474	10	190	0.999
10/13/2022	18:33:32	0.043	-0.0269	0.030	0.652	0.0211	84641	0.215	0.0092	0.039	0.590	0.0050	466	10	190	0.999
10/13/2022	18:34:32	0.049	-0.0365	0.023	0.728	0.0226	84595	0.215	0.0095	0.040	0.601	0.0049	458	10	190	0.999
10/13/2022	18:35:32	0.079	-0.0278	0.030	0.675	0.0207	84418	0.212	0.0092	0.041	0.583	0.0048	457	10	190	0.999
10/13/2022	18:36:34	0.079	-0.0478	0.011	0.676	0.0211	84372	0.215	0.0088	0.040	0.606	0.0049	464	10	190	0.999
10/13/2022	18:37:32	0.094	-0.0344	0.027	0.719	0.0206	84423	0.213	0.0095	0.040	0.630	0.0048	460	10	190	0.999
10/13/2022	18:38:32	0.036	0.0116	0.028	0.672	0.0200	84345	0.216	0.0094	0.039	0.540	0.0049	461	10	190	0.999
10/13/2022	18:39:32	0.031	-0.0092	0.016	0.660	0.0225	84266	0.218	0.0095	0.040	0.568	0.0050	472	10	190	0.999
10/13/2022	18:40:32	0.056	-0.0313	0.033	0.723	0.0219	84581	0.217	0.0096	0.040	0.675	0.0049	467	10	190	0.999
10/13/2022	18:41:32	0.043	-0.0250	0.039	0.690	0.0223	84028	0.219	0.0094	0.038	0.615	0.0050	470	10	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	18:42:32	0.087	-0.0333	0.036	0.712	0.0233	84732	0.216	0.0093	0.040	0.635	0.0049	470	10	190	0.999
10/13/2022	18:43:32	0.065	-0.0271	-0.003	0.652	0.0233	84261	0.219	0.0090	0.041	0.574	0.0050	471	10	190	0.999
10/13/2022	18:44:33	0.015	-0.0405	0.028	0.598	0.0252	84097	0.219	0.0089	0.038	0.551	0.0050	472	10	190	0.999
10/13/2022	18:45:32	0.029	-0.0121	0.045	0.653	0.0231	84131	0.216	0.0095	0.040	0.536	0.0049	467	10	190	0.999
10/13/2022	18:46:32	0.107	-0.0143	0.034	0.700	0.0219	84368	0.219	0.0092	0.039	0.723	0.0050	470	10	190	0.999
10/13/2022	18:47:32	0.023	-0.0134	0.033	0.657	0.0221	84411	0.223	0.0088	0.039	0.648	0.0051	482	10	190	0.999
10/13/2022	18:48:32	0.029	-0.0138	0.031	0.628	0.0228	83515	0.215	0.0086	0.040	0.540	0.0050	463	10	190	0.999
10/13/2022	18:49:32	0.016	-0.0376	0.024	0.643	0.0232	84059	0.217	0.0092	0.039	0.568	0.0049	469	10	190	0.999
10/13/2022	18:50:32	0.007	-0.0433	0.023	0.670	0.0237	83644	0.215	0.0089	0.039	0.549	0.0049	470	10	190	0.999
10/13/2022	18:51:35	19.988	-0.0096	0.023	0.368	0.0359	47027	0.181	0.0072	0.027	0.316	0.0051	288	11	190	0.999
10/13/2022	18:52:33	93.120	-0.0271	-0.004	0.002	0.0276	942	0.089	0.0036	0.009	0.030	0.0033	59	13	190	0.999
10/13/2022	18:53:35	95.142	-0.0142	-0.007	-0.032	0.0209	354	0.101	0.0034	0.009	0.016	0.0075	11	13	190	0.999
10/13/2022	18:54:32	95.080	-0.0093	-0.005	-0.015	0.0225	181	0.102	0.0039	0.009	0.014	0.0071	6	14	190	0.999
10/13/2022	18:55:32	95.269	-0.0205	0.001	-0.021	0.0240	213	0.098	0.0035	0.008	0.015	0.0067	4	14	190	0.999
10/13/2022	18:56:32	95.239	-0.0193	-0.017	-0.014	0.0202	198	0.101	0.0034	0.008	0.013	0.0073	4	14	190	0.999
10/13/2022	18:57:32	95.335	-0.0219	-0.007	-0.0239	0.0239	175	0.100	0.0035	0.008	0.012	0.0071	4	14	190	0.999
10/13/2022	18:58:32	95.492	-0.0167	-0.004	-0.005	0.0166	158	0.096	0.0035	0.008	0.013	0.0070	4	14	190	0.999
10/13/2022	18:59:35	95.375	-0.0174	-0.008	-0.0184	-17	0.099	0.0036	0.008	0.013	0.0071	3	14	190	0.999	
10/13/2022	19:00:32	95.176	-0.0095	-0.011	-0.0229	-18	0.101	0.0036	0.008	0.015	0.0069	3	14	190	0.999	
10/13/2022	19:01:34	95.323	-0.0257	0.001	0.001	0.0208	-49	0.101	0.0036	0.008	0.013	0.0071	3	14	190	0.999
10/13/2022	19:02:32	95.547	-0.0195	-0.005	0.008	0.0194	-133	0.101	0.0035	0.008	0.014	0.0069	3	14	190	0.999
10/13/2022	19:03:32	95.469	-0.0202	-0.011	0.003	0.0196	-58	0.101	0.0037	0.009	0.015	0.0070	3	14	190	0.999
10/13/2022	19:04:32	95.236	-0.0141	-0.005	0.001	0.0181	-171	0.097	0.0034	0.008	0.014	0.0068	3	14	190	0.999
10/13/2022	19:05:32	95.078	-0.0175	-0.006	0.015	0.0176	-79	0.098	0.0035	0.008	0.017	0.0070	3	14	190	0.999
10/13/2022	19:06:32	95.480	-0.0101	-0.005	0.018	0.0174	-98	0.100	0.0034	0.008	0.016	0.0070	3	14	190	0.999
10/13/2022	19:07:32	95.624	-0.0084	-0.005	0.013	0.0167	-143	0.100	0.0037	0.009	0.015	0.0070	3	14	190	0.999
10/13/2022	19:08:32	95.545	-0.0182	-0.010	0.014	0.0157	-160	0.101	0.0034	0.008	0.016	0.0072	3	14	190	0.999
System CTS		95.545														
10/13/2022	19:09:32	93.102	-0.0131	-0.005	-0.038	0.0190	688	0.106	0.0038	0.009	0.026	0.0069	3	14	190	0.999
10/13/2022	19:10:32	1.730	-0.0042	0.061	-2.621	0.1158	76965	0.763	0.0091	0.042	1.078	0.0182	210	10	190	0.999
10/13/2022	19:11:32	0.727	-0.0252	0.023	0.683	0.0216	85568	0.221	0.0088	0.040	0.568	0.0049	478	10	190	0.999
10/13/2022	19:12:32	0.479	0.0048	0.022	0.675	0.0235	83525	0.220	0.0092	0.040	0.544	0.0050	471	10	190	0.999
10/13/2022	19:13:34	5.446	-0.0108	0.019	0.611	0.0274	74706	0.201	0.0085	0.035	0.476	0.0048	421	10	190	0.999
10/13/2022	19:14:32	0.387	-0.0237	-0.005	0.010	0.0089	788	0.043	0.0033	0.008	0.028	0.0006	16	14	190	0.999
10/13/2022	19:15:32	0.276	-0.0039	-0.012	-0.012	0.0084	224	0.046	0.0036	0.009	0.017	0.0007	3	14	190	0.999
10/13/2022	19:16:32	0.313	-0.0209	0.002	0.011	0.0064	96	0.044	0.0033	0.007	0.017	0.0006	1	14	190	0.999
10/13/2022	19:17:32	0.268	-0.0130	0.000	0.014	0.0101	81	0.043	0.0037	0.008	0.018	0.0007	1	14	190	0.999
10/13/2022	19:18:32	0.288	-0.0195	0.002	0.025	0.0083	-22	0.044	0.0035	0.008	0.018	0.0006	1	14	190	0.999
10/13/2022	19:19:32	0.209	-0.0173	-0.002	0.031	0.0103	-25	0.047	0.0032	0.008	0.019	0.0006	1	14	190	0.999
System Zero		0.209														
10/13/2022	19:20:32	0.219	-0.0059	0.000	0.028	0.0090	-77	0.044	0.0036	0.009	0.019	0.0006	1	14	190	0.999
10/13/2022	19:21:32	85.694	-0.0141	-0.009	0.042	0.0215	-211	0.122	0.0034	0.008	0.025	0.0046	3	14	190	0.991
10/13/2022	19:22:32	93.803	-0.0272	-0.008	0.050	0.0258	-313	0.083	0.0036	0.009	0.024	0.0029	3	14	190	0.992
10/13/2022	19:23:32	95.417	-0.0269	-0.015	0.029	0.0195	-227	0.096	0.0033	0.008	0.017	0.0070	3	14	190	0.991
10/13/2022	19:24:32	95.454	-0.0134	-0.006	0.022	0.0175	-179	0.094	0.0033	0.008	0.010	0.0069	3	14	190	0.991
10/13/2022	19:25:32	95.276	-0.0254	-0.016	0.0176	-122	0.095	0.0035	0.008	0.011	0.0069	0.0008	3	14	190	0.991
10/13/2022	19:26:32	95.398	-0.0225	-0.011	-0.003	0.0161	-90	0.093	0.0034	0.008	0.009	0.0069	3	13	190	0.991

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/13/2022	19:27:32	95.221	-0.0173	-0.009	-0.023	0.0200	-41	0.096	0.0034	0.009	0.013	0.0071	3	13	190	0.991
10/13/2022	19:28:32	95.382	-0.0332	-0.006	-0.018	0.0170	-43	0.095	0.0037	0.009	0.015	0.0070	3	13	190	0.991
10/13/2022	19:29:32	95.400	-0.0113	-0.012	-0.016	0.0183	7	0.096	0.0034	0.008	0.015	0.0070	3	13	190	0.991
Direct CTS	95.400															
10/13/2022	19:30:32	16.822	-0.0223	-0.015	-0.020	0.0231	48	0.069	0.0034	0.008	0.014	0.0029	1	14	190	0.991
10/13/2022	19:31:32	0.256	-0.0240	-0.004	0.007	0.0080	73	0.058	0.0037	0.008	0.010	0.0004	0	14	190	0.991
10/13/2022	19:32:32	0.242	-0.0162	0.006	0.000	0.0082	-27	0.056	0.0034	0.008	0.008	0.0003	1	14	190	0.991
10/13/2022	19:33:32	0.221	-0.0257	-0.010	0.025	0.0091	-65	0.040	0.0036	0.009	0.011	0.0004	1	14	190	0.991
10/13/2022	19:34:32	0.239	-0.0367	-0.002	0.040	0.0088	-103	0.035	0.0035	0.008	0.016	0.0004	1	14	190	0.991
10/13/2022	19:35:32	0.230	-0.0044	0.003	0.027	0.0086	-127	0.039	0.0037	0.008	0.019	0.0004	1	14	190	0.991
10/13/2022	19:36:32	0.219	-0.0110	-0.011	0.037	0.0096	-192	0.039	0.0035	0.008	0.019	0.0004	1	14	190	0.991
10/13/2022	19:37:32	0.239	-0.0113	-0.005	0.029	0.0081	-178	0.038	0.0036	0.008	0.022	0.0004	1	14	190	0.991
10/13/2022	19:38:32	0.236	-0.0133	0.006	0.038	0.0086	-176	0.039	0.0033	0.008	0.022	0.0004	1	14	190	0.991
Direct Zero	0.236															
10/13/2022	19:39:32	0.248	-0.0210	-0.008	0.042	0.0091	-202	0.037	0.0034	0.008	0.023	0.0004	1	14	190	0.991
10/13/2022	19:43:18	-0.003	0.0051	0.002	-0.012	-0.0013	24	0.007	0.0024	0.006	0.006	0.0002	0	14	190	0.991
10/13/2022	19:44:18	9.467	0.0076	0.001	-0.019	0.0080	43	0.058	0.0025	0.006	0.011	0.0019	1	14	190	0.991
10/13/2022	19:45:18	93.241	0.0141	-0.008	-0.053	0.0109	69	0.082	0.0026	0.006	0.018	0.0039	3	14	190	0.991
10/13/2022	19:46:19	94.839	-0.0042	-0.005	-0.048	0.0102	69	0.082	0.0027	0.006	0.024	0.0070	3	14	190	0.991
10/13/2022	19:47:18	94.818	0.0050	-0.009	-0.064	0.0116	99	0.083	0.0027	0.006	0.027	0.0070	3	14	190	0.991
10/13/2022	19:48:18	94.988	-0.0055	0.003	-0.056	0.0114	87	0.085	0.0026	0.006	0.031	0.0072	3	13	190	0.991
10/13/2022	19:49:18	31.665	-0.0054	0.002	-0.057	0.0229	190	0.089	0.0028	0.006	0.030	0.0048	1	14	190	0.991
10/13/2022	19:50:18	0.015	-0.0114	0.000	-0.065	-0.0012	295	0.008	0.0027	0.006	0.026	0.0002	1	14	190	0.991
10/13/2022	19:56:09	-0.449	0.0171	-0.0077	-0.019	-0.0074	70	0.033	0.0039	0.009	0.010	0.0004	1	14	190	0.991
10/13/2022	19:57:09	0.001	0.0252	0.002	-0.013	-0.0006	30	0.008	0.0024	0.006	0.008	0.0002	0	14	190	0.993
Ambient Air																
10/13/2022	19:58:09	-0.264	-0.0178	0.013	-0.833	-0.0136	10048	0.271	0.0049	0.011	0.449	0.0059	27	12	190	1.004
10/13/2022	19:59:09	0.007	-0.0050	0.009	0.021	0.0028	10490	0.033	0.0049	0.012	0.119	0.0010	52	12	190	1.004
10/13/2022	20:00:09	0.017	-0.0181	0.016	0.031	0.0005	10756	0.033	0.0047	0.012	0.118	0.0008	54	12	190	1.004
10/13/2022	20:01:12	0.022	-0.0163	0.010	0.029	-0.0004	10841	0.035	0.0048	0.012	0.122	0.0008	54	12	190	1.004
10/13/2022	20:02:09	0.018	-0.0280	0.013	0.024	-0.0013	10732	0.036	0.0047	0.012	0.120	0.0008	54	12	190	1.004

Condition: Natural Gas Max

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	6:49:55	0.443	-0.0086	0.009	-0.022	0.0074	10	0.035	0.0039	0.010	0.011	0.0003	1	14	190	0.991
10/14/2022	6:50:52	0.475	-0.0125	0.026	-0.004	0.0073	20	0.035	0.0038	0.010	0.010	0.0003	1	14	190	0.991
10/14/2022	6:51:55	-0.806	0.0102	0.022	-0.275	0.0013	3197	0.382	0.0039	0.010	0.143	0.0021	10	13	190	0.994
10/14/2022	6:52:52	0.471	0.0012	0.017	-0.018	0.0067	94	0.038	0.0040	0.010	0.012	0.0003	4	14	190	0.991
10/14/2022	6:53:52	0.452	-0.0113	0.012	-0.038	0.0066	121	0.036	0.0039	0.009	0.017	0.0003	1	14	190	0.991
10/14/2022	6:57:11	0.026	0.0191	-0.003	-0.025	-0.0016	-4	0.007	0.0028	0.006	0.010	0.0002	0	14	190	0.991
10/14/2022	6:58:11	-0.012	0.0092	0.001	-0.025	0.0007	5	0.008	0.0026	0.006	0.011	0.0002	0	14	190	0.991
10/14/2022	6:59:11	-0.416	0.0027	0.000	-0.276	-0.0058	3686	0.174	0.0031	0.007	0.147	0.0024	10	13	190	0.995
Ambient Air																
10/14/2022	7:00:12	-0.098	-0.0238	0.012	-0.531	0.0093	12468	0.090	0.0049	0.013	0.167	0.0017	48	12	190	1.004
10/14/2022	7:01:11	-0.085	-0.0248	0.014	0.068	0.0007	12536	0.050	0.0050	0.013	0.157	0.0010	69	12	190	1.004
10/14/2022	7:02:11	-0.090	-0.0039	0.024	-0.036	-0.0021	12343	0.044	0.0046	0.012	0.138	0.0010	64	12	190	1.004
10/14/2022	7:03:12	-0.098	-0.0497	0.007	0.133	-0.0019	12537	0.046	0.0056	0.014	0.195	0.0010	69	12	190	1.004
10/14/2022	7:04:11	-0.093	-0.0160	0.002	0.070	0.0012	12358	0.042	0.0051	0.012	0.137	0.0010	64	12	190	1.004
10/14/2022	7:05:11	0.004	0.067	0.011	-0.023	-0.0019	293	0.008	0.0028	0.007	0.009	0.0002	4	14	190	0.992
10/14/2022	7:06:11	-0.001	0.0270	0.008	-0.010	-0.0007	17	0.007	0.0024	0.005	0.009	0.0002	0	14	190	0.992
10/14/2022	7:07:11	0.007	0.0376	0.007	-0.009	-0.0012	14	0.009	0.0029	0.007	0.009	0.0002	0	14	190	0.992
10/14/2022	7:08:11	-0.043	0.0026	0.013	-0.019	0.0006	-39	0.008	0.0026	0.006	0.011	0.0002	0	14	190	0.991
10/14/2022	7:09:13	-0.012	0.0179	0.008	-0.025	-0.0006	-36	0.006	0.0026	0.006	0.009	0.0002	0	14	190	0.985
Direct Zero																
10/14/2022	7:10:11	-0.011	0.0177	-0.012	-0.026	0.0001	-19	0.007	0.0025	0.006	0.008	0.0002	0	14	190	0.985
10/14/2022	7:11:11	56.805	0.0245	0.005	-0.010	0.0277	25	0.134	0.0025	0.006	0.009	0.0068	2	14	190	0.989
10/14/2022	7:12:11	93.775	-0.0017	0.009	-0.007	0.0162	-182	0.065	0.0025	0.006	0.009	0.0029	3	14	190	0.991
10/14/2022	7:13:11	95.124	-0.0045	-0.005	0.001	0.0079	-182	0.081	0.0024	0.006	0.012	0.0069	3	14	190	0.991
10/14/2022	7:14:11	95.419	-0.0047	-0.003	-0.002	0.0075	-221	0.080	0.0024	0.005	0.014	0.0068	3	14	190	0.991
10/14/2022	7:15:11	95.349	-0.0033	0.002	0.009	0.0067	-242	0.080	0.0027	0.006	0.015	0.0068	3	14	190	0.991
10/14/2022	7:16:11	95.651	-0.0008	-0.009	0.004	0.0035	-226	0.081	0.0027	0.006	0.015	0.0069	3	14	190	0.991
Direct CTS																
10/14/2022	7:17:11	54.619	0.5220	-0.003	-0.295	-0.0240	4289	0.278	0.0055	0.013	0.148	0.0071	12	13	190	0.994
10/14/2022	7:18:11	-0.027	0.056	0.008	-0.081	-0.0046	1005	0.036	0.0031	0.009	0.017	0.0006	7	13	190	0.999
10/14/2022	7:19:11	-0.058	0.0302	0.001	-0.038	-0.0045	207	0.026	0.0030	0.008	0.013	0.0006	2	14	190	0.998
10/14/2022	7:20:11	0.0171	0.017	0.001	-0.029	-0.0015	174	0.027	0.0029	0.007	0.012	0.0006	1	14	190	0.999
10/14/2022	7:21:11	-0.101	0.0280	0.001	-0.034	-0.0027	129	0.024	0.0027	0.006	0.010	0.0006	1	14	190	0.999
10/14/2022	7:22:11	0.005	0.0384	0.005	-0.037	-0.0041	131	0.022	0.0028	0.007	0.014	0.0005	1	13	190	0.999
System Zero																
10/14/2022	7:23:11	35.898	0.0152	0.006	-0.020	0.0258	184	0.125	0.0031	0.008	0.016	0.0063	2	13	190	0.999
10/14/2022	7:24:11	93.757	0.0278	-0.001	-0.029	0.0137	96	0.072	0.0026	0.006	0.011	0.0029	4	13	190	0.999
10/14/2022	7:25:11	94.972	0.0237	0.002	-0.029	0.0045	-106	0.090	0.0029	0.007	0.016	0.0071	3	14	190	0.998
10/14/2022	7:26:11	95.384	0.0162	0.018	-0.011	0.0052	-76	0.088	0.0027	0.006	0.012	0.0072	3	13	190	0.999
10/14/2022	7:27:14	95.542	0.0213	-0.001	-0.004	0.0081	-191	0.091	0.0027	0.006	0.014	0.0071	3	14	190	0.999
10/14/2022	7:28:11	95.587	0.0248	0.003	0.002	0.0064	-129	0.088	0.0028	0.007	0.013	0.0073	3	13	190	0.999
10/14/2022	7:29:11	95.394	0.0375	-0.010	0.013	0.0054	-226	0.091	0.0030	0.007	0.017	0.0073	3	14	190	0.999

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	7:30:11	95.437	0.0238	0.000	0.012	0.0095	-193	0.089	0.0026	0.006	0.016	0.0071	3	13	190	0.999
System CTS		95.437														
10/14/2022	7:31:11	-0.446	0.1027	0.099	-2.657	-0.0895	77586	1.750	0.0095	0.042	2.058	0.0374	158	10	190	0.998
10/14/2022	7:32:11	-0.074	0.060	-0.002	0.647	0.0096	82819	0.218	0.0096	0.040	0.537	0.0050	467	10	190	0.999
10/14/2022	7:33:11	-0.192	0.0546	0.033	0.583	0.0096	84618	0.215	0.0093	0.040	0.528	0.0050	466	10	190	0.999
10/14/2022	7:34:11	-0.115	0.0514	0.015	0.609	0.0136	83296	0.210	0.0096	0.039	0.493	0.0049	452	10	190	0.999
10/14/2022	7:35:13	0.016	-0.0264	0.013	0.098	0.0029	15741	0.051	0.0048	0.012	0.174	0.0013	125	12	190	1.003
10/14/2022	7:36:11	0.101	-0.0115	0.027	0.031	-0.0026	12158	0.035	0.0045	0.011	0.119	0.0009	65	12	190	1.004
10/14/2022	7:37:11	-0.039	-0.0102	0.005	0.018	0.0008	11675	0.038	0.0047	0.011	0.124	0.0009	59	12	190	1.004
10/14/2022	7:38:11	-0.014	-0.0163	0.012	0.039	-0.0001	11654	0.036	0.0047	0.011	0.125	0.0008	58	12	190	0.996
10/14/2022	7:39:11	0.870	0.2329	-0.001	0.009	1.4503	6456	0.099	0.0039	0.010	0.071	0.0056	33	13	190	0.992
10/14/2022	7:40:11	-3.198	0.7243	-0.004	-0.009	4.7846	-8	0.084	0.0031	0.008	0.007	0.0040	5	14	190	0.996
10/14/2022	7:41:11	-3.347	0.7978	-0.003	-0.028	4.7812	16	0.088	0.0032	0.007	0.007	0.0043	0	14	190	0.999
10/14/2022	7:42:11	-2.466	0.8260	-0.008	-0.015	4.8040	4	0.073	0.0033	0.007	0.009	0.0033	0	14	190	1.005
10/14/2022	7:43:11	-2.558	0.8463	0.002	-0.017	4.8249	-36	0.077	0.0032	0.008	0.008	0.0034	0	14	190	1.005
10/14/2022	7:44:11	-2.486	0.8610	0.000	-0.008	4.8297	-154	0.077	0.0034	0.008	0.009	0.0035	1	14	190	1.005
10/14/2022	7:45:11	-2.303	0.8561	0.005	0.012	4.8222	-104	0.075	0.0033	0.007	0.012	0.0033	1	14	190	1.004
10/14/2022	7:46:12	-2.502	0.8801	-0.007	0.001	4.8318	-122	0.077	0.0035	0.008	0.014	0.0034	1	14	190	0.999
10/14/2022	7:47:11	-2.222	0.8708	0.000	0.000	4.8274	-69	0.073	0.0034	0.008	0.012	0.0032	1	14	190	1.005
10/14/2022	7:48:11	-2.286	0.8620	-0.017	-0.019	4.8292	-106	0.074	0.0037	0.009	0.010	0.0032	1	14	190	0.998
10/14/2022	7:49:11	-2.745	0.8840	-0.009	-0.013	4.8277	-74	0.079	0.0035	0.008	0.009	0.0035	0	14	190	0.995
10/14/2022	7:50:11	-3.168	0.3319	0.270	-0.022	4.7436	100	0.084	0.0086	0.017	0.010	0.0039	0	14	190	0.989
10/14/2022	7:51:11	-2.729	0.0943	8.329	-0.013	4.7618	16	0.076	0.0276	0.054	0.008	0.0033	0	14	190	0.993
10/14/2022	7:52:11	-2.748	0.1043	10.292	-0.015	4.7578	-9	0.074	0.0337	0.069	0.007	0.0033	0	14	190	0.993
10/14/2022	7:53:11	-2.775	0.1305	11.279	0.008	4.7439	-46	0.076	0.0380	0.078	0.008	0.0034	0	14	190	0.993
10/14/2022	7:54:11	-2.753	0.1475	12.007	0.005	4.7578	-56	0.078	0.0406	0.083	0.011	0.0033	0	14	190	0.993
10/14/2022	7:55:11	-2.704	0.1673	12.715	0.003	4.7714	-103	0.075	0.0435	0.089	0.012	0.0033	0	14	190	0.993
10/14/2022	7:56:11	-2.633	0.1645	12.924	0.014	4.7513	-120	0.075	0.0444	0.091	0.014	0.0032	0	14	190	0.993
10/14/2022	7:57:11	-2.765	0.1497	13.047	0.011	4.7457	-135	0.078	0.0451	0.092	0.017	0.0033	0	14	190	0.993
10/14/2022	7:58:11	-2.673	0.1608	13.326	0.008	4.7319	-169	0.075	0.0463	0.095	0.019	0.0032	0	14	190	0.994
10/14/2022	7:59:11	-2.763	0.1556	13.826	0.015	4.7448	-158	0.077	0.0473	0.097	0.019	0.0033	1	14	190	0.994
10/14/2022	8:00:11	-2.708	0.1540	14.275	0.024	4.7581	-150	0.077	0.0489	0.100	0.018	0.0033	1	14	190	0.994
10/14/2022	8:01:11	-2.782	0.1763	14.743	0.020	4.7805	-168	0.080	0.0497	0.102	0.019	0.0034	1	14	190	0.994
10/14/2022	8:02:11	-2.628	0.1816	14.780	0.012	4.7433	-127	0.078	0.0498	0.102	0.019	0.0032	1	14	190	0.994
10/14/2022	8:03:11	-2.494	0.1756	15.132	0.013	4.7530	-95	0.079	0.0495	0.101	0.012	0.0033	0	14	190	0.994
10/14/2022	8:04:11	-2.417	0.1736	14.991	-0.004	4.7326	-42	0.077	0.0498	0.102	0.011	0.0030	0	14	190	0.994
10/14/2022	8:05:11	-2.543	0.1705	15.803	-0.001	4.7657	-6	0.078	0.0517	0.106	0.007	0.0033	0	14	190	0.994
10/14/2022	8:06:11	-2.383	0.1428	15.561	-0.012	4.7553	34	0.076	0.0508	0.111	0.009	0.0031	0	14	190	0.994
10/14/2022	8:07:14	-2.613	0.1603	15.827	-0.012	4.7599	50	0.077	0.0524	0.107	0.008	0.0032	0	14	190	0.994
10/14/2022	8:08:11	-2.642	0.1533	16.227	-0.013	4.7733	44	0.077	0.0532	0.116	0.010	0.0032	0	13	190	0.994
10/14/2022	8:09:11	-2.635	0.1860	16.551	-0.034	4.7597	75	0.078	0.0533	0.117	0.013	0.0033	0	13	190	0.994
10/14/2022	8:10:11	-2.475	0.1438	16.236	-0.009	4.7551	77	0.074	0.0508	0.114	0.010	0.0030	0	14	190	0.994
10/14/2022	8:11:11	-2.569	0.1835	16.746	-0.031	4.7752	38	0.078	0.0529	0.116	0.011	0.0031	0	13	190	0.994
10/14/2022	8:12:11	-2.514	0.1670	17.023	-0.024	4.7701	56	0.076	0.0539	0.118	0.012	0.0032	0	13	190	0.994
10/14/2022	8:13:11	-2.517	0.1808	17.185	-0.026	4.7626	67	0.075	0.0534	0.117	0.012	0.0032	0	13	190	0.994
10/14/2022	8:14:11	-2.607	0.179	-0.017	4.7525	12	0.076	0.0541	0.118	0.009	0.0032	0	13	190	0.994	

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	8:15:11	-2.624	0.1774	17.309	-0.016	4.7658	29	0.077	0.0538	0.118	0.010	0.0033	0	13	190	0.994
10/14/2022	8:16:14	-2.620	0.1932	17.197	-0.025	4.7480	38	0.076	0.0542	0.119	0.008	0.0032	0	14	190	0.994
10/14/2022	8:17:13	-2.533	0.1683	17.098	-0.007	4.7389	-35	0.075	0.0540	0.118	0.008	0.0032	0	14	190	0.994
10/14/2022	8:18:13	-2.444	0.1695	17.528	-0.003	4.7673	-33	0.074	0.0536	0.117	0.009	0.0032	0	14	190	0.994
10/14/2022	8:19:12	-2.655	0.1920	17.847	0.002	4.7652	-70	0.078	0.0541	0.118	0.009	0.0034	0	14	190	0.994
10/14/2022	8:20:11	-2.591	0.1620	17.571	0.018	4.7635	-97	0.077	0.0533	0.117	0.012	0.0033	1	14	190	0.994
10/14/2022	8:21:11	-2.645	0.1774	17.957	0.024	4.7849	-109	0.077	0.0535	0.117	0.012	0.0032	0	14	190	0.994
10/14/2022	8:22:11	-2.590	0.1819	18.014	0.025	4.7795	-136	0.076	0.0541	0.119	0.014	0.0033	0	14	190	0.994
10/14/2022	8:23:11	-2.559	0.1755	17.618	0.021	4.7465	-131	0.076	0.0541	0.118	0.016	0.0032	1	14	190	0.994
10/14/2022	8:24:12	-2.573	0.1668	17.839	0.022	4.7513	-114	0.075	0.0542	0.118	0.016	0.0032	1	14	190	0.994
10/14/2022	8:25:11	-2.629	0.1981	18.302	0.005	4.7581	-170	0.078	0.0548	0.120	0.015	0.0033	1	14	190	0.994
10/14/2022	8:26:11	-2.641	0.1608	17.863	0.013	4.7599	-138	0.078	0.0537	0.117	0.013	0.0033	0	14	190	0.994
10/14/2022	8:27:11	-2.478	0.1692	17.865	-0.001	4.7461	-90	0.075	0.0544	0.119	0.011	0.0031	0	14	190	0.994
10/14/2022	8:28:11	-3.581	0.1569	18.128	-0.006	4.6996	-36	0.095	0.0542	0.118	0.007	0.0048	0	14	190	0.988
10/14/2022	8:29:14	-4.278	0.1944	18.070	-0.008	4.6528	22	0.120	0.0541	0.118	0.009	0.0065	0	13	190	0.985
10/14/2022	8:30:12	-4.243	0.1938	17.586	-0.008	4.6416	59	0.119	0.0532	0.117	0.011	0.0066	0	14	190	0.985
10/14/2022	8:31:11	-4.554	0.1591	17.483	-0.024	4.6476	83	0.129	0.0548	0.120	0.012	0.0071	0	13	190	0.985
10/14/2022	8:32:11	-4.486	0.1740	17.073	-0.024	4.6488	44	0.130	0.0540	0.118	0.012	0.0071	0	14	190	0.985
10/14/2022	8:33:11	-4.485	0.1719	17.390	-0.031	4.6604	87	0.129	0.0535	0.117	0.014	0.0070	0	14	190	0.985
10/14/2022	8:34:11	-4.584	0.1596	16.610	-0.021	4.6438	53	0.133	0.0526	0.115	0.010	0.0073	0	14	191	0.985
10/14/2022	8:35:13	-4.719	0.2011	16.719	-0.025	4.6568	-3	0.139	0.0526	0.115	0.010	0.0076	0	14	191	0.985
10/14/2022	8:36:11	-4.366	0.1681	16.379	0.001	4.6500	-22	0.125	0.0499	0.109	0.007	0.0069	0	14	191	0.985
10/14/2022	8:37:12	-4.545	0.1621	16.140	0.002	4.6528	-61	0.133	0.0499	0.109	0.007	0.0073	0	14	191	0.985
10/14/2022	8:38:14	-4.534	0.1360	15.891	0.009	4.6595	-19	0.133	0.0492	0.108	0.008	0.0072	0	14	191	0.985
10/14/2022	8:39:11	-4.652	0.1638	15.651	-0.010	4.6466	-6	0.136	0.0493	0.108	0.008	0.0074	0	14	191	0.985
10/14/2022	8:40:11	-4.406	0.1669	15.117	-0.023	4.6409	28	0.129	0.0470	0.096	0.009	0.0070	0	14	190	0.985
10/14/2022	8:41:11	-4.497	0.1635	15.283	-0.011	4.6672	12	0.130	0.0474	0.097	0.009	0.0070	0	14	190	0.985
10/14/2022	8:42:11	-4.395	0.1731	14.932	-0.021	4.6443	-13	0.128	0.0460	0.094	0.008	0.0069	0	14	190	0.985
10/14/2022	8:43:11	-4.426	0.1583	14.964	-0.004	4.6760	17	0.128	0.0464	0.095	0.008	0.0070	0	14	190	0.985
10/14/2022	8:44:11	-4.494	0.1790	14.665	0.007	4.6649	-7	0.132	0.0456	0.093	0.008	0.0070	0	14	190	0.985
10/14/2022	8:45:11	-4.427	0.1690	14.599	0.004	4.6656	-46	0.126	0.0446	0.091	0.009	0.0068	0	14	190	0.985
10/14/2022	8:46:11	-4.494	0.2002	14.223	0.010	4.6621	-20	0.131	0.0442	0.090	0.010	0.0070	0	14	190	0.985
10/14/2022	8:47:11	-4.479	0.1638	14.142	-0.003	4.6581	-51	0.129	0.0432	0.088	0.009	0.0069	0	14	190	0.985
10/14/2022	8:48:11	-4.360	0.1659	13.898	0.013	4.6567	-75	0.126	0.0426	0.087	0.010	0.0067	0	14	190	0.985
10/14/2022	8:49:11	-4.562	0.1650	13.614	-0.006	4.6498	-80	0.134	0.0426	0.087	0.012	0.0071	0	14	190	0.985
10/14/2022	8:50:11	-2.691	0.1971	15.113	0.015	4.7321	-70	0.098	0.0500	0.102	0.015	0.0041	2	14	189	1.057
10/14/2022	8:51:11	-0.019	0.1883	19.231	0.011	4.9349	-1	0.158	0.0649	0.142	0.014	0.0095	3	14	189	1.134
10/14/2022	8:52:11	0.793	0.2108	19.806	-0.024	4.9381	-430	0.186	0.0674	0.148	0.010	0.0130	4	14	188	1.143
10/14/2022	8:53:11	2.558	0.2385	19.425	-0.012	4.9541	-25	0.220	0.0660	0.145	0.011	0.0151	4	14	187	1.150
10/14/2022	8:54:11	3.257	0.2311	19.707	-0.018	5.0132	-136	0.255	0.0677	0.149	0.013	0.0168	4	14	187	1.155
10/14/2022	8:55:12	3.829	0.2424	20.092	-0.020	5.0402	341	0.275	0.0678	0.149	0.012	0.0195	5	14	187	1.160
10/14/2022	8:56:11	4.287	0.2391	20.161	-0.013	5.0149	213	0.278	0.0687	0.151	0.012	0.0191	9	14	186	1.164
10/14/2022	8:57:11	3.442	0.2064	19.989	-0.011	5.0796	-242	0.289	0.0698	0.153	0.013	0.0209	7	14	186	1.168
10/14/2022	8:58:11	4.329	0.2068	20.173	-0.033	5.0388	-55	0.294	0.0706	0.155	0.015	0.0215	5	14	186	1.170
10/14/2022	8:59:11	4.985	0.2348	20.527	-0.017	5.0910	-415	0.308	0.0703	0.155	0.018	0.0233	5	14	187	1.173
10/14/2022	9:00:11	4.698	0.2384	20.150	-0.024	5.0824	-286	0.269	0.0708	0.155	0.017	0.0200	5	14	187	1.175

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	9:01:13	3.163	0.1956	19.718	-0.033	5.0132	435	0.245	0.0638	0.140	0.015	0.0155	3	14	188	1.085
10/14/2022	9:02:11	0.328	0.2084	19.671	-0.005	4.9277	23	0.160	0.0581	0.127	0.010	0.0093	2	14	189	1.014
10/14/2022	9:03:11	-0.563	0.1876	19.259	-0.002	4.8832	-67	0.129	0.0570	0.125	0.007	0.0070	1	14	190	0.988
10/14/2022	9:04:11	-0.688	0.1728	19.858	-0.015	4.8970	-55	0.122	0.0554	0.121	0.010	0.0065	1	14	190	0.989
10/14/2022	9:05:11	-0.918	0.1770	19.113	0.001	4.8452	-138	0.104	0.0547	0.120	0.013	0.0051	1	14	191	0.991
10/14/2022	9:06:11	-1.059	0.1866	19.568	0.011	4.8543	-177	0.100	0.0546	0.120	0.015	0.0048	1	14	191	0.991
10/14/2022	9:07:11	-0.214	0.1621	19.737	0.014	4.9018	-311	0.165	0.0559	0.123	0.017	0.0091	3	14	191	1.010
10/14/2022	9:08:11	2.105	0.2726	20.435	0.001	4.9905	344	0.216	0.0593	0.130	0.014	0.0130	4	14	190	1.020
10/14/2022	9:09:11	0.161	0.1831	19.974	-0.024	4.9295	-26	0.161	0.0565	0.123	0.010	0.0087	6	14	191	1.004
10/14/2022	9:10:11	-1.480	0.1996	19.493	-0.021	4.8485	47	0.088	0.0544	0.119	0.010	0.0042	1	14	191	0.988
10/14/2022	9:11:11	-1.752	0.1629	19.378	-0.027	4.8211	34	0.079	0.0535	0.117	0.011	0.0035	1	14	191	0.988
10/14/2022	9:12:11	-1.998	0.1899	19.462	-0.036	4.8093	115	0.078	0.0522	0.114	0.014	0.0034	1	14	191	0.988
10/14/2022	9:13:11	-2.376	0.1677	19.274	-0.033	4.7848	72	0.075	0.0540	0.118	0.013	0.0032	0	14	192	0.988
10/14/2022	9:14:11	-2.370	0.1811	19.146	-0.018	4.7793	48	0.075	0.0529	0.116	0.010	0.0030	1	14	192	0.988
10/14/2022	9:15:11	-2.404	0.1872	19.128	-0.029	4.7759	50	0.074	0.0537	0.117	0.012	0.0030	0	14	192	0.987
10/14/2022	9:16:11	-2.656	0.1716	19.280	-0.012	4.7799	46	0.075	0.0544	0.119	0.011	0.0030	1	14	192	0.987
10/14/2022	9:17:14	3.956	0.1746	18.868	-0.017	4.6879	46	0.110	0.0553	0.121	0.012	0.0056	0	14	192	0.985
10/14/2022	9:18:13	-3.013	0.1001	9.313	4.979	4.8202	-34	0.117	0.0314	0.069	0.038	0.0041	2	14	191	0.997
10/14/2022	9:19:11	-0.145	-0.0121	0.113	20.225	5.1889	45	0.214	0.0085	0.020	0.116	0.0094	4	14	190	1.010
10/14/2022	9:20:11	0.929	-0.0321	0.064	21.765	5.2114	244	0.247	0.0089	0.019	0.149	0.0116	4	14	190	1.013
10/14/2022	9:21:11	2.122	0.0107	0.039	24.176	5.2854	128	0.257	0.0096	0.021	0.151	0.0138	6	14	189	1.015
10/14/2022	9:22:11	2.371	0.0829	0.001	22.025	5.2746	421	0.284	0.0102	0.022	0.149	0.0153	5	14	189	1.017
10/14/2022	9:23:13	3.245	-0.0265	0.041	24.167	5.3338	-184	0.307	0.0107	0.023	0.154	0.0177	9	14	188	1.019
10/14/2022	9:24:11	0.941	-0.0212	0.043	24.736	5.2306	-38	0.236	0.0052	0.011	0.154	0.0120	2	14	189	0.997
10/14/2022	9:25:11	0.421	0.0057	0.053	22.719	5.2030	-103	0.221	0.0048	0.011	0.148	0.0102	2	14	189	0.995
10/14/2022	9:26:11	0.901	-0.0074	0.053	21.084	5.1814	53	0.213	0.0051	0.011	0.141	0.0107	2	14	189	0.995
10/14/2022	9:27:11	0.027	-0.0155	0.037	22.898	5.2230	-36	0.215	0.0048	0.011	0.144	0.0098	2	14	189	0.994
10/14/2022	9:28:12	-0.0123	0.027	23.830	5.2019	9	0.215	0.0042	0.009	0.147	0.0097	2	14	190	0.993	
10/14/2022	9:29:11	-0.873	-0.0189	0.026	20.835	5.1651	162	0.193	0.0041	0.009	0.141	0.0078	1	14	190	0.993
10/14/2022	9:30:11	-0.652	-0.0071	0.045	20.858	5.1741	129	0.198	0.0042	0.009	0.140	0.0081	2	14	190	0.993
10/14/2022	9:31:11	-0.376	0.0002	0.014	23.478	5.1927	159	0.193	0.0044	0.010	0.143	0.0077	1	14	190	0.993
10/14/2022	9:32:11	-1.154	-0.0014	0.032	21.620	5.1602	172	0.195	0.0045	0.010	0.140	0.0075	2	14	190	0.993
10/14/2022	9:33:11	-1.411	0.0137	0.046	20.292	5.1202	94	0.177	0.0045	0.010	0.136	0.0060	2	14	190	0.992
10/14/2022	9:34:14	-4.747	-0.0136	0.076	17.879	4.9203	96	0.194	0.0029	0.007	0.124	0.0068	0	14	191	0.985
10/14/2022	9:35:11	-5.266	0.0126	0.143	18.134	4.9198	60	0.223	0.0029	0.006	0.126	0.0077	0	14	191	0.985
10/14/2022	9:36:11	-5.265	0.0100	0.178	14.740	4.9127	21	0.242	0.0027	0.006	0.107	0.0078	0	14	192	0.985
10/14/2022	9:37:11	-4.667	0.0077	0.193	17.538	4.9746	7	0.217	0.0029	0.007	0.098	0.0060	1	14	192	0.986
10/14/2022	9:38:14	-3.914	0.0060	0.084	20.195	4.9873	-68	0.162	0.0027	0.007	0.132	0.0047	0	14	192	0.986
10/14/2022	9:39:12	-4.057	0.0069	0.085	23.139	5.0218	-100	0.167	0.0028	0.007	0.140	0.0049	0	14	192	0.986
10/14/2022	9:40:11	-3.961	0.0098	0.071	21.627	5.0000	-100	0.162	0.0029	0.006	0.134	0.0048	0	14	192	0.986
10/14/2022	9:41:11	-4.123	0.0131	0.073	20.609	4.9924	-103	0.166	0.0027	0.006	0.133	0.0050	0	14	192	0.986
10/14/2022	9:42:11	-3.983	0.0059	0.082	21.512	4.9986	-111	0.163	0.0026	0.006	0.133	0.0048	0	14	192	0.986
10/14/2022	9:43:11	-3.933	-0.0013	0.069	22.248	5.0217	-73	0.163	0.0024	0.006	0.134	0.0046	0	14	191	0.986
10/14/2022	9:44:11	-3.869	0.0087	0.067	20.990	4.9849	-50	0.162	0.0026	0.006	0.130	0.0046	0	14	191	0.988
10/14/2022	9:45:11	-3.660	0.0170	0.057	22.415	5.0208	-49	0.158	0.0026	0.006	0.136	0.0042	0	14	191	0.989
10/14/2022	9:46:11	-3.527	0.0126	0.048	21.946	5.0030	-21	0.153	0.0026	0.006	0.135	0.0040	0	14	191	0.990

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	9:47:11	-3.544	-0.0029	0.055	21.660	5.0029	59	0.156	0.0026	0.006	0.136	0.0039	0	14	191	0.990
10/14/2022	9:48:11	-3.534	0.097	0.062	20.829	4.9973	87	0.154	0.0025	0.006	0.136	0.0039	0	14	190	0.990
10/14/2022	9:49:11	-3.201	0.091	0.051	20.919	5.0052	111	0.150	0.0026	0.006	0.134	0.0036	0	14	190	0.990
10/14/2022	9:50:14	-3.190	0.0182	0.042	21.330	5.0186	119	0.152	0.0026	0.006	0.135	0.0036	0	14	190	0.990
10/14/2022	9:51:11	-3.138	-0.0019	0.046	20.979	5.0082	110	0.151	0.0028	0.006	0.135	0.0035	1	14	190	0.990
10/14/2022	9:52:11	-3.096	0.0262	0.044	21.748	5.0280	105	0.150	0.0026	0.006	0.136	0.0034	0	14	190	0.990
10/14/2022	9:53:11	-2.948	0.0080	0.044	21.645	5.0095	133	0.146	0.0029	0.007	0.136	0.0034	1	14	190	0.990
10/14/2022	9:54:11	-3.329	-0.0026	0.041	21.313	5.0127	125	0.152	0.0028	0.006	0.137	0.0036	0	14	190	0.990
10/14/2022	9:55:11	-3.128	-0.0145	0.050	20.366	4.9954	32	0.147	0.0028	0.007	0.135	0.0035	0	14	190	0.990
10/14/2022	9:56:11	-3.529	0.095	0.044	23.967	5.0515	29	0.155	0.0028	0.006	0.148	0.0038	0	14	190	0.990
10/14/2022	9:57:14	-3.030	-0.0035	0.049	20.660	5.0147	-18	0.149	0.0025	0.006	0.133	0.0034	0	14	190	0.990
10/14/2022	9:58:17	-3.441	0.0151	0.049	20.131	4.9708	-33	0.158	0.0028	0.007	0.130	0.0039	0	14	190	0.989
10/14/2022	9:59:11	-5.048	0.0264	0.077	21.677	4.9158	-70	0.206	0.0028	0.006	0.138	0.0073	0	14	190	0.985
10/14/2022	10:00:13	-5.150	-0.0008	0.111	20.648	4.9286	-114	0.221	0.0026	0.006	0.132	0.0073	0	14	190	0.985
10/14/2022	10:01:14	-5.290	0.0093	0.123	19.824	4.9505	-71	0.234	0.0029	0.007	0.129	0.0075	0	14	190	0.985
10/14/2022	10:02:11	-4.792	0.0121	0.144	16.935	4.9134	-69	0.233	0.0027	0.006	0.110	0.0068	0	14	190	0.985
10/14/2022	10:03:11	-4.711	0.0163	0.152	15.789	4.9025	-64	0.241	0.0025	0.006	0.103	0.0067	0	14	190	0.985
10/14/2022	10:04:11	-5.014	0.0216	0.158	14.879	4.8981	-45	0.253	0.0028	0.006	0.084	0.0073	0	14	190	0.985
10/14/2022	10:05:11	-5.093	0.0008	0.191	13.764	4.9092	-66	0.264	0.0028	0.006	0.081	0.0074	0	14	190	0.985
10/14/2022	10:06:11	-0.738	0.0286	0.126	5.942	1.9911	5582	0.376	0.0036	0.009	0.256	0.0084	15	13	190	0.996
10/14/2022	10:07:11	0.044	0.1121	0.018	-0.009	0.0283	29012	0.216	0.0061	0.020	0.430	0.0048	122	11	190	0.992
10/14/2022	10:08:11	-0.252	0.0804	0.015	0.9633	0.0066	69503	0.215	0.0090	0.033	0.513	0.0048	376	10	190	0.992
10/14/2022	10:09:11	-0.356	0.0558	0.006	1.169	0.0169	85773	0.220	0.0102	0.041	0.812	0.0051	451	10	190	0.992
10/14/2022	10:10:11	-0.216	0.0493	0.041	0.919	0.0174	87567	0.221	0.0094	0.041	0.627	0.0051	480	10	190	0.993
10/14/2022	10:11:11	-0.166	0.0418	0.041	1.035	0.0186	89377	0.224	0.0103	0.043	0.800	0.0051	479	10	190	0.994
10/14/2022	10:12:11	-0.226	0.0274	0.024	1.0233	0.0204	89258	0.229	0.0106	0.044	0.516	0.0052	504	10	190	0.993
10/14/2022	10:13:11	-0.267	0.0480	0.046	0.865	0.0172	86529	0.219	0.0101	0.042	0.502	0.0050	496	10	190	0.993
10/14/2022	10:14:11	-0.238	0.0493	0.074	0.760	0.0159	83638	0.215	0.0097	0.039	0.456	0.0051	454	10	190	0.993
10/14/2022	10:15:11	-0.225	0.0381	0.059	0.800	0.0173	83807	0.212	0.0097	0.041	0.538	0.0048	454	10	190	0.993
10/14/2022	10:16:11	-0.151	0.0324	0.084	0.791	0.0124	84100	0.214	0.0094	0.039	0.595	0.0049	463	10	190	0.994
10/14/2022	10:17:11	-0.234	0.0353	0.074	0.858	0.0158	83795	0.217	0.0089	0.040	0.683	0.0050	466	10	190	0.994
10/14/2022	10:18:11	-0.281	0.0360	0.045	0.693	0.0198	83786	0.216	0.0096	0.039	0.558	0.0050	467	10	190	0.994
10/14/2022	10:19:11	-0.226	0.0332	0.049	0.849	0.0159	83991	0.210	0.0094	0.041	0.497	0.0050	457	10	190	0.994
10/14/2022	10:20:11	0.838	0.0456	0.061	0.809	0.0160	83397	0.219	0.0093	0.040	0.678	0.0050	466	10	190	0.994
10/14/2022	10:21:11	2.306	0.1341	0.073	0.691	0.2949	76421	0.196	0.0087	0.037	0.522	0.0046	427	10	190	0.994
10/14/2022	10:22:11	-0.495	0.0622	0.041	0.694	0.5410	75829	0.201	0.0086	0.037	0.617	0.0046	432	10	190	0.994
10/14/2022	10:23:11	-0.472	0.0621	0.051	0.646	0.5408	74951	0.190	0.0091	0.035	0.412	0.0044	411	10	190	0.994
10/14/2022	10:24:11	-0.544	0.0785	0.072	0.487	0.5377	75050	0.193	0.0083	0.036	0.456	0.0045	408	10	190	0.994
10/14/2022	10:25:11	-0.671	0.0801	0.056	0.551	0.5419	74893	0.193	0.0093	0.037	0.437	0.0043	399	10	190	0.994
10/14/2022	10:26:11	-0.596	0.0755	0.053	0.638	0.5415	75547	0.192	0.0088	0.036	0.626	0.0045	405	10	190	0.994
10/14/2022	10:27:11	-0.516	0.0483	0.073	0.697	0.5447	75373	0.194	0.0093	0.037	0.501	0.0044	420	10	190	0.994
10/14/2022	10:28:11	-0.587	0.0864	0.053	0.732	0.5471	75260	0.193	0.0090	0.036	0.620	0.0044	423	10	190	0.994
10/14/2022	10:29:11	-0.648	0.0643	0.016	0.747	0.5544	75732	0.195	0.0091	0.038	0.713	0.0044	429	10	190	0.994
10/14/2022	10:30:11	-0.432	0.1034	0.047	0.467	0.5209	59063	0.167	0.0080	0.031	0.397	0.0038	332	10	190	0.992
10/14/2022	10:31:11	-0.100	0.0306	-0.002	-0.017	0.0028	-36	0.024	0.0027	0.007	0.011	0.0002	5	14	190	0.989
10/14/2022	10:32:11	-0.056	0.0128	0.003	0.003	0.0024	-69	0.023	0.0024	0.006	0.012	0.0002	0	14	190	0.989

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	10:33:11	-0.081	0.0286	-0.002	0.022	0.0026	-119	0.024	0.0026	0.016	0.0002	0	14	190	0.989	
10/14/2022	10:34:11	-0.053	0.0071	0.002	0.003	0.0024	-159	0.024	0.0026	0.017	0.0002	1	14	190	0.989	
10/14/2022	10:35:11	-0.060	0.0269	0.002	0.022	0.0027	-109	0.020	0.0025	0.012	0.0002	0	14	190	0.989	
10/14/2022	10:36:11	-0.076	0.0211	0.002	-0.006	0.0024	-70	0.022	0.0026	0.008	0.0002	0	14	190	0.989	
10/14/2022	10:39:11	0.028	0.0050	0.000	-0.010	-0.0003	67	0.006	0.0024	0.005	0.0009	0.0002	0	14	190	0.990
10/14/2022	10:40:11	0.006	0.0005	-0.002	-0.025	0.0001	64	0.007	0.0024	0.005	0.0009	0.0002	0	14	190	0.990
10/14/2022	10:41:11	-0.867	0.0683	0.069	-2.513	0.2335	76267	1.652	0.0088	0.045	1.924	0.0371	156	10	190	0.994
10/14/2022	10:42:14	-0.180	0.0472	0.077	0.703	0.0110	84160	0.211	0.0095	0.041	0.584	0.0049	456	10	190	0.994
10/14/2022	10:43:11	-0.224	0.0300	0.076	0.607	0.0123	83245	0.211	0.0094	0.039	0.553	0.0049	454	10	190	0.994
10/14/2022	10:44:11	-0.145	0.0280	0.064	0.778	0.0136	83691	0.213	0.0093	0.040	0.667	0.0050	459	10	190	0.994
10/14/2022	10:45:11	-0.208	0.0248	0.043	0.688	0.0137	82285	0.206	0.0097	0.039	0.479	0.0048	446	10	190	0.994
10/14/2022	10:46:11	-0.152	0.0382	0.046	0.696	0.0136	82245	0.205	0.0095	0.040	0.475	0.0048	441	10	190	0.994
10/14/2022	10:47:11	-0.134	0.0139	0.048	0.701	0.0121	83062	0.205	0.0095	0.039	0.596	0.0047	444	10	190	0.995
10/14/2022	10:48:11	-0.062	0.0348	0.048	0.706	0.0136	83010	0.207	0.0094	0.039	0.506	0.0048	445	10	190	0.995
Spiking Formaldehyde																
10/14/2022	10:49:12	-0.076	0.0203	0.031	0.6641	0.0135	83712	0.212	0.0095	0.040	0.645	0.0050	460	10	190	0.995
10/14/2022	10:50:11	-0.192	0.0169	0.056	0.684	0.0117	83841	0.212	0.0088	0.040	0.750	0.0050	465	10	190	0.995
10/14/2022	10:51:13	-0.104	-0.0069	0.031	0.696	0.0128	83095	0.212	0.0087	0.040	0.578	0.0049	458	10	190	0.995
10/14/2022	10:52:11	-0.110	-0.0059	0.041	0.758	0.0114	83242	0.210	0.0091	0.039	0.635	0.0049	458	10	190	0.995
10/14/2022	10:53:11	-0.107	0.0204	0.036	0.728	0.0137	83555	0.213	0.0090	0.039	0.607	0.0049	462	10	190	0.995
10/14/2022	10:54:11	0.648	0.2788	0.038	0.299	1.6973	38025	0.169	0.0059	0.025	0.265	0.0064	240	11	190	0.995
10/14/2022	10:55:11	-2.388	0.7364	0.003	0.025	4.2224	7212	0.088	0.0038	0.010	0.069	0.0038	43	13	190	0.995
10/14/2022	10:56:11	-0.540	0.1195	0.064	0.290	0.4643	75790	0.305	0.0087	0.040	0.841	0.0069	459	10	190	0.994
10/14/2022	10:57:11	-0.470	0.0909	0.024	0.711	0.4818	74802	0.192	0.0088	0.037	0.652	0.0044	413	10	190	0.994
10/14/2022	10:58:11	-0.459	0.0763	0.059	0.561	0.4763	75738	0.193	0.0084	0.036	0.598	0.0046	411	10	190	0.994
10/14/2022	10:59:11	-0.498	0.0846	0.025	0.670	0.4821	75288	0.191	0.0090	0.036	0.567	0.0044	417	10	190	0.995
10/14/2022	11:00:11	-0.492	0.0820	0.022	0.524	0.4854	75084	0.192	0.0085	0.036	0.472	0.0044	424	10	190	0.995
10/14/2022	11:01:14	-0.498	0.0689	0.047	0.713	0.4849	75259	0.194	0.0089	0.036	0.692	0.0045	419	10	190	0.995
10/14/2022	11:02:11	-0.458	0.0745	0.052	0.642	0.4822	75121	0.192	0.0087	0.036	0.500	0.0045	418	10	190	0.995
10/14/2022	11:03:11	-0.464	0.0543	0.039	0.545	0.4843	75188	0.192	0.0084	0.037	0.493	0.0044	421	10	190	0.995
10/14/2022	11:04:13	-0.523	0.0722	0.038	0.580	0.4807	75793	0.191	0.0091	0.036	0.587	0.0044	422	10	190	0.995
10/14/2022	11:05:11	-0.380	0.0717	0.047	0.624	0.2712	78556	0.204	0.0086	0.038	0.592	0.0047	441	10	190	0.995
10/14/2022	11:06:11	-0.203	0.0502	0.015	0.690	0.0140	85066	0.215	0.0092	0.041	0.587	0.0049	457	10	190	0.993
10/14/2022	11:07:11	-0.157	0.0280	-0.004	0.650	0.0162	83015	0.209	0.0094	0.038	0.553	0.0048	452	10	190	0.993
10/14/2022	11:08:11	-0.121	-0.0013	0.002	0.622	0.0128	78671	0.202	0.0087	0.038	0.541	0.0047	437	10	190	0.993
10/14/2022	11:09:13	-0.136	0.0108	-0.035	0.574	0.0143	82181	0.208	0.0087	0.040	0.496	0.0048	450	10	190	0.993
10/14/2022	11:10:11	-0.140	0.0183	-0.026	0.614	0.0156	83166	0.211	0.0089	0.039	0.570	0.0049	456	10	190	0.993
10/14/2022	11:11:11	-0.159	-0.0048	-0.011	0.632	0.0160	82680	0.211	0.0092	0.039	0.517	0.0049	457	10	190	0.993
10/14/2022	11:12:11	-0.189	-0.0019	-0.020	0.591	0.0150	83424	0.209	0.0094	0.040	0.517	0.0049	452	10	190	0.993
10/14/2022	11:13:13	-0.134	0.0003	-0.032	0.619	0.2615	81119	0.204	0.0085	0.039	0.616	0.0048	451	10	190	0.998
10/14/2022	11:14:11	-0.868	0.0093	0.020	0.465	0.162	64979	0.172	0.0081	0.033	0.414	0.0040	375	10	190	0.995
10/14/2022	11:15:11	-0.360	0.0118	0.007	0.591	0.2745	79598	0.207	0.0089	0.039	0.766	0.0048	426	10	190	0.994
10/14/2022	11:16:11	-0.196	0.0016	0.021	0.627	0.2704	79141	0.206	0.0085	0.039	0.658	0.0046	447	10	190	0.994
10/14/2022	11:17:11	-0.317	0.0161	0.056	0.640	0.2622	79079	0.200	0.0085	0.038	0.716	0.0047	446	10	190	0.993
10/14/2022	11:18:11	-0.139	-0.0019	0.015	0.651	0.0138	75517	0.203	0.0083	0.036	0.606	0.0047	435	10	190	0.992
10/14/2022	11:19:12	-0.167	-0.0001	-0.025	0.674	0.0154	84367	0.218	0.0086	0.041	0.810	0.0050	477	10	190	0.992

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	11:20:11	-0.153	-0.0067	-0.009	0.642	0.0153	87565	0.223	0.0090	0.042	0.570	0.0052	490	10	190	0.993
10/14/2022	11:21:11	-0.146	0.0167	0.015	0.583	0.0147	82280	0.217	0.0079	0.040	0.684	0.0051	475	10	190	0.993
10/14/2022	11:22:11	-0.112	0.0043	-0.014	0.669	0.0157	82318	0.220	0.0083	0.041	0.991	0.0051	482	10	190	0.993
10/14/2022	11:23:11	-0.168	0.0148	-0.022	0.512	0.0166	81643	0.215	0.0079	0.039	0.484	0.0050	471	10	190	0.993
10/14/2022	11:24:11	-0.097	0.031	-0.007	0.629	0.0155	82948	0.216	0.0079	0.040	0.601	0.0050	475	10	190	0.993
10/14/2022	11:25:11	-0.137	-0.0056	-0.010	0.640	0.0159	84681	0.219	0.0085	0.040	0.597	0.0051	484	10	190	0.993
10/14/2022	11:26:11	-0.137	0.0041	-0.020	0.680	0.0139	85298	0.216	0.0088	0.040	0.644	0.0050	479	10	190	0.993
10/14/2022	11:27:11	-0.104	-0.0053	-0.032	0.606	0.0152	84693	0.220	0.0083	0.041	0.579	0.0051	488	10	190	0.993
10/14/2022	11:28:11	-0.105	-0.0100	-0.016	0.623	0.0161	84337	0.222	0.0086	0.041	0.541	0.0052	486	10	190	0.993
10/14/2022	11:29:11	-0.461	0.0235	-0.018	0.504	0.6659	74347	0.203	0.0083	0.037	0.498	0.0048	440	10	190	0.997
10/14/2022	11:30:11	-0.252	0.0228	0.029	0.600	0.2792	79317	0.212	0.0083	0.038	0.639	0.0049	453	10	190	0.995
10/14/2022	11:31:11	-0.374	-0.0147	0.043	0.517	1.2186	60601	0.172	0.0074	0.031	0.423	0.0042	369	10	190	0.995
10/14/2022	11:32:11	-1.698	-0.0190	0.075	0.280	2.1707	47776	0.139	0.0069	0.025	0.372	0.0036	276	10	190	0.995
10/14/2022	11:33:11	-1.742	-0.0172	0.068	0.349	2.1642	47601	0.137	0.0068	0.025	0.595	0.0037	261	10	190	0.995
10/14/2022	11:34:11	-1.478	0.0097	0.067	0.427	2.1692	47760	0.133	0.0072	0.025	0.491	0.0036	253	11	190	0.995
10/14/2022	11:35:11	-1.643	-0.0219	0.073	0.473	2.1699	47776	0.134	0.0070	0.025	0.668	0.0036	252	11	190	0.995
10/14/2022	11:36:11	-1.590	-0.0089	0.067	0.288	2.1663	47291	0.134	0.0067	0.024	0.342	0.0035	252	11	190	0.995
10/14/2022	11:37:11	-1.860	-0.0138	0.071	0.403	2.1768	47559	0.136	0.0068	0.025	0.683	0.0036	259	11	190	0.995
10/14/2022	11:38:11	-1.493	-0.0113	0.085	0.278	1.9567	49688	0.141	0.0070	0.026	0.358	0.0036	269	11	190	0.995
10/14/2022	11:39:11	-0.047	0.0019	0.130	0.592	0.0161	83048	0.218	0.0088	0.039	0.608	0.0051	445	10	190	0.995
10/14/2022	11:40:11	-0.169	0.0209	0.125	0.739	0.0172	83704	0.219	0.0085	0.039	0.736	0.0050	476	10	190	0.995
10/14/2022	11:41:11	-0.084	0.0128	0.145	0.564	0.0132	82891	0.216	0.0085	0.038	0.448	0.0050	466	10	190	0.995
10/14/2022	11:42:11	-0.128	0.0063	0.133	0.748	0.0149	83833	0.217	0.0084	0.040	0.769	0.0051	472	10	190	0.995
10/14/2022	11:43:11	-0.161	0.0111	0.144	0.660	0.0121	83307	0.212	0.0089	0.040	0.614	0.0048	465	10	190	0.995
10/14/2022	11:44:11	-0.116	0.0358	0.122	0.644	0.0133	82778	0.210	0.0087	0.040	0.469	0.0049	456	10	190	0.995
10/14/2022	11:45:11	-0.122	0.0361	0.107	0.819	0.0145	83360	0.214	0.0090	0.040	0.726	0.0049	470	10	190	0.996
10/14/2022	11:46:11	-0.082	0.0140	0.130	0.677	0.0118	83065	0.211	0.0094	0.039	0.594	0.0049	460	10	190	0.995
10/14/2022	11:47:12	-0.169	0.0258	0.119	0.644	0.0145	83010	0.213	0.0090	0.039	0.517	0.0050	460	10	190	0.995
10/14/2022	11:48:11	-0.076	0.0213	0.092	0.722	0.0162	82941	0.209	0.0091	0.042	0.676	0.0049	452	10	190	0.995
10/14/2022	11:49:11	-0.171	0.0209	0.120	0.561	0.0110	83165	0.216	0.0092	0.040	0.503	0.0050	464	10	190	0.995
10/14/2022	11:50:11	-0.121	-0.0162	0.111	0.699	0.0155	83363	0.213	0.0089	0.040	0.672	0.0050	465	10	190	0.995
10/14/2022	11:51:11	-0.123	0.0154	0.081	0.738	0.0139	82712	0.210	0.0091	0.040	0.552	0.0048	455	10	190	0.995
10/14/2022	11:52:11	-0.125	-0.0003	0.091	0.700	0.2996	76823	0.196	0.0089	0.038	0.488	0.0046	425	10	190	0.995
10/14/2022	11:53:11	-1.900	-0.0118	0.068	0.435	2.2366	46627	0.137	0.0071	0.025	0.455	0.0039	306	11	190	0.995
10/14/2022	11:54:11	-1.843	-0.0266	0.067	0.280	2.2116	46579	0.128	0.0069	0.025	0.365	0.0035	245	11	190	0.995
10/14/2022	11:55:11	-1.811	-0.0177	0.050	0.328	2.2130	46789	0.132	0.0070	0.025	0.387	0.0036	247	11	190	0.995
10/14/2022	11:56:12	-1.958	-0.0256	0.054	0.306	2.2200	47076	0.129	0.0069	0.024	0.426	0.0036	249	10	190	0.995
10/14/2022	11:57:11	-1.786	-0.0109	0.075	0.312	2.2085	46409	0.130	0.0070	0.024	0.408	0.0035	241	11	190	0.995
10/14/2022	11:58:11	-1.840	-0.0173	0.043	0.316	2.2306	46950	0.131	0.0068	0.026	0.398	0.0036	246	10	190	0.995
10/14/2022	11:59:12	-1.952	-0.0157	0.055	0.394	2.2305	46583	0.132	0.0072	0.024	0.476	0.0036	244	11	190	0.995
10/14/2022	12:00:11	-1.890	-0.0362	0.071	0.421	2.2249	46328	0.132	0.0071	0.025	0.500	0.0036	243	11	190	0.995
10/14/2022	12:01:13	-1.835	-0.0282	0.073	0.460	2.2430	46841	0.130	0.0073	0.026	0.450	0.0036	244	10	190	0.995
10/14/2022	12:02:11	-1.843	-0.0208	0.089	0.417	2.2265	46319	0.128	0.0073	0.026	0.651	0.0035	244	11	190	0.995
10/14/2022	12:03:11	-1.686	-0.0123	0.089	0.286	2.2137	46194	0.129	0.0070	0.025	0.347	0.0035	245	11	190	0.995
10/14/2022	12:04:11	-1.775	0.0043	0.110	0.501	2.2108	46540	0.129	0.0072	0.025	0.573	0.0035	243	11	190	0.995
10/14/2022	12:05:11	-1.875	-0.0205	0.110	0.448	2.2183	46858	0.129	0.0070	0.025	0.384	0.0035	246	10	190	0.995

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	12:06:12	-1.837	-0.0067	0.142	0.370	2.2026	46606	0.132	0.0072	0.025	0.415	0.0037	246	11	190	0.995
10/14/2022	12:07:11	-1.951	-0.0128	0.137	0.528	2.2269	47124	0.135	0.0072	0.026	0.428	0.0037	253	10	190	0.995
10/14/2022	12:08:13	-1.795	0.0010	0.144	0.555	2.2152	46806	0.130	0.0069	0.025	0.500	0.0035	246	11	190	0.995
10/14/2022	12:09:11	-1.810	-0.0069	0.152	0.698	2.2192	46873	0.131	0.0073	0.025	0.612	0.0036	248	11	190	0.995
10/14/2022	12:10:11	-1.800	-0.0132	0.143	0.532	2.2192	46716	0.129	0.0070	0.025	0.395	0.0035	247	11	190	0.995
10/14/2022	12:11:11	-1.694	-0.0179	0.162	0.694	2.2194	46455	0.126	0.0069	0.025	0.514	0.0034	243	11	190	0.995
10/14/2022	12:12:11	-1.920	-0.0267	0.187	0.609	2.2193	46201	0.132	0.0069	0.024	0.357	0.0035	245	11	190	0.995
10/14/2022	12:13:14	-1.924	-0.0132	0.190	0.822	2.2271	46385	0.129	0.0069	0.024	0.510	0.0035	242	11	190	0.995
10/14/2022	12:14:11	-1.895	-0.0142	0.179	0.763	2.2309	46297	0.128	0.0070	0.024	0.366	0.0034	242	11	190	0.995
10/14/2022	12:15:14	-1.780	-0.0144	0.193	0.861	2.2327	46191	0.126	0.0072	0.024	0.407	0.0035	237	11	190	0.995
10/14/2022	12:16:11	-1.912	-0.0218	0.194	0.815	2.2359	46008	0.130	0.0075	0.024	0.356	0.0035	240	11	190	0.995
10/14/2022	12:17:11	-1.872	-0.0043	0.198	0.980	2.2408	46119	0.125	0.0072	0.024	0.406	0.0034	235	11	190	0.995
10/14/2022	12:18:11	-1.728	-0.0139	0.196	1.030	2.2348	45897	0.126	0.0069	0.024	0.313	0.0033	229	11	190	0.995
10/14/2022	12:19:11	-1.751	-0.0046	0.224	1.117	2.2366	45662	0.124	0.0071	0.024	0.367	0.0034	228	11	190	0.995
10/14/2022	12:20:11	-1.637	-0.0173	0.209	1.065	2.2324	45984	0.122	0.0072	0.025	0.313	0.0032	231	11	190	0.995
10/14/2022	12:21:11	-2.027	-0.0047	0.235	1.236	2.2356	46291	0.132	0.0066	0.024	0.394	0.0038	247	11	190	0.995
10/14/2022	12:22:11	-1.665	-0.0002	0.220	1.365	2.2410	46615	0.124	0.0070	0.025	0.346	0.0033	235	11	190	0.995
10/14/2022	12:23:11	-1.941	-0.0074	0.212	1.647	2.2462	46946	0.131	0.0069	0.026	0.444	0.0036	246	10	190	0.995
10/14/2022	12:24:11	-1.749	-0.0169	0.220	1.515	2.2277	46513	0.125	0.0072	0.025	0.347	0.0034	240	11	190	0.995
10/14/2022	12:25:11	-1.901	-0.0260	0.233	1.595	2.2224	46665	0.131	0.0079	0.025	0.337	0.0036	243	11	190	0.995
10/14/2022	12:26:11	-1.758	-0.0049	0.225	1.642	2.2041	46400	0.125	0.0073	0.026	0.351	0.0034	237	11	190	0.995
10/14/2022	12:27:11	-1.736	-0.0290	0.253	2.204	2.2250	46819	0.128	0.0071	0.025	0.680	0.0035	244	11	190	0.995
10/14/2022	12:28:11	-1.672	-0.0064	0.228	2.197	2.2214	47032	0.127	0.0071	0.025	0.360	0.0033	239	11	190	0.995
10/14/2022	12:29:11	-1.762	-0.0169	0.225	2.116	2.2105	46653	0.129	0.0071	0.025	0.392	0.0036	241	11	190	0.995
10/14/2022	12:30:12	-0.660	-0.0087	0.181	1.866	2.2041	46028	0.164	0.0078	0.030	0.515	0.0042	315	10	190	0.994
10/14/2022	12:31:11	-0.140	0.0021	0.033	0.676	0.0104	84332	0.216	0.0097	0.040	0.629	0.0051	441	10	190	0.992
10/14/2022	12:32:11	-0.191	0.0139	0.022	0.746	0.0147	86597	0.215	0.0092	0.042	0.605	0.0050	472	10	190	0.992
10/14/2022	12:33:11	-0.212	-0.0095	0.019	0.746	0.0165	83384	0.209	0.0093	0.039	0.626	0.0048	455	10	190	0.992
10/14/2022	12:34:11	-0.142	0.0052	-0.008	0.695	0.0156	81858	0.201	0.0091	0.039	0.497	0.0047	439	10	190	0.992
10/14/2022	12:35:11	-0.130	0.0238	0.000	0.661	0.0149	81339	0.201	0.0094	0.039	0.425	0.0047	437	10	190	0.992
10/14/2022	12:36:11	-0.159	-0.0061	-0.011	0.653	0.0156	82233	0.206	0.0089	0.039	0.613	0.0048	450	10	190	0.993
10/14/2022	12:37:11	-0.140	-0.0004	0.026	0.721	0.0153	81631	0.205	0.0088	0.038	0.681	0.0048	448	10	190	0.993
10/14/2022	12:38:11	-0.150	-0.0285	-0.005	0.592	0.0172	84049	0.206	0.0095	0.040	0.534	0.0048	452	10	190	0.993
10/14/2022	12:39:12	-0.137	-0.0112	-0.018	0.614	0.0149	83462	0.206	0.0088	0.040	0.635	0.0048	453	10	190	0.992
10/14/2022	12:40:11	-0.108	-0.0055	-0.025	0.691	0.0172	83257	0.208	0.0095	0.041	0.684	0.0049	453	10	190	0.992
10/14/2022	12:41:11	-0.517	0.0121	0.152	3.039	0.8816	69604	0.180	0.0087	0.035	0.456	0.0044	394	10	190	0.993
10/14/2022	12:42:11	-0.360	0.0028	0.295	4.581	0.2735	78262	0.202	0.0088	0.038	0.622	0.0046	420	10	190	0.994
10/14/2022	12:43:11	-0.288	0.0070	0.320	4.467	0.2724	78040	0.202	0.0089	0.039	0.547	0.0046	426	10	190	0.994
10/14/2022	12:44:11	-0.295	0.0048	0.286	4.648	0.2784	79093	0.195	0.0094	0.039	0.842	0.0046	428	10	190	0.994
10/14/2022	12:45:11	-0.179	0.0011	0.260	4.050	0.2785	78540	0.202	0.0093	0.038	0.628	0.0048	433	10	190	0.995
10/14/2022	12:46:11	-0.263	0.0068	0.242	3.728	0.2724	78356	0.197	0.0091	0.037	0.509	0.0045	424	10	190	0.995
10/14/2022	12:47:11	-0.245	-0.0024	0.209	3.579	0.2761	78791	0.194	0.0093	0.038	0.491	0.0046	424	10	190	0.995
10/14/2022	12:48:11	-0.329	0.0085	0.204	3.324	0.2728	78622	0.195	0.0091	0.038	0.539	0.0047	431	10	190	0.995
10/14/2022	12:49:11	-0.272	0.0242	0.191	3.051	0.2752	78339	0.198	0.0092	0.037	0.445	0.0046	426	10	190	0.995
10/14/2022	12:50:11	-0.309	0.0165	0.180	3.190	0.2777	78716	0.195	0.0096	0.038	0.556	0.0045	416	10	190	0.994
10/14/2022	12:51:11	-0.329	-0.0093	0.151	3.017	0.2760	79057	0.199	0.0089	0.038	0.629	0.0046	433	10	190	0.995

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	12:52:11	-0.372	0.0129	0.192	2.734	0.2683	78533	0.193	0.0091	0.037	0.522	0.0045	422	10	190	0.994
10/14/2022	12:53:11	-0.280	0.0062	0.142	2.951	0.2554	79501	0.199	0.0093	0.038	0.643	0.0045	425	10	190	0.995
10/14/2022	12:54:12	-0.328	-0.0035	0.140	2.813	0.2468	79747	0.198	0.0092	0.039	0.703	0.0046	432	10	190	0.995
10/14/2022	12:55:11	-0.250	0.0021	0.144	2.541	0.2406	79282	0.191	0.0096	0.038	0.421	0.0045	417	10	190	0.995
10/14/2022	12:56:11	-0.328	0.0066	0.143	2.516	0.2245	79311	0.197	0.0093	0.038	0.549	0.0045	419	10	190	0.995
10/14/2022	12:57:11	-0.287	-0.0058	0.125	2.387	0.2248	79520	0.191	0.0100	0.039	0.425	0.0044	416	10	190	0.995
10/14/2022	12:58:11	-0.264	0.0133	0.122	2.570	0.2247	80408	0.199	0.0094	0.038	0.720	0.0046	438	10	190	0.995
10/14/2022	12:59:11	-0.329	0.0043	0.109	2.573	0.2239	80426	0.203	0.0095	0.039	0.713	0.0047	441	10	190	0.995
10/14/2022	13:00:11	-0.320	-0.0196	0.125	2.533	0.2250	80864	0.201	0.0091	0.041	0.829	0.0046	437	10	190	0.995
10/14/2022	13:01:11	-0.294	0.0208	0.113	2.346	0.2217	80724	0.199	0.0091	0.039	0.893	0.0047	444	10	190	0.995
10/14/2022	13:02:11	-0.331	0.0162	0.139	2.195	0.2187	80453	0.204	0.0092	0.037	0.675	0.0047	445	10	190	0.995
10/14/2022	13:03:11	-0.270	-0.0208	0.116	2.162	0.2200	80040	0.201	0.0095	0.039	0.608	0.0046	432	10	190	0.995
10/14/2022	13:04:11	-0.312	0.0175	0.126	2.144	0.2188	80492	0.198	0.0096	0.039	0.607	0.0046	440	10	190	0.995
10/14/2022	13:05:11	-0.286	-0.0203	0.108	2.129	0.2181	80264	0.198	0.0096	0.039	0.652	0.0046	439	10	190	0.995
10/14/2022	13:06:13	-0.330	0.0008	0.107	1.963	0.2182	80431	0.205	0.0088	0.038	0.616	0.0048	457	10	190	0.995
10/14/2022	13:07:11	-0.341	0.0042	0.122	2.014	0.2145	79694	0.202	0.0090	0.037	0.572	0.0047	440	10	190	0.995
10/14/2022	13:08:11	-0.391	0.0058	0.091	1.896	0.2173	79659	0.211	0.0085	0.037	0.542	0.0048	449	10	190	0.995
10/14/2022	13:09:12	-0.385	0.0039	0.101	1.844	0.2166	79225	0.203	0.0087	0.037	0.605	0.0047	450	10	190	0.995
10/14/2022	13:10:11	-0.242	0.0027	0.092	1.963	0.2133	80101	0.204	0.0088	0.037	0.557	0.0047	452	10	190	0.995
10/14/2022	13:11:11	-0.305	0.0083	0.113	1.776	0.2118	80452	0.204	0.0089	0.038	0.522	0.0048	451	10	190	0.995
10/14/2022	13:12:11	-0.405	0.0136	0.083	1.856	0.2157	80441	0.207	0.0089	0.039	0.622	0.0048	452	10	190	0.995
10/14/2022	13:13:11	-0.273	0.0053	0.094	1.748	0.2149	79910	0.205	0.0083	0.038	0.565	0.0047	451	10	190	0.995
10/14/2022	13:14:11	-0.397	-0.0003	0.077	1.823	0.2177	80331	0.206	0.0088	0.038	0.570	0.0048	457	10	190	0.995
10/14/2022	13:15:11	-0.261	0.0035	0.095	1.853	0.2179	80094	0.206	0.0085	0.039	0.669	0.0048	452	10	190	0.995
10/14/2022	13:16:11	-0.270	0.0036	0.091	1.722	0.2167	80181	0.202	0.0088	0.037	0.591	0.0047	448	10	190	0.995
10/14/2022	13:17:11	-0.312	-0.0097	0.088	1.685	0.2162	79733	0.202	0.0087	0.038	0.521	0.0047	445	10	190	0.995
10/14/2022	13:18:12	-0.286	-0.0053	0.066	1.744	0.2206	79334	0.205	0.0087	0.038	0.645	0.0046	444	10	190	0.995
10/14/2022	13:19:11	-0.305	0.0036	0.076	1.597	0.2160	79703	0.206	0.0088	0.038	0.574	0.0047	448	10	190	0.995
10/14/2022	13:20:11	-0.367	0.0252	0.063	1.594	0.2171	79664	0.204	0.0094	0.038	0.522	0.0049	448	10	190	0.995
10/14/2022	13:21:11	-0.374	0.0410	0.057	1.547	0.2157	80107	0.205	0.0091	0.038	0.541	0.0047	447	10	190	0.995
10/14/2022	13:22:11	-0.266	0.0154	0.072	1.693	0.2166	80318	0.211	0.0088	0.039	0.869	0.0049	460	10	190	0.995
10/14/2022	13:23:11	-0.378	-0.0135	0.081	1.576	0.2127	79749	0.203	0.0087	0.039	0.574	0.0047	448	10	190	0.995
10/14/2022	13:24:11	-0.285	0.0168	0.057	1.652	0.2141	80624	0.209	0.0087	0.040	0.743	0.0048	460	10	190	0.995
10/14/2022	13:25:11	-0.373	0.0268	0.082	1.684	0.2170	79918	0.207	0.0094	0.040	0.578	0.0047	446	10	190	0.995
10/14/2022	13:26:11	-0.342	-0.0108	0.089	1.696	0.2323	80343	0.207	0.0086	0.039	0.739	0.0048	450	10	190	0.995
10/14/2022	13:27:11	-0.346	-0.0081	0.092	1.558	0.2292	79720	0.201	0.0090	0.038	0.512	0.0046	439	10	190	0.995
10/14/2022	13:28:11	-0.354	0.0070	0.055	1.587	0.2328	79704	0.204	0.0091	0.039	0.522	0.0048	441	10	190	0.995
10/14/2022	13:29:11	-0.279	0.0067	0.081	1.576	0.2292	80337	0.208	0.0089	0.037	0.644	0.0049	454	10	190	0.995
10/14/2022	13:30:12	-0.300	-0.0011	0.060	1.337	0.0778	91667	0.230	0.0098	0.045	0.761	0.0053	501	10	190	0.994
10/14/2022	13:31:14	-0.177	0.0047	0.028	0.882	0.0174	82920	0.215	0.0088	0.040	0.563	0.0049	487	10	190	0.993
10/14/2022	13:32:12	-0.134	-0.0087	-0.0003	0.755	0.0141	85074	0.212	0.0093	0.041	0.634	0.0049	463	10	190	0.993
10/14/2022	13:33:11	-0.191	0.0193	-0.017	0.663	0.0155	85405	0.217	0.0091	0.041	0.618	0.0050	474	10	190	0.993
10/14/2022	13:34:11	-0.218	0.0145	-0.018	0.712	0.0156	80956	0.207	0.0091	0.038	0.591	0.0048	450	10	190	0.993
10/14/2022	13:35:11	-0.189	0.0240	-0.011	0.725	0.0150	82466	0.209	0.0090	0.038	0.683	0.0048	454	10	190	0.993
10/14/2022	13:36:11	-0.312	-0.0056	0.029	0.936	0.1691	86780	0.221	0.0091	0.041	0.562	0.0050	477	10	190	0.995
10/14/2022	13:37:11	-0.269	0.0303	0.081	1.290	0.2336	80539	0.209	0.0092	0.039	0.577	0.0049	453	10	190	0.995

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	13:38:11	-0.271	-0.0012	0.094	1.387	0.2342	79653	0.206	0.0091	0.038	0.596	0.0048	451	10	190	0.995
10/14/2022	13:39:11	-0.278	0.0225	0.076	1.459	0.2416	79753	0.211	0.0089	0.038	0.645	0.0048	449	10	190	0.995
10/14/2022	13:40:11	-0.318	-0.0041	0.078	1.538	0.2413	79244	0.202	0.0089	0.038	0.631	0.0047	440	10	190	0.995
10/14/2022	13:41:11	-0.415	0.0086	0.092	1.442	0.2386	79350	0.206	0.0085	0.038	0.711	0.0048	451	10	190	0.995
Spiking HF																
10/14/2022	13:42:11	-0.220	0.006	0.053	1.186	0.1375	75050	0.199	0.0083	0.036	0.469	0.0046	430	10	190	0.993
10/14/2022	13:43:11	-0.185	0.0083	0.012	0.706	0.0102	81996	0.212	0.0086	0.039	0.643	0.0049	444	10	190	0.992
10/14/2022	13:44:11	-0.191	0.0144	-0.008	0.713	0.0129	81087	0.212	0.0088	0.039	0.590	0.0049	460	10	190	0.992
10/14/2022	13:45:11	-0.213	0.0180	-0.012	0.709	0.0148	85909	0.219	0.0095	0.041	0.637	0.0051	481	10	190	0.993
10/14/2022	13:46:11	-0.373	0.0182	0.035	1.007	0.2472	86848	0.220	0.0091	0.042	0.692	0.0051	483	10	190	0.995
10/14/2022	13:47:11	-0.242	0.0165	0.061	1.440	0.2272	80222	0.215	0.0086	0.039	0.885	0.0049	463	10	190	0.995
10/14/2022	13:48:11	-0.278	0.0358	0.075	1.161	0.2295	79705	0.211	0.0085	0.038	0.456	0.0049	455	10	190	0.995
10/14/2022	13:49:11	-0.370	0.0016	0.072	1.341	0.2287	79415	0.210	0.0087	0.038	0.508	0.0047	452	10	190	0.995
10/14/2022	13:50:11	-0.396	0.0018	0.084	1.369	0.2297	79618	0.207	0.0090	0.038	0.534	0.0048	451	10	190	0.995
10/14/2022	13:51:11	-0.392	-0.0019	0.089	1.487	0.2311	79898	0.211	0.0088	0.039	0.604	0.0049	457	10	190	0.995
10/14/2022	13:52:11	-0.371	-0.0019	0.082	1.416	0.2291	79808	0.212	0.0086	0.038	0.628	0.0050	466	10	190	0.995
10/14/2022	13:53:11	-0.390	0.0139	0.085	1.412	0.2276	79854	0.203	0.0092	0.038	0.522	0.0048	446	10	190	0.995
10/14/2022	13:54:11	-0.297	-0.0173	0.086	1.470	0.1862	80685	0.208	0.0088	0.037	0.685	0.0048	459	10	190	0.995
10/14/2022	13:55:11	-0.179	0.061	0.018	0.912	0.0121	77323	0.201	0.0087	0.037	0.548	0.0047	435	10	190	0.992
10/14/2022	13:56:11	-0.212	0.0065	-0.019	0.764	0.0153	81788	0.209	0.0089	0.038	0.606	0.0048	455	10	190	0.993
10/14/2022	13:57:11	-0.195	-0.0085	-0.028	0.809	0.0155	79186	0.203	0.0096	0.038	0.645	0.0047	439	10	190	0.993
10/14/2022	13:58:11	-0.188	0.0226	-0.027	0.618	0.0166	85589	0.213	0.0093	0.042	0.563	0.0049	466	10	190	0.993
10/14/2022	13:59:11	-0.149	0.0051	-0.008	0.652	0.0141	80339	0.203	0.0090	0.037	0.481	0.0048	443	10	190	0.993
10/14/2022	14:00:14	-0.216	0.0032	-0.032	0.655	0.0155	81469	0.210	0.0089	0.040	0.655	0.0049	457	10	190	0.993
10/14/2022	14:01:14	-0.270	0.0155	0.122	0.752	0.3504	78429	0.201	0.0088	0.038	0.625	0.0048	439	10	190	0.994
10/14/2022	14:02:11	-0.299	0.0178	0.776	1.266	0.1860	80265	0.209	0.0094	0.038	0.468	0.0047	451	10	190	0.996
10/14/2022	14:03:11	-0.232	0.0356	0.649	1.401	0.1717	80560	0.205	0.0092	0.041	0.698	0.0049	454	10	190	0.996
10/14/2022	14:04:11	-0.260	0.0289	0.502	1.519	0.1708	80695	0.212	0.0088	0.039	0.714	0.0050	456	10	190	0.996
10/14/2022	14:05:14	-0.281	0.0247	0.443	1.536	0.1726	80112	0.202	0.0093	0.039	0.566	0.0047	442	10	190	0.995
10/14/2022	14:06:13	-0.218	0.0071	0.397	1.483	0.1663	80229	0.202	0.0093	0.038	0.456	0.0047	440	10	190	0.995
10/14/2022	14:07:11	-0.164	-0.0102	0.138	0.998	0.0549	74412	0.194	0.0088	0.035	0.460	0.0045	414	10	190	0.993
10/14/2022	14:08:11	-0.188	0.0041	0.013	0.724	0.0115	83743	0.211	0.0087	0.040	0.743	0.0050	450	10	190	0.993
10/14/2022	14:09:11	-0.198	-0.0140	-0.017	0.736	0.0152	81220	0.206	0.0089	0.039	0.660	0.0048	452	10	190	0.993
10/14/2022	14:10:12	-0.207	0.0081	-0.012	0.767	0.0165	82533	0.203	0.0093	0.038	0.601	0.0047	442	10	190	0.995
10/14/2022	14:11:11	-0.352	-0.0009	0.800	0.918	0.4479	75655	0.195	0.0095	0.036	0.475	0.0045	424	10	190	0.997
10/14/2022	14:12:11	-0.275	0.0147	1.062	1.477	0.1780	80520	0.204	0.0099	0.040	0.547	0.0047	441	10	190	0.995
10/14/2022	14:13:11	-0.312	0.0361	0.788	1.448	0.1758	80124	0.206	0.0091	0.038	0.559	0.0048	444	10	190	0.995
10/14/2022	14:14:11	-0.295	0.0337	0.629	1.553	0.1791	79481	0.202	0.0091	0.039	0.554	0.0047	440	10	190	0.995
10/14/2022	14:15:11	-0.225	0.0202	0.564	1.592	0.1774	80051	0.207	0.0094	0.038	0.521	0.0049	444	10	190	0.995
10/14/2022	14:16:14	-0.225	-0.0033	0.484	1.492	0.1765	80263	0.204	0.0089	0.039	0.544	0.0047	449	10	190	0.995
10/14/2022	14:17:11	-0.286	0.0020	0.253	1.353	0.0867	75788	0.204	0.0090	0.036	0.654	0.0047	433	10	190	0.992
10/14/2022	14:18:11	-0.186	-0.0147	-0.001	0.822	0.0171	85257	0.215	0.0092	0.042	0.726	0.0050	470	10	190	0.992
10/14/2022	14:19:11	-0.172	0.0020	0.22	0.734	0.0128	84463	0.214	0.0089	0.041	0.655	0.0049	467	10	190	0.992
10/14/2022	14:20:11	-0.197	-0.0170	-0.004	0.583	0.211	84293	0.211	0.0090	0.041	0.477	0.0049	460	10	190	0.992
10/14/2022	14:21:11	-0.210	0.0258	-0.006	0.602	0.0160	83515	0.212	0.0094	0.040	0.453	0.0049	459	10	190	0.993
10/14/2022	14:22:11	-0.301	0.0059	0.306	0.870	0.3364	77742	0.201	0.0085	0.037	0.509	0.0047	438	10	190	0.994

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	14:23:11	-0.312	0.0168	0.698	1.413	0.1809	80744	0.206	0.0091	0.038	0.622	0.0048	455	10	190	0.995
10/14/2022	14:24:11	-0.371	0.0186	0.621	1.396	0.1828	80347	0.208	0.0089	0.039	0.492	0.0049	448	10	190	0.995
10/14/2022	14:25:11	-0.335	0.0212	0.551	1.433	0.1824	80219	0.204	0.0093	0.038	0.497	0.0047	448	10	190	0.995
10/14/2022	14:26:11	-0.188	0.0025	0.202	1.015	0.0574	78700	0.205	0.0084	0.037	0.517	0.0047	444	10	190	0.990
10/14/2022	14:27:11	-0.168	-0.0262	0.032	0.670	0.0135	74790	0.198	0.0082	0.036	0.506	0.0046	432	10	190	0.989
10/14/2022	14:28:11	-0.228	-0.0181	0.011	0.589	0.0074	84125	0.212	0.0089	0.040	0.547	0.0049	450	10	190	0.989
10/14/2022	14:29:11	-0.171	-0.0183	0.005	0.661	0.0140	81443	0.208	0.0089	0.038	0.551	0.0048	456	10	190	0.989
10/14/2022	14:30:11	-0.255	0.0176	0.005	0.617	0.0141	83161	0.213	0.0087	0.039	0.549	0.0049	464	10	190	0.989
10/14/2022	14:31:11	-0.453	0.0069	0.402	0.992	0.35552	79399	0.198	0.0090	0.038	0.501	0.0046	439	10	190	0.994
10/14/2022	14:32:11	-0.451	0.0145	0.680	1.380	0.2232	80228	0.207	0.0093	0.039	0.690	0.0050	446	10	190	0.995
10/14/2022	14:33:11	-0.244	0.0069	0.623	1.401	0.2174	80379	0.208	0.0091	0.039	0.634	0.0047	454	10	190	0.995
10/14/2022	14:34:12	-0.320	0.0273	0.537	1.328	0.2151	79270	0.204	0.0090	0.038	0.508	0.0047	446	10	190	0.995
10/14/2022	14:35:11	-0.129	-0.0015	0.263	1.198	0.0781	77220	0.199	0.0092	0.037	0.735	0.0046	431	10	190	0.990
10/14/2022	14:36:11	-0.187	-0.0031	0.029	0.812	0.0145	75884	0.202	0.0087	0.037	0.591	0.0047	435	10	190	0.989
10/14/2022	14:37:11	-0.257	0.0072	0.27	0.793	0.0138	84616	0.214	0.0091	0.039	0.645	0.0050	469	10	190	0.989
10/14/2022	14:38:11	-0.236	0.0045	0.006	0.675	0.0131	78912	0.205	0.0088	0.038	0.506	0.0048	444	10	190	0.989
10/14/2022	14:39:11	-0.252	0.0200	0.026	0.749	0.0128	85046	0.214	0.0090	0.040	0.554	0.0050	468	10	190	0.989
10/14/2022	14:40:11	-0.209	0.0037	-0.020	0.604	0.0145	81167	0.207	0.0090	0.039	0.466	0.0048	449	10	190	0.989
10/14/2022	14:41:11	-0.227	0.0029	0.005	0.641	0.0125	82737	0.212	0.0093	0.039	0.556	0.0049	463	10	190	0.989
10/14/2022	14:42:11	-0.457	-0.0074	0.394	0.892	0.36551	83439	0.210	0.0092	0.039	0.479	0.0048	460	10	190	0.994
10/14/2022	14:43:11	-0.200	0.0242	0.757	1.307	0.2161	80160	0.207	0.0090	0.039	0.736	0.0048	454	10	190	0.995
10/14/2022	14:44:11	-0.320	-0.0076	0.702	1.296	0.2158	79346	0.201	0.0092	0.038	0.524	0.0046	440	10	190	0.995
10/14/2022	14:45:11	-0.272	0.0186	0.616	1.296	0.2138	79330	0.201	0.0091	0.037	0.523	0.0047	442	10	190	0.995
10/14/2022	14:46:11	-0.265	-0.0032	0.336	1.148	0.1003	77038	0.200	0.0084	0.037	0.567	0.0046	434	10	190	0.991
10/14/2022	14:47:11	-0.220	0.0144	0.054	0.726	0.0105	79763	0.202	0.0090	0.038	0.539	0.0047	438	10	190	0.989
10/14/2022	14:48:11	-0.131	-0.0013	0.055	0.706	0.0365	70983	0.163	0.0078	0.035	0.600	0.0036	389	11	190	0.991
10/14/2022	14:49:11	-0.055	0.0233	0.434	1.171	0.0121	83668	0.211	0.0095	0.041	0.598	0.0048	433	10	190	0.995
10/14/2022	14:50:11	-0.137	0.0264	0.423	1.280	0.0141	83230	0.212	0.0094	0.040	0.528	0.0048	452	10	190	0.995
10/14/2022	14:51:11	-0.152	0.0115	0.397	1.356	0.0165	82930	0.208	0.0096	0.039	0.561	0.0049	448	10	190	0.995
10/14/2022	14:52:14	-0.312	0.0300	0.396	1.254	0.0137	82948	0.206	0.0091	0.039	0.512	0.0047	450	10	190	0.995
10/14/2022	14:53:12	-0.020	0.0480	0.359	1.230	0.2547	76155	0.199	0.0090	0.037	0.532	0.0047	423	10	190	0.995
10/14/2022	14:54:11	-0.109	0.0663	0.044	0.023	0.0051	663	0.029	0.0030	0.006	0.031	0.0006	18	14	190	0.995
10/14/2022	14:55:11	-0.027	-0.0044	0.042	-0.016	0.0023	267	0.028	0.0028	0.006	0.019	0.0007	2	14	190	0.995
10/14/2022	14:56:11	-0.115	0.0175	0.037	0.010	0.0016	120	0.027	0.0027	0.006	0.019	0.0006	1	14	190	0.995
10/14/2022	14:57:11	-0.064	0.0194	0.024	0.011	0.0000	32	0.026	0.0028	0.006	0.019	0.0007	1	14	190	0.995
10/14/2022	14:58:11	-0.017	0.0000	0.028	0.030	0.0017	61	0.028	0.0028	0.006	0.019	0.0007	1	14	190	0.995
System Zero		-0.017														
10/14/2022	14:59:11	94.821	0.0072	0.021	0.030	0.0142	14	0.134	0.0027	0.006	0.021	0.0051	3	14	190	0.995
10/14/2022	15:00:11	95.297	0.0035	0.028	0.017	0.0114	-71	0.089	0.0027	0.006	0.022	0.0070	3	14	190	0.995
10/14/2022	15:01:11	95.410	0.0219	0.030	0.014	0.0113	-216	0.090	0.0027	0.006	0.024	0.0068	3	14	190	0.995
10/14/2022	15:02:11	95.531	-0.0018	0.016	0.021	0.0065	-181	0.087	0.0027	0.006	0.023	0.0067	3	14	190	0.995
10/14/2022	15:03:11	95.485	0.0149	0.026	0.022	0.0094	-287	0.091	0.0029	0.006	0.025	0.0070	3	14	190	0.994
System CTS		95.485														
10/14/2022	15:04:11	23.878	0.0143	0.006	0.044	0.0218	-238	0.074	0.0027	0.006	0.027	0.0038	1	14	190	0.992
10/14/2022	15:05:11	-0.014	0.0101	0.002	0.031	0.0010	-194	0.015	0.0025	0.006	0.024	0.0002	1	14	190	0.990
10/14/2022	15:06:13	-0.027	0.0041	0.009	0.025	0.0002	-178	0.013	0.0026	0.006	0.021	0.0002	1	14	190	0.990

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/14/2022	15:07:11	-0.034	-0.0026	-0.008	0.030	-0.0001	-131	0.014	0.0024	0.005	0.020	0.0002	0	14	190	0.990
10/14/2022	15:08:11	-0.025	-0.0045	0.001	0.020	0.0010	-130	0.014	0.0024	0.005	0.018	0.0002	0	14	190	0.990
Direct Zero	-0.025															
10/14/2022	15:09:11	24.529	0.005	0.008	0.025	0.0208	-123	0.093	0.0023	0.005	0.018	0.0048	1	14	190	0.990
10/14/2022	15:10:13	93.357	0.070	-0.005	0.012	0.0177	-207	0.068	0.0026	0.006	0.020	0.0031	3	14	190	0.990
10/14/2022	15:11:13	95.266	0.094	0.001	0.022	0.0068	-247	0.083	0.0027	0.006	0.022	0.0068	3	14	190	0.990
10/14/2022	15:12:13	95.476	-0.075	-0.010	0.029	0.0080	-265	0.084	0.0026	0.006	0.022	0.0068	3	14	190	0.990
10/14/2022	15:13:11	95.522	0.008	-0.005	0.020	0.0114	-266	0.087	0.0025	0.006	0.019	0.0070	3	14	190	0.990
10/14/2022	15:14:11	95.516	0.061	-0.007	0.015	0.0100	-216	0.085	0.0024	0.005	0.014	0.0070	3	14	190	0.990
Direct CTS	95.516															
10/14/2022	15:15:11	33.342	-0.0173	0.019	-0.182	0.0186	3106	0.128	0.0027	0.006	0.114	0.0052	8	14	190	0.991
Ambient Air																
10/14/2022	15:16:11	0.071	-0.0139	0.070	-0.378	0.0109	10989	0.069	0.0044	0.011	0.136	0.0015	41	13	190	0.997
10/14/2022	15:17:11	0.057	-0.0156	0.069	0.137	0.0014	10471	0.038	0.0042	0.011	0.126	0.0009	56	13	190	0.997
10/14/2022	15:18:11	-0.047	-0.0185	0.066	0.162	0.0055	10039	0.037	0.0044	0.010	0.119	0.0008	53	13	190	0.997
10/14/2022	15:19:11	0.023	-0.0185	0.054	0.154	0.0044	9614	0.036	0.0044	0.010	0.114	0.0009	49	13	190	0.997
10/14/2022	15:20:11	-0.016	-0.0233	0.057	0.127	0.0001	9230	0.034	0.0043	0.010	0.113	0.0009	49	13	190	0.997
10/14/2022	15:21:11	0.009	-0.0204	0.038	0.147	0.0007	9037	0.035	0.0042	0.010	0.112	0.0008	48	13	190	0.997
10/14/2022	15:22:11	-0.058	-0.0265	0.050	0.125	0.0008	8754	0.032	0.0040	0.009	0.109	0.0008	46	13	190	0.997
10/14/2022	15:23:11	0.001	-0.0080	0.017	0.053	0.0000	2935	0.020	0.0027	0.006	0.039	0.0004	17	14	190	0.992
10/14/2022	15:24:11	-0.051	0.0108	0.006	0.020	0.0003	-204	0.013	0.0026	0.006	0.019	0.0002	3	15	190	0.990
10/14/2022	15:25:11	-0.054	0.0052	-0.002	0.043	-0.0002	-180	0.013	0.0026	0.006	0.028	0.0002	1	15	190	0.990
10/14/2022	15:26:11	-0.061	0.0128	-0.002	0.043	0.0007	-245	0.015	0.0027	0.006	0.029	0.0002	1	15	190	0.990
10/14/2022	15:29:42	0.003	-0.0018	0.007	-0.010	-0.0005	7	0.007	0.0022	0.005	0.005	0.0002	0	15	190	0.990
10/14/2022	15:30:42	0.018	0.0096	0.003	-0.011	-0.0002	39	0.006	0.0024	0.005	0.008	0.0002	0	15	190	0.990

Client: Georgia Power
 Facility: Plant McDonough
 Source: Unit 4B

Condition: Natural Gas Max

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/17/2022	6:56:40	0.413	-0.0015	0.008	-0.010	0.0082	2	0.032	0.0037	0.009	0.007	0.0003	0	14	190	0.990
10/17/2022	6:57:40	0.420	-0.0093	0.005	-0.018	0.0084	-5	0.032	0.0036	0.009	0.008	0.0003	1	14	190	0.990
10/17/2022	6:58:40	0.417	-0.0121	0.016	-0.009	0.0081	-26	0.034	0.0037	0.009	0.009	0.0003	0	15	190	0.990
10/17/2022	6:59:40	0.437	-0.0171	0.007	-0.015	0.0081	-24	0.032	0.0038	0.009	0.007	0.0003	1	14	190	0.990
10/17/2022	7:00:40	0.422	-0.0056	0.005	-0.023	0.0078	-8	0.031	0.0038	0.009	0.009	0.0003	0	14	190	0.990
10/17/2022	7:04:15	0.024	0.0033	0.005	-0.010	-0.0004	70	0.006	0.0024	0.005	0.009	0.0002	0	14	190	0.990
10/17/2022	7:05:15	0.019	0.0065	-0.002	-0.024	-0.0001	102	0.006	0.0024	0.006	0.013	0.0002	0	14	190	0.990
10/17/2022	7:06:15	0.025	-0.0073	-0.002	-0.020	-0.0015	137	0.007	0.0025	0.006	0.016	0.0002	0	14	190	0.990
10/17/2022	7:07:15	0.017	0.0017	-0.006	-0.033	0.0000	152	0.007	0.0024	0.006	0.019	0.0002	0	14	190	0.990
10/17/2022	7:08:15	-0.002	-0.0097	-0.009	-0.036	-0.0004	170	0.007	0.0023	0.005	0.019	0.0002	1	14	190	0.990
10/17/2022	7:09:15	0.018	0.0097	0.001	-0.024	-0.0009	186	0.007	0.0023	0.005	0.017	0.0002	1	14	190	0.990
10/17/2022	7:10:15	0.007	0.0037	0.006	-0.010	0.0001	133	0.006	0.0023	0.005	0.015	0.0002	1	14	190	0.990
Direct Zero	0.007															
10/17/2022	7:11:15	0.027	0.0104	-0.002	-0.016	-0.0009	86	0.008	0.0024	0.005	0.011	0.0002	0	14	190	0.990
10/17/2022	7:12:15	-0.012	-0.0082	-0.003	-0.009	-0.0004	7	0.007	0.0023	0.005	0.008	0.0002	0	14	190	0.990
10/17/2022	7:13:15	-2.769	0.0419	0.046	-0.655	-0.0154	9737	0.777	0.0041	0.010	0.395	0.0061	29	13	190	0.996
Ambient Air																
10/17/2022	7:14:15	-0.343	-0.0164	0.036	0.114	0.0000	11333	0.149	0.0041	0.011	0.135	0.0009	78	13	190	0.997
10/17/2022	7:15:15	-0.229	-0.0360	0.027	0.123	0.0001	12019	0.096	0.0045	0.011	0.145	0.0010	73	13	190	0.997
10/17/2022	7:16:15	-0.150	-0.0206	0.035	0.123	0.0006	12318	0.076	0.0042	0.011	0.144	0.0011	71	13	190	0.997
10/17/2022	7:17:15	-0.0223	0.036	0.149	0.0022	13285	0.067	0.0046	0.012	0.158	0.0011	76	12	190	0.997	
10/17/2022	7:18:15	-0.101	-0.0312	0.039	0.126	-0.0019	14711	0.065	0.0044	0.011	0.169	0.0012	82	12	190	0.997
10/17/2022	7:19:15	-0.074	-0.0406	0.019	0.190	-0.0005	15880	0.059	0.0047	0.012	0.177	0.0012	95	12	190	0.997
10/17/2022	7:20:15	5.902	-0.0135	0.032	0.132	0.0077	14641	0.056	0.0041	0.011	0.146	0.0015	84	12	190	0.996
10/17/2022	7:21:15	94.382	-0.0071	0.007	-0.008	0.0097	107	0.131	0.0023	0.005	0.011	0.0049	55	14	190	0.990
10/17/2022	7:22:15	94.597	0.0016	-0.012	0.0035	0.0094	17	0.083	0.0025	0.006	0.018	0.0069	3	14	190	0.990
10/17/2022	7:23:17	94.762	-0.0106	-0.002	-0.034	0.0082	51	0.082	0.0024	0.005	0.021	0.0069	3	14	190	0.990
10/17/2022	7:24:17	94.836	-0.0159	-0.001	-0.040	0.0065	94	0.082	0.0026	0.006	0.026	0.0069	3	14	190	0.990
10/17/2022	7:25:15	94.700	0.0029	-0.005	-0.037	0.0084	64	0.082	0.0025	0.006	0.028	0.0068	3	14	190	0.990
Direct CTS	94.700															
10/17/2022	7:26:15	52.537	0.1511	0.016	-0.577	-0.0014	9904	0.369	0.0037	0.010	0.339	0.0090	26	13	190	0.993
10/17/2022	7:27:15	92.807	0.0223	0.002	0.013	0.0139	977	0.082	0.0030	0.007	0.023	0.0029	49	14	190	0.994
10/17/2022	7:28:15	94.293	-0.0009	0.014	-0.071	0.0111	494	0.093	0.0025	0.006	0.015	0.0071	11	14	190	0.994
10/17/2022	7:29:15	94.440	-0.0064	0.000	-0.007	0.0054	210	0.089	0.0026	0.006	0.011	0.0070	6	14	190	0.994
10/17/2022	7:30:15	94.550	0.0038	0.018	-0.004	0.0101	71	0.087	0.0025	0.006	0.012	0.0069	4	14	190	0.994
10/17/2022	7:31:15	94.298	0.0187	0.011	0.017	0.0064	-159	0.088	0.0026	0.006	0.016	0.0069	3	14	190	0.994
10/17/2022	7:32:15	94.920	0.0032	-0.003	0.020	0.0064	-227	0.085	0.0027	0.007	0.016	0.0065	3	14	190	0.994
10/17/2022	7:33:15	94.593	0.0018	0.012	0.019	0.0131	-223	0.087	0.0025	0.006	0.017	0.0069	3	14	190	0.994
10/17/2022	7:34:15	94.861	-0.0002	-0.002	0.021	0.0096	-219	0.088	0.0026	0.006	0.014	0.0069	3	14	190	0.994
10/17/2022	7:35:15	94.898	0.0081	0.001	0.029	0.0071	-168	0.085	0.0026	0.006	0.015	0.0068	3	14	190	0.994
System CTS	94.898															
10/17/2022	7:36:15	17.161	0.0028	0.002	0.015	0.0138	-76	0.061	0.0025	0.006	0.014	0.0030	1	14	190	0.994
10/17/2022	7:37:16	0.203	0.0105	0.009	0.031	0.0004	-104	0.022	0.0025	0.006	0.014	0.0005	0	14	190	0.994

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/17/2022	7:38:15	0.121	0.0207	0.001	0.020	-0.0005	-98	0.021	0.0026	0.006	0.014	0.0005	1	14	190	0.994
10/17/2022	7:39:15	0.120	0.0140	0.007	0.032	-0.0016	-33	0.022	0.0025	0.006	0.016	0.0005	1	14	190	0.994
10/17/2022	7:40:15	-0.020	-0.0028	0.012	0.020	-0.0015	-15	0.021	0.0024	0.006	0.012	0.0005	0	14	190	0.994
10/17/2022	7:41:15	-0.012	0.0034	0.004	0.005	-0.0010	49	0.019	0.0023	0.005	0.008	0.0004	1	14	190	0.994
System Zero	-0.012															
10/17/2022	7:42:18	-0.011	0.0072	0.002	0.004	-0.0013	103	0.020	0.0025	0.006	0.007	0.0005	1	14	190	0.994
10/17/2022	7:43:15	-0.799	0.0919	0.116	-2.568	-0.0990	89288	1.774	0.0102	0.051	0.089	0.0434	178	10	190	0.994
10/17/2022	7:44:15	-0.222	0.0841	0.075	1.003	0.0142	88801	0.235	0.0099	0.042	0.665	0.0053	528	10	190	0.994
10/17/2022	7:45:15	-0.260	0.0864	0.076	1.108	0.0149	87748	0.237	0.0091	0.042	0.596	0.0054	526	10	190	0.994
10/17/2022	7:46:15	-0.314	0.0664	0.074	0.984	0.0096	87498	0.231	0.0094	0.040	0.562	0.0053	497	10	190	0.994
10/17/2022	7:47:16	-0.262	0.0675	0.075	0.889	0.0122	87608	0.237	0.0087	0.041	0.650	0.0055	520	10	190	0.994
10/17/2022	8:05:09	0.080	0.0041	0.078	0.928	0.0207	75845	0.209	0.0082	0.037	0.565	0.0048	445	10	190	0.994
10/17/2022	8:10:09	0.179	0.0135	0.069	0.956	0.0207	85903	0.225	0.0084	0.041	0.579	0.0051	489	10	190	0.994
10/17/2022	8:15:09	0.187	0.0121	0.085	0.957	0.0189	87277	0.227	0.0085	0.041	0.670	0.0052	493	10	190	0.995
Start Run 1																
10/17/2022	8:20:09	0.171	0.0086	0.087	0.892	0.0201	88790	0.231	0.0085	0.041	0.628	0.0053	502	10	190	0.995
10/17/2022	8:25:09	0.207	-0.0014	0.092	1.002	0.0212	89481	0.236	0.0087	0.042	0.606	0.0053	530	10	190	0.996
10/17/2022	8:30:09	0.157	0.0060	0.103	0.954	0.0213	89643	0.234	0.0088	0.041	0.545	0.0053	527	10	190	0.996
10/17/2022	8:35:09	0.203	-0.0077	0.104	0.982	0.0222	89341	0.236	0.0087	0.041	0.657	0.0053	528	10	190	0.996
10/17/2022	8:40:11	0.199	-0.0155	0.098	0.961	0.0211	88839	0.239	0.0083	0.042	0.661	0.0054	537	10	190	0.996
10/17/2022	8:45:09	0.186	-0.0093	0.102	0.958	0.0215	88913	0.246	0.0077	0.042	0.640	0.0056	553	10	190	0.996
10/17/2022	8:50:09	0.183	-0.0130	0.099	0.953	0.0213	89223	0.242	0.0080	0.042	0.612	0.0055	547	10	190	0.996
10/17/2022	8:55:10	0.195	-0.0186	0.093	0.998	0.0212	89144	0.240	0.0082	0.042	0.679	0.0055	544	10	190	0.997
10/17/2022	9:00:09	0.158	-0.0096	0.094	0.990	0.0217	90117	0.245	0.0083	0.042	0.656	0.0056	550	10	190	0.996
10/17/2022	9:05:09	0.197	-0.0126	0.089	0.989	0.0198	89884	0.239	0.0085	0.042	0.698	0.0055	539	10	190	0.996
10/17/2022	9:10:09	0.161	-0.0088	0.083	0.959	0.0218	90144	0.239	0.0085	0.042	0.666	0.0054	540	10	190	0.996
10/17/2022	9:15:09	0.176	-0.0090	0.080	0.945	0.0215	90846	0.240	0.0087	0.043	0.652	0.0054	540	10	190	0.996
10/17/2022	9:20:09	0.159	-0.0095	0.083	0.962	0.0210	90507	0.240	0.0085	0.042	0.669	0.0054	541	10	190	0.996
Run Averages	0.181		-0.007	0.093	0.965	0.0212	89606	0.239	0.0084	0.042	0.644	0.0054	537			
10/17/2022	9:25:09	0.167	-0.0128	0.083	0.973	0.0217	90749	0.238	0.0085	0.042	0.750	0.0054	543	10	190	0.996
10/17/2022	9:30:09	0.205	-0.0077	0.077	0.937	0.0229	89821	0.235	0.0085	0.042	0.738	0.0054	533	10	189	0.996
Start Run 2																
10/17/2022	9:35:10	0.224	-0.0134	0.067	0.942	0.0228	89332	0.235	0.0087	0.042	0.720	0.0054	528	10	189	0.996
10/17/2022	9:40:09	0.231	-0.0029	0.069	0.918	0.0226	89865	0.227	0.0093	0.042	0.680	0.0052	515	10	190	0.996
10/17/2022	9:45:09	0.256	-0.0136	0.074	0.883	0.0230	89586	0.232	0.0089	0.042	0.642	0.0052	519	10	190	0.996
10/17/2022	9:50:10	0.222	-0.0065	0.069	0.915	0.0232	90072	0.233	0.0090	0.043	0.711	0.0053	523	10	190	0.995
10/17/2022	9:55:10	0.206	-0.0024	0.073	0.858	0.0221	90095	0.233	0.0091	0.042	0.605	0.0053	525	10	191	0.996
10/17/2022	10:00:10	0.199	0.0012	0.060	0.939	0.0230	89334	0.230	0.0090	0.042	0.777	0.0053	518	10	190	0.996
10/17/2022	10:05:09	0.201	-0.0088	0.070	0.916	0.0219	89743	0.230	0.0093	0.042	0.718	0.0052	517	10	190	0.996
10/17/2022	10:10:09	0.217	-0.0197	0.054	0.887	0.0224	90102	0.231	0.0090	0.043	0.638	0.0052	520	10	190	0.996
10/17/2022	10:15:09	0.228	-0.0001	0.063	0.832	0.0226	90175	0.232	0.0092	0.042	0.586	0.0053	524	10	190	0.996
10/17/2022	10:20:10	0.202	-0.0158	0.066	0.916	0.0216	89139	0.228	0.0092	0.042	0.692	0.0052	513	10	190	0.996
10/17/2022	10:25:09	0.198	-0.0139	0.058	0.869	0.0228	89048	0.226	0.0092	0.042	0.582	0.0052	512	10	190	0.996
10/17/2022	10:30:09	0.197	-0.0083	0.056	0.853	0.0227	89040	0.229	0.0090	0.041	0.551	0.0052	514	10	190	0.996
10/17/2022	10:35:09	0.220	-0.0137	0.067	0.913	0.0224	88944	0.227	0.0092	0.042	0.682	0.0052	514	10	190	0.996
Run Averages	0.215		-0.0091	0.065	0.896	0.0225	89575	0.230	0.0091	0.042	0.660	0.0052	519			
10/17/2022	10:40:09	0.184	-0.0066	0.051	0.841	0.0224	88838	0.231	0.0088	0.042	0.603	0.0053	522	10	190	0.996

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
Start Run 3																
10/17/2022	10:45:09	0.191	-0.0115	0.049	0.915	0.0236	88713	0.228	0.0089	0.041	0.657	0.0052	515	10	190	0.996
10/17/2022	10:50:10	0.202	-0.0072	0.055	0.954	0.0233	88832	0.229	0.0089	0.042	0.725	0.0052	517	10	190	0.996
10/17/2022	10:55:09	0.182	-0.0096	0.058	0.928	0.0235	89089	0.232	0.0089	0.041	0.661	0.0053	524	10	190	0.996
10/17/2022	11:00:09	0.193	-0.0162	0.058	0.863	0.0223	88794	0.227	0.0090	0.042	0.641	0.0052	512	10	190	0.996
10/17/2022	11:05:09	0.189	-0.0095	0.059	0.865	0.0222	89230	0.229	0.0090	0.042	0.656	0.0052	517	10	190	0.995
10/17/2022	11:10:09	0.197	-0.0086	0.059	0.918	0.0221	90095	0.232	0.0091	0.042	0.677	0.0053	522	10	190	0.996
10/17/2022	11:15:09	0.189	-0.0155	0.054	0.920	0.0229	89476	0.234	0.0086	0.042	0.804	0.0053	531	10	190	0.996
10/17/2022	11:20:09	0.172	-0.0163	0.058	0.871	0.0224	88906	0.237	0.0082	0.042	0.665	0.0054	539	10	190	0.996
10/17/2022	11:25:09	0.165	-0.0148	0.055	0.896	0.0222	88867	0.240	0.0082	0.042	0.644	0.0055	543	10	190	0.996
10/17/2022	11:30:09	0.162	-0.0066	0.043	0.919	0.0231	88867	0.240	0.0083	0.042	0.708	0.0055	541	10	190	0.996
10/17/2022	11:35:09	0.156	-0.0067	0.048	0.864	0.0226	88836	0.240	0.0082	0.042	0.641	0.0055	543	10	190	0.996
10/17/2022	11:40:11	0.166	-0.0222	0.057	0.875	0.0233	88676	0.235	0.0085	0.041	0.634	0.0054	533	10	190	0.995
10/17/2022	11:45:09	0.171	-0.0137	0.058	0.877	0.0231	89347	0.236	0.0085	0.041	0.645	0.0054	537	10	190	0.996
Run Averages		0.180	-0.0122	0.055	0.897	0.0228	89056	0.234	0.0086	0.042	0.674	0.0053	529			
10/17/2022	11:50:09	0.201	-0.0143	0.047	0.944	0.0223	88694	0.238	0.0083	0.041	0.787	0.0054	538	10	190	0.996
Start Run 4																
10/17/2022	11:55:09	0.133	-0.0178	0.050	0.919	0.0236	89139	0.238	0.0082	0.041	0.675	0.0055	542	10	190	0.995
10/17/2022	12:00:09	0.173	-0.0073	0.046	0.902	0.0230	89145	0.235	0.0084	0.042	0.687	0.0054	536	10	190	0.995
10/17/2022	12:05:10	0.201	-0.0283	0.043	0.853	0.0223	88834	0.234	0.0086	0.042	0.633	0.0054	530	10	190	0.995
10/17/2022	12:10:09	0.173	-0.0152	0.034	0.842	0.0229	88694	0.227	0.0092	0.042	0.597	0.0052	512	10	190	0.996
10/17/2022	12:15:09	0.180	-0.0144	0.038	0.812	0.0221	88487	0.225	0.0092	0.041	0.553	0.0051	508	10	190	0.996
10/17/2022	12:20:09	0.190	-0.0140	0.044	0.917	0.0228	88885	0.227	0.0092	0.041	0.723	0.0052	512	10	190	0.996
10/17/2022	12:25:09	0.159	-0.0139	0.038	0.874	0.0228	89477	0.229	0.0091	0.042	0.637	0.0052	518	10	190	0.996
10/17/2022	12:30:09	0.171	-0.0160	0.034	0.934	0.0228	89595	0.231	0.0090	0.042	0.704	0.0053	524	10	190	0.996
10/17/2022	12:35:09	0.189	-0.0198	0.035	0.832	0.0226	88897	0.229	0.0091	0.042	0.564	0.0052	518	10	190	0.996
10/17/2022	12:40:09	0.167	-0.0164	0.027	0.913	0.0231	89259	0.231	0.0091	0.042	0.728	0.0053	521	10	190	0.996
10/17/2022	12:45:09	0.179	-0.0231	0.034	0.866	0.0235	88896	0.237	0.0085	0.042	0.663	0.0054	535	10	190	0.995
Run Averages		0.176	-0.0167	0.039	0.884	0.0228	89000	0.232	0.0088	0.042	0.663	0.0053	525			
10/17/2022	12:50:12	0.156	-0.0131	0.040	0.932	0.0242	89046	0.234	0.0085	0.041	0.751	0.0053	533	10	190	0.996
10/17/2022	12:55:09	0.161	-0.0090	0.044	0.856	0.0229	88816	0.238	0.0085	0.042	0.698	0.0054	537	10	190	0.996
10/17/2022	13:00:09	0.129	-0.0149	0.040	0.866	0.0237	88652	0.240	0.0083	0.042	0.643	0.0055	542	10	190	0.995
Start Run 5																
10/17/2022	13:05:09	0.180	-0.0185	0.039	0.921	0.0226	89177	0.237	0.0084	0.042	0.776	0.0054	539	10	190	0.995
10/17/2022	13:10:09	0.144	-0.0160	0.037	0.917	0.0239	89455	0.232	0.0089	0.042	0.775	0.0053	528	10	190	0.996
10/17/2022	13:15:09	0.159	-0.0211	0.029	0.918	0.0231	89016	0.229	0.0091	0.042	0.741	0.0052	518	10	190	0.995
10/17/2022	13:20:09	0.175	-0.0145	0.031	0.879	0.0247	88620	0.229	0.0090	0.041	0.683	0.0052	517	10	190	0.995
10/17/2022	13:25:09	0.146	-0.0096	0.030	0.843	0.0234	88723	0.230	0.0090	0.041	0.652	0.0053	523	10	190	0.996
10/17/2022	13:30:09	0.172	-0.0123	0.032	0.834	0.0226	88718	0.232	0.0086	0.041	0.572	0.0053	526	10	190	0.996
10/17/2022	13:35:09	0.160	-0.0183	0.033	0.832	0.0235	88585	0.228	0.0089	0.041	0.574	0.0052	517	10	190	0.996
10/17/2022	13:40:09	0.140	-0.0164	0.029	0.825	0.0238	88214	0.221	0.0096	0.041	0.593	0.0050	499	10	190	0.996
10/17/2022	13:45:09	0.142	-0.0106	0.038	0.819	0.0238	88211	0.228	0.0092	0.041	0.572	0.0052	512	10	190	0.995
10/17/2022	13:50:09	0.156	-0.0079	0.026	0.842	0.0229	88562	0.234	0.0090	0.042	0.597	0.0053	525	10	190	0.996
10/17/2022	13:55:09	0.170	-0.0173	0.032	0.823	0.0221	87859	0.229	0.0087	0.041	0.575	0.0053	520	10	190	0.996
10/17/2022	14:00:09	0.129	-0.0211	0.032	0.837	0.0240	87963	0.230	0.0088	0.041	0.604	0.0053	521	10	190	0.995
10/17/2022	14:05:09	0.155	-0.0099	0.023	0.909	0.0241	88666	0.236	0.0086	0.042	0.788	0.0054	535	10	190	0.996
Run Averages		0.156	-0.0149	0.032	0.862	0.0234	88598	0.230	0.0089	0.041	0.654	0.0053	522			

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/17/2022	14:10:09	0.128	-0.0132	0.028	0.895	0.0235	88243	0.239	0.0085	0.041	0.698	0.0055	540	10	190	0.996
10/17/2022	14:15:09	0.128	-0.0188	0.042	0.873	0.0232	88927	0.237	0.0084	0.041	0.700	0.0054	538	10	190	0.996
Start Run 6																
10/17/2022	14:20:09	0.132	-0.0228	0.022	0.863	0.0233	88742	0.235	0.0086	0.042	0.719	0.0054	538	10	190	0.996
10/17/2022	14:25:09	0.116	-0.0210	0.035	0.832	0.0223	88104	0.236	0.0084	0.041	0.609	0.0054	535	10	190	0.996
10/17/2022	14:30:11	0.124	-0.0229	0.041	0.876	0.0220	88244	0.237	0.0086	0.041	0.651	0.0054	535	10	190	0.996
10/17/2022	14:35:11	0.113	-0.0232	0.017	0.846	0.0227	88680	0.238	0.0085	0.041	0.604	0.0055	542	10	190	0.995
10/17/2022	14:40:10	0.113	-0.0147	0.028	0.863	0.0221	88226	0.231	0.0090	0.041	0.695	0.0053	522	10	190	0.995
10/17/2022	14:45:12	0.160	-0.0158	0.028	0.843	0.0236	87229	0.224	0.0094	0.040	0.555	0.0051	502	10	190	0.995
10/17/2022	14:50:09	0.127	-0.0249	0.035	0.800	0.0223	87342	0.222	0.0092	0.041	0.618	0.0051	483	10	190	0.995
10/17/2022	14:55:09	0.086	-0.0193	0.028	0.789	0.0228	87374	0.227	0.0089	0.041	0.718	0.0052	491	10	190	0.996
10/17/2022	15:00:09	0.101	-0.0206	0.030	0.713	0.0215	87748	0.226	0.0090	0.041	0.596	0.0052	492	10	190	0.996
10/17/2022	15:05:09	0.150	-0.0245	0.033	0.881	0.0229	87691	0.226	0.0091	0.041	0.753	0.0051	508	10	190	0.996
10/17/2022	15:10:09	0.077	-0.0327	0.033	0.735	0.0213	87610	0.219	0.0092	0.041	0.655	0.0050	480	10	190	0.996
10/17/2022	15:15:11	0.070	-0.0133	0.025	0.836	0.0219	87627	0.224	0.0091	0.042	0.868	0.0052	487	10	190	0.996
10/17/2022	15:20:09	0.062	-0.0026	0.042	0.775	0.0213	87141	0.226	0.0088	0.040	0.619	0.0052	493	10	190	0.996
Run Averages		0.110	-0.0199	0.031	0.819	0.0223	87825	0.229	0.0089	0.041	0.666	0.0052	508			
10/17/2022	15:25:09	0.102	-0.0252	0.025	0.766	0.0219	87093	0.228	0.0087	0.041	0.716	0.0052	498	10	190	0.996
10/17/2022	15:30:09	0.106	-0.0250	0.036	0.701	0.0212	86835	0.227	0.0088	0.040	0.567	0.0052	493	10	190	0.996
Start Run 7																
10/17/2022	15:35:10	0.080	-0.0164	0.033	0.719	0.0221	86666	0.230	0.0086	0.040	0.589	0.0053	501	10	190	0.996
10/17/2022	15:40:11	0.084	-0.0103	0.030	0.791	0.0226	87369	0.234	0.0084	0.041	0.709	0.0054	512	10	190	0.996
10/17/2022	15:45:09	0.063	-0.0158	0.034	0.787	0.0216	87075	0.230	0.0085	0.041	0.718	0.0053	504	10	190	0.996
10/17/2022	15:50:09	0.050	-0.0185	0.028	0.778	0.0221	87135	0.229	0.0087	0.041	0.778	0.0053	499	10	190	0.996
10/17/2022	15:55:09	0.095	-0.0278	0.025	0.712	0.0222	86551	0.221	0.0091	0.041	0.582	0.0051	480	10	190	0.996
10/17/2022	16:00:09	0.097	-0.0169	0.031	0.699	0.0208	86973	0.222	0.0092	0.041	0.547	0.0051	482	10	190	0.996
10/17/2022	16:05:12	0.091	-0.0259	0.030	0.736	0.0216	86935	0.221	0.0093	0.040	0.614	0.0050	480	10	190	0.995
10/17/2022	16:10:09	0.098	-0.0236	0.029	0.725	0.0201	86548	0.219	0.0092	0.040	0.642	0.0050	475	10	190	0.995
10/17/2022	16:15:09	0.092	-0.0205	0.035	0.669	0.0216	86763	0.217	0.0094	0.040	0.543	0.0050	470	10	190	0.995
10/17/2022	16:20:09	0.073	-0.0180	0.027	0.720	0.0214	87140	0.220	0.0092	0.041	0.693	0.0051	479	10	190	0.995
10/17/2022	16:25:09	0.088	-0.0215	0.035	0.698	0.0222	86718	0.223	0.0091	0.041	0.553	0.0051	483	10	190	0.995
10/17/2022	16:30:09	0.069	-0.0240	0.026	0.717	0.0220	86659	0.222	0.0091	0.040	0.631	0.0050	481	10	190	0.995
10/17/2022	16:35:09	0.101	-0.0145	0.029	0.689	0.0205	85791	0.219	0.0093	0.040	0.540	0.0050	472	10	190	0.996
Run Averages		0.083	-0.0195	0.030	0.726	0.0216	86794	0.224	0.0090	0.041	0.626	0.0051	486			
10/17/2022	16:40:12	0.084	-0.0053	0.023	0.681	0.0231	86264	0.223	0.0092	0.041	0.573	0.0051	485	10	190	0.996
10/17/2022	16:46:26	23.200	0.0210	0.019	0.310	0.0184	41632	0.183	0.0068	0.026	0.292	0.0056	277	11	190	0.996
10/17/2022	16:47:25	92.566	-0.0141	-0.003	0.028	0.0183	1213	0.087	0.0033	0.008	0.038	0.0033	58	14	190	0.996
10/17/2022	16:48:23	94.509	-0.0144	-0.012	-0.010	0.0101	158	0.100	0.0032	0.008	0.023	0.0073	11	14	190	0.995
10/17/2022	16:49:23	94.904	0.0069	0.006	0.0100	-60	0.101	0.0033	0.008	0.024	0.0069	3	14	190	0.995	
10/17/2022	16:50:26	94.440	-0.0022	-0.001	0.016	0.0112	-103	0.103	0.0032	0.008	0.024	0.0071	3	14	190	0.995
10/17/2022	16:51:23	94.705	0.0054	-0.005	0.018	0.0109	-117	0.099	0.0035	0.008	0.021	0.0069	3	14	190	0.995
System CTS		94.705														
10/17/2022	16:52:23	70.255	0.0168	0.004	0.023	0.0259	-123	0.110	0.0031	0.007	0.019	0.0060	2	14	190	0.995
10/17/2022	16:53:25	0.134	0.0166	-0.005	0.027	-91	0.037	0.0033	0.007	0.022	0.0006	1	14	190	0.995	
10/17/2022	16:54:26	-0.066	-0.009	0.043	-0.0031	-115	0.036	0.0031	0.008	0.021	0.0006	1	14	190	0.995	
10/17/2022	16:55:28	-0.085	-0.0062	-0.013	0.039	-92	0.036	0.0032	0.008	0.024	0.0005	1	14	190	0.995	
10/17/2022	16:56:23	-0.144	-0.0056	-0.009	0.050	-42	0.036	0.0034	0.008	0.022	0.0005	1	14	190	0.995	

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/17/2022	16:57:23	-0.135	0.0069	-0.005	0.037	-0.0017	-162	0.034	0.0034	0.009	0.024	0.0006	1	14	190	0.995
10/17/2022	16:58:23	-0.174	0.0010	-0.006	0.044	-0.0004	-122	0.037	0.0031	0.008	0.023	0.0006	1	14	190	0.995
System Zero	-0.174															
10/17/2022	16:59:23	50.707	0.0002	-0.015	0.041	0.0323	-177	0.133	0.0031	0.008	0.024	0.0068	2	14	190	0.992
10/17/2022	17:00:23	92.757	0.0104	-0.007	0.032	0.0179	-383	0.078	0.0031	0.007	0.028	0.0029	3	14	190	0.991
10/17/2022	17:01:23	94.659	0.0080	-0.009	0.055	0.0100	-355	0.095	0.0030	0.008	0.026	0.0070	3	14	190	0.991
10/17/2022	17:02:23	94.878	0.0056	-0.016	0.038	0.0094	-306	0.094	0.0033	0.008	0.021	0.0069	3	14	190	0.991
10/17/2022	17:03:23	94.821	-0.0029	-0.008	0.028	0.0108	-219	0.095	0.0029	0.008	0.012	0.0069	3	14	190	0.991
10/17/2022	17:04:23	94.980	0.0133	-0.018	0.023	0.0075	-174	0.093	0.0031	0.008	0.011	0.0068	3	14	190	0.990
Direct CTS	94.980															
10/17/2022	17:05:25	35.448	-0.0013	-0.004	0.028	0.0252	-135	0.098	0.0032	0.008	0.016	0.0051	1	14	190	0.990
10/17/2022	17:06:23	-0.182	0.0053	-0.008	0.033	0.0003	-57	0.030	0.0031	0.007	0.014	0.0002	0	14	190	0.990
10/17/2022	17:07:23	-0.193	-0.0106	-0.018	0.025	0.0008	-96	0.033	0.0030	0.009	0.013	0.0002	0	14	190	0.990
10/17/2022	17:08:23	-0.185	0.0035	-0.003	0.024	0.0004	-51	0.029	0.0031	0.007	0.015	0.0002	0	14	190	0.990
10/17/2022	17:09:23	-0.203	-0.0082	-0.015	0.033	-0.0001	-77	0.029	0.0032	0.007	0.016	0.0002	0	14	190	0.990
10/17/2022	17:12:59	-0.059	-0.0101	0.000	0.015	0.0004	4	0.008	0.0026	0.006	0.008	0.0002	0	14	190	0.991
10/17/2022	17:13:59	-0.019	-0.0085	-0.013	0.018	-0.0003	-10	0.008	0.0025	0.006	0.007	0.0002	0	14	190	0.991
Direct Zero	-0.019															
10/17/2022	17:14:59	-0.034	0.0077	0.008	0.022	0.0010	-49	0.008	0.0025	0.006	0.008	0.0002	0	14	190	0.991
10/17/2022	17:16:02	-0.053	0.0075	-0.013	0.004	0.0004	-21	0.007	0.0026	0.006	0.009	0.0002	0	14	190	0.991
10/17/2022	17:16:59	-0.030	0.0001	-0.014	0.017	-0.0001	-61	0.007	0.0025	0.005	0.009	0.0002	0	14	190	0.991
10/17/2022	17:17:59	-0.044	-0.0050	0.006	0.020	-0.0002	-53	0.007	0.0024	0.005	0.011	0.0002	0	14	190	0.991
10/17/2022	17:18:59	-0.068	0.0036	0.010	-0.510	-0.0100	7018	0.195	0.0035	0.009	0.269	0.0043	19	13	190	0.996
10/17/2022	17:19:59	-0.050	-0.0476	0.002	0.044	-0.0029	10733	0.044	0.0045	0.011	0.118	0.0009	55	12	190	0.998
10/17/2022	17:20:59	-0.069	-0.0508	-0.002	0.080	-0.0007	10721	0.041	0.0043	0.011	0.116	0.0009	55	12	190	0.998
10/17/2022	17:21:59	-0.032	-0.0399	-0.009	0.052	-0.0022	10609	0.039	0.0039	0.010	0.121	0.0009	55	12	190	0.998
Ambient Air																
10/17/2022	17:22:59	-0.080	-0.0326	0.005	0.066	-0.0006	11345	0.041	0.0045	0.011	0.125	0.0009	58	12	190	0.998
10/17/2022	17:23:59	-0.004	-0.0544	0.011	0.062	-0.0036	12160	0.040	0.0045	0.011	0.134	0.0009	62	12	190	0.998
10/17/2022	17:24:59	-0.118	-0.0353	0.010	0.087	-0.0016	12442	0.044	0.0045	0.011	0.136	0.0011	64	12	190	0.998
10/17/2022	17:25:59	-0.008	-0.0292	0.006	0.059	-0.0008	12452	0.039	0.0044	0.011	0.136	0.0010	63	12	190	0.998
10/17/2022	17:26:59	-0.034	-0.0434	0.011	0.073	-0.0008	12106	0.040	0.0048	0.011	0.137	0.0009	61	12	190	0.998

Client: Georgia Power
 Facility: Plant McDonough
 Source: Unit 4B

Condition: Natural Gas Max

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	6:55:46	0.403	-0.0119	0.004	-0.002	0.0086	35	0.031	0.0032	0.008	0.008	0.0004	0	15	190	0.990
10/18/2022	6:56:48	0.408	-0.0136	0.013	-0.008	0.0084	8	0.030	0.0034	0.010	0.0004	0	15	190	0.990	
10/18/2022	6:57:46	0.401	-0.0216	0.023	-0.012	0.0102	15	0.030	0.0033	0.011	0.0004	0	15	190	0.990	
10/18/2022	6:58:46	0.400	-0.0077	0.001	-0.001	0.0090	19	0.031	0.0032	0.008	0.0004	0	15	190	0.990	
10/18/2022	7:02:10	-0.008	0.0041	0.009	-0.004	0.0004	0	0.006	0.0023	0.005	0.0006	0	15	190	0.990	
10/18/2022	7:03:10	-0.023	-0.0024	0.006	0.009	0.0002	-2	0.007	0.0024	0.005	0.0006	0	15	190	0.990	
10/18/2022	7:04:10	0.001	0.0036	0.010	0.009	-0.0014	-10	0.007	0.0025	0.006	0.008	0.0002	0	15	190	0.990
Direct Zero	0.001															
10/18/2022	7:05:10	0.002	0.0115	0.005	0.004	-0.0004	-13	0.007	0.0025	0.006	0.0006	0.0002	0	15	190	0.990
10/18/2022	7:06:10	-0.007	0.0068	0.011	0.005	0.0009	-17	0.006	0.0021	0.005	0.0007	0.0002	0	15	190	0.990
10/18/2022	7:07:10	-0.015	-0.0056	-0.003	0.011	0.0001	-36	0.007	0.0024	0.005	0.0007	0.0002	0	15	190	0.990
10/18/2022	7:08:10	-0.002	0.0036	0.006	0.007	0.0012	0	0.008	0.0025	0.006	0.0007	0.0002	0	15	190	0.990
10/18/2022	7:09:10	-0.031	0.0133	0.003	0.015	-0.0008	-22	0.007	0.0024	0.005	0.0007	0.0002	0	15	190	0.990
10/18/2022	7:10:10	-0.001	0.0031	0.002	0.011	0.0016	-10	0.008	0.0022	0.005	0.0007	0.0002	0	15	190	0.990
10/18/2022	7:11:10	0.004	-0.0104	0.016	-0.004	-0.0012	-23	0.006	0.0025	0.005	0.0006	0.0002	0	14	190	0.990
10/18/2022	7:12:10	57.923	-0.0099	0.001	-0.001	0.0275	8	0.135	0.0026	0.006	0.008	0.0068	2	14	190	0.990
10/18/2022	7:13:10	93.831	0.0011	0.004	0.001	0.0193	-138	0.065	0.0025	0.006	0.008	0.0029	3	14	190	0.990
10/18/2022	7:14:10	94.910	0.0021	0.002	-0.003	0.0136	-103	0.080	0.0023	0.005	0.008	0.0068	3	14	190	0.990
Direct CTS	94.910															
10/18/2022	7:15:10	94.675	0.0146	0.002	-0.003	0.0131	-120	0.080	0.0024	0.006	0.009	0.0068	3	14	190	0.990
10/18/2022	7:16:10	95.347	-0.0087	0.001	-0.011	0.0116	-88	0.082	0.0023	0.005	0.008	0.0069	3	14	190	0.990
10/18/2022	7:17:10	94.759	-0.0047	0.015	-0.019	0.0108	-106	0.078	0.0023	0.006	0.009	0.0067	3	14	190	0.990
10/18/2022	7:18:13	46.604	0.0117	-0.005	-0.178	0.0277	1951	0.458	0.0028	0.007	0.107	0.0064	9	14	190	0.993
Ambient Air																
10/18/2022	7:19:10	-0.166	-0.0284	0.009	-0.301	0.0081	5961	0.113	0.0047	0.011	0.071	0.0010	27	13	190	0.997
10/18/2022	7:20:10	-0.129	-0.0295	0.009	0.055	-0.0016	5986	0.057	0.0047	0.010	0.076	0.0007	37	13	190	0.997
10/18/2022	7:21:10	-0.083	-0.0290	0.002	0.066	0.0017	5992	0.043	0.0046	0.011	0.077	0.0007	34	13	190	0.997
10/18/2022	7:22:10	-0.082	-0.0226	0.022	0.050	0.0006	6070	0.036	0.0047	0.010	0.076	0.0006	32	13	190	0.997
10/18/2022	7:23:10	-0.134	-0.0322	-0.001	0.042	-0.0012	6073	0.035	0.0044	0.010	0.079	0.0007	35	13	190	0.997
10/18/2022	7:24:10	0.338	-0.0121	0.010	0.056	0.0021	12004	0.072	0.0049	0.012	0.123	0.0016	68	12	190	0.996
10/18/2022	7:25:10	0.222	-0.0235	0.024	0.050	0.0013	9784	0.039	0.0041	0.011	0.104	0.0008	50	13	190	0.994
10/18/2022	7:26:10	-0.017	0.0127	0.006	0.003	0.0010	654	0.025	0.0027	0.006	0.014	0.0006	11	14	190	0.994
10/18/2022	7:27:10	-0.084	-0.0026	0.005	-0.023	0.0026	136	0.025	0.0026	0.006	0.008	0.0006	1	14	190	0.994
10/18/2022	7:28:10	-0.054	0.0090	0.001	-0.006	-0.0003	91	0.024	0.0026	0.006	0.010	0.0005	1	14	190	0.994
System Zero	-0.054															
10/18/2022	7:29:10	-0.074	0.0000	0.010	-0.006	0.0012	3	0.023	0.0026	0.006	0.009	0.0005	1	14	190	0.994
10/18/2022	7:30:10	-0.032	-0.0040	-0.004	0.006	0.0019	50	0.023	0.0026	0.006	0.008	0.0005	1	14	190	0.994
10/18/2022	7:31:10	-0.039	-0.0210	0.004	-0.002	0.0000	53	0.024	0.0028	0.006	0.008	0.0006	1	14	190	0.994
10/18/2022	7:32:10	-0.055	0.0146	0.003	0.011	0.0020	72	0.021	0.0026	0.006	0.007	0.0005	1	14	190	0.994
10/18/2022	7:33:11	0.010	0.0047	0.009	-0.008	-0.0009	24	0.022	0.0024	0.005	0.007	0.0005	1	15	190	0.994
10/18/2022	7:34:10	-0.008	-0.0043	0.003	0.004	0.0019	-15	0.023	0.0025	0.006	0.007	0.0005	1	15	190	0.994
10/18/2022	7:35:10	26.849	0.0099	0.001	-0.005	0.00264	138	0.107	0.0023	0.005	0.009	0.0054	1	14	190	0.994
10/18/2022	7:36:10	93.217	-0.0083	0.001	-0.011	0.0212	-109	0.069	0.0025	0.006	0.009	0.0030	3	14	190	0.994

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	7:37:10	94.705	0.0028	0.002	-0.004	0.0165	-19	0.088	0.0026	0.006	0.008	0.0070	3	14	190	0.994
10/18/2022	7:38:10	94.181	0.0033	0.003	-0.008	0.0180	-43	0.086	0.0026	0.006	0.010	0.0068	3	14	190	0.994
10/18/2022	7:39:10	94.432	-0.0106	0.007	-0.007	0.0199	-75	0.088	0.0025	0.006	0.009	0.0070	3	14	190	0.994
10/18/2022	7:40:10	95.243	0.0039	0.008	-0.015	0.0136	-90	0.087	0.0024	0.006	0.010	0.0069	3	14	190	0.994
System Zero		95.243														
10/18/2022	7:41:10	95.135	-0.0149	0.005	-0.011	0.0145	-138	0.089	0.0025	0.006	0.008	0.0070	3	14	190	0.994
10/18/2022	7:42:10	94.589	-0.0112	0.004	-0.010	0.0128	-102	0.085	0.0025	0.006	0.009	0.0068	3	14	190	0.994
10/18/2022	7:43:10	95.362	-0.0019	0.001	0.004	0.0129	-94	0.088	0.0024	0.006	0.009	0.0072	3	14	190	0.994
10/18/2022	7:44:10	94.891	0.0019	0.008	-0.002	0.0134	-80	0.087	0.0024	0.006	0.009	0.0070	3	14	190	0.994
10/18/2022	7:45:10	-0.155	0.0058	0.035	-2.402	-0.0560	55627	1.301	0.0087	0.035	1.711	0.0281	119	11	190	0.994
10/18/2022	7:46:10	-0.065	-0.0263	0.028	0.547	0.0078	62392	0.172	0.0088	0.030	0.630	0.0041	325	10	190	0.994
10/18/2022	7:47:10	-0.028	-0.0108	0.028	0.611	0.0086	69206	0.183	0.0089	0.033	0.427	0.0043	371	10	190	0.994
10/18/2022	7:48:12	-0.065	-0.0305	0.036	0.682	0.0112	71083	0.187	0.0086	0.034	0.533	0.0043	384	10	190	0.994
10/18/2022	7:49:13	-0.088	-0.0090	0.026	0.599	0.0089	69680	0.183	0.0087	0.034	0.505	0.0043	375	10	190	0.994
10/18/2022	7:50:10	-0.119	-0.0200	0.031	0.485	0.0118	68895	0.185	0.0091	0.033	0.413	0.0044	375	10	190	0.994
10/18/2022	7:51:11	-0.150	-0.0217	0.048	0.465	0.0102	68116	0.183	0.0086	0.033	0.412	0.0043	374	10	190	0.994
10/18/2022	7:52:10	-0.170	-0.0127	0.019	0.491	0.0115	68457	0.185	0.0086	0.034	0.428	0.0043	378	10	190	0.994
10/18/2022	7:53:10	-0.149	-0.0152	0.026	0.583	0.0139	69320	0.186	0.0087	0.033	0.517	0.0044	378	10	190	0.995
10/18/2022	7:54:10	-0.208	-0.0165	0.036	0.586	0.0115	69926	0.187	0.0086	0.033	0.506	0.0044	382	10	190	0.995
10/18/2022	7:55:10	-0.077	-0.0351	0.013	0.653	0.0108	74434	0.193	0.0092	0.036	0.725	0.0044	399	10	190	0.995
10/18/2022	7:56:10	-0.192	-0.0005	0.033	0.610	0.0124	89500	0.219	0.0103	0.042	0.627	0.0051	468	10	190	0.995
10/18/2022	7:57:10	-0.138	-0.0144	0.025	0.792	0.0148	83429	0.215	0.0094	0.040	0.483	0.0049	482	10	190	0.995
10/18/2022	7:58:10	-0.139	-0.0205	0.029	0.622	0.0140	78670	0.203	0.0097	0.037	0.619	0.0047	436	10	190	0.995
10/18/2022	7:59:10	-0.175	-0.0147	0.029	0.558	0.0154	72702	0.193	0.0089	0.036	0.408	0.0045	412	10	190	0.995
10/18/2022	8:00:10	-0.198	-0.0240	0.033	0.667	0.0108	76970	0.200	0.0092	0.037	0.657	0.0047	410	10	190	0.995
10/18/2022	8:01:10	-0.137	-0.0026	0.014	0.600	0.0165	84350	0.212	0.0097	0.039	0.504	0.0048	462	10	190	0.995
10/18/2022	8:02:10	-0.183	-0.0164	0.033	0.560	0.0159	81923	0.212	0.0094	0.038	0.466	0.0048	451	10	190	0.996
10/18/2022	8:03:10	-0.196	-0.0144	0.037	0.648	0.0135	91342	0.223	0.0103	0.044	0.534	0.0051	480	10	190	0.991
10/18/2022	8:04:11	-0.180	-0.0031	0.012	0.720	0.0168	80669	0.208	0.0099	0.039	0.564	0.0047	468	10	190	0.990
10/18/2022	8:05:10	-0.175	-0.0129	-0.006	0.614	0.0160	75991	0.194	0.0094	0.035	0.494	0.0045	417	10	190	0.990
10/18/2022	8:06:10	-0.143	-0.0415	0.005	0.674	0.0119	81619	0.203	0.0099	0.038	0.739	0.0047	440	10	190	0.990
10/18/2022	8:07:10	-0.176	-0.0214	-0.014	0.572	0.0131	72947	0.193	0.0088	0.034	0.443	0.0045	414	10	190	0.990
10/18/2022	8:08:10	-0.209	-0.0018	-0.008	0.538	0.0092	78697	0.200	0.0092	0.036	0.510	0.0047	418	10	190	0.991
10/18/2022	8:09:10	-0.209	-0.0009	-0.006	0.645	0.0126	79049	0.202	0.0092	0.036	0.583	0.0047	438	10	190	0.990
10/18/2022	8:10:10	-0.170	-0.0438	-0.011	0.617	0.0130	74221	0.193	0.0092	0.035	0.625	0.0045	414	10	190	0.991
10/18/2022	8:11:10	-0.187	-0.0238	-0.010	0.582	0.0098	77013	0.195	0.0090	0.036	0.723	0.0045	405	10	190	0.991
10/18/2022	8:12:10	-0.203	-0.0257	-0.014	0.677	0.0126	77240	0.197	0.0094	0.037	0.644	0.0046	425	10	190	0.990
10/18/2022	8:13:10	-0.184	-0.0243	-0.019	0.521	0.0149	78426	0.201	0.0091	0.038	0.455	0.0047	434	10	190	0.991
10/18/2022	8:14:10	-0.191	-0.0086	-0.008	0.568	0.0134	77548	0.199	0.0092	0.037	0.543	0.0046	431	10	190	0.990
10/18/2022	8:15:10	-0.205	-0.0187	-0.023	0.520	0.0142	77464	0.199	0.0093	0.035	0.482	0.0046	428	10	190	0.990
10/18/2022	8:16:10	-0.164	-0.0109	-0.031	0.709	0.0149	78905	0.198	0.0096	0.037	0.605	0.0046	427	10	190	0.990
10/18/2022	8:17:10	-0.195	-0.0220	-0.021	0.622	0.0130	78184	0.197	0.0092	0.037	0.479	0.0046	427	10	190	0.990
10/18/2022	8:18:10	-0.213	-0.0086	-0.003	0.621	0.0114	76013	0.195	0.0092	0.036	0.599	0.0046	420	10	190	0.990
10/18/2022	8:19:10	-0.215	-0.0176	-0.004	0.606	0.0120	75889	0.198	0.0089	0.036	0.509	0.0046	429	10	190	0.990
10/18/2022	8:20:10	-0.205	-0.0216	-0.012	0.511	0.0119	76383	0.197	0.0090	0.036	0.514	0.0046	427	10	190	0.990
10/18/2022	8:21:10	-0.207	-0.0202	-0.034	0.516	0.0128	76598	0.200	0.0090	0.037	0.477	0.0046	432	10	190	0.990
10/18/2022	8:22:10	-0.188	-0.0419	-0.015	0.616	0.0122	76835	0.196	0.0095	0.036	0.519	0.0045	423	10	190	0.990

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	8:23:12	-0.203	-0.0166	0.630	0.0137	76885	0.199	0.0091	0.036	0.509	0.0046	430	10	190	0.991	
10/18/2022	8:24:11	-0.201	-0.0228	-0.017	0.584	0.0135	76385	0.199	0.0090	0.036	0.496	0.0046	430	10	190	0.990
10/18/2022	8:25:10	-0.195	-0.0353	-0.031	0.645	0.0127	76862	0.200	0.0094	0.036	0.580	0.0047	432	10	190	0.990
10/18/2022	8:26:10	-0.243	-0.0253	-0.015	0.544	0.0145	77429	0.202	0.0091	0.037	0.523	0.0047	435	10	190	0.990
10/18/2022	8:27:10	-0.176	-0.0226	-0.020	0.593	0.0150	77507	0.203	0.0091	0.036	0.464	0.0047	441	10	190	0.990
10/18/2022	8:28:10	-0.203	-0.0317	-0.013	0.647	0.0138	78059	0.204	0.0093	0.037	0.637	0.0047	440	10	190	0.991
10/18/2022	8:29:10	-1.164	-0.0320	0.041	0.479	1.6166	61951	0.168	0.0079	0.030	0.430	0.0041	369	10	190	0.998
10/18/2022	8:30:10	-1.350	-0.0188	0.086	0.380	1.7875	54879	0.150	0.0078	0.027	0.398	0.0038	317	10	190	0.995
10/18/2022	8:31:10	-1.249	-0.0338	0.129	0.452	1.7946	52463	0.139	0.0078	0.027	0.470	0.0034	282	10	190	0.995
10/18/2022	8:32:10	-1.592	-0.0156	0.134	0.421	1.8114	52474	0.148	0.0077	0.026	0.501	0.0038	293	10	190	0.995
10/18/2022	8:33:10	-1.529	-0.0183	0.167	0.396	1.8172	52364	0.140	0.0076	0.026	0.450	0.0037	285	10	190	0.995
10/18/2022	8:34:11	-1.434	-0.0363	0.172	0.334	1.8298	53136	0.139	0.0082	0.027	0.383	0.0036	285	10	190	0.995
10/18/2022	8:35:10	-1.469	-0.0219	0.191	0.421	1.8282	51749	0.142	0.0077	0.027	0.397	0.0036	279	10	190	0.995
10/18/2022	8:36:10	-1.465	-0.0349	0.191	0.417	1.8400	50922	0.136	0.0076	0.026	0.618	0.0035	271	10	190	0.996
10/18/2022	8:37:10	-1.455	-0.0400	0.207	0.497	1.8371	50995	0.132	0.0079	0.027	0.542	0.0034	264	10	190	0.995
10/18/2022	8:38:10	-1.636	-0.0246	0.221	0.370	1.8418	51096	0.134	0.0079	0.026	0.365	0.0035	268	10	190	0.995
10/18/2022	8:39:10	-1.542	-0.0334	0.230	0.308	1.8293	50189	0.134	0.0081	0.026	0.314	0.0035	263	11	190	0.995
10/18/2022	8:40:10	-1.448	-0.0480	0.248	0.388	1.8401	50469	0.131	0.0080	0.026	0.357	0.0035	264	11	190	0.996
10/18/2022	8:41:10	-1.579	-0.0273	0.249	0.344	1.8358	51613	0.135	0.0075	0.026	0.331	0.0036	272	11	190	0.996
10/18/2022	8:42:11	-1.638	-0.0282	0.258	0.472	1.8551	52652	0.137	0.0081	0.027	0.438	0.0035	275	10	190	0.996
10/18/2022	8:43:10	-1.662	-0.0422	0.284	0.423	1.8500	52848	0.138	0.0083	0.026	0.404	0.0037	276	10	190	0.995
10/18/2022	8:44:10	-1.702	-0.0418	0.263	0.496	1.8547	52357	0.138	0.0084	0.027	0.405	0.0036	272	11	190	0.996
10/18/2022	8:45:10	-1.640	-0.0459	0.296	0.559	1.8488	51689	0.136	0.0082	0.026	0.481	0.0036	267	11	190	0.996
10/18/2022	8:46:11	-1.614	-0.0222	0.284	0.425	1.8536	50875	0.135	0.0081	0.026	0.314	0.0036	264	11	190	0.995
10/18/2022	8:47:10	-1.652	-0.0459	0.283	0.506	1.8681	50906	0.133	0.0081	0.027	0.359	0.0033	262	10	190	0.995
10/18/2022	8:48:10	-1.640	-0.0256	0.284	0.483	1.8618	49456	0.130	0.0080	0.025	0.315	0.0034	257	11	190	0.995
10/18/2022	8:49:10	-1.667	-0.0389	0.298	0.534	1.8818	49662	0.133	0.0081	0.026	0.375	0.0036	262	11	190	0.995
10/18/2022	8:50:10	-1.650	-0.0288	0.301	0.552	1.8816	49772	0.131	0.0080	0.027	0.379	0.0035	262	10	190	0.995
10/18/2022	8:51:10	-1.671	-0.0273	0.325	0.565	1.8694	49516	0.133	0.0082	0.025	0.345	0.0036	262	11	190	0.996
10/18/2022	8:52:10	-1.624	-0.0402	0.300	0.663	1.8781	49256	0.132	0.0080	0.026	0.516	0.0035	259	11	190	0.995
10/18/2022	8:53:10	-1.675	-0.0296	0.320	0.681	1.8775	49061	0.132	0.0076	0.025	0.370	0.0036	262	11	190	0.995
10/18/2022	8:54:10	-1.731	-0.0299	0.311	0.898	1.8812	49210	0.132	0.0078	0.026	0.562	0.0035	263	11	190	0.996
10/18/2022	8:55:10	-1.755	-0.0357	0.331	0.701	1.8777	48681	0.134	0.0078	0.025	0.353	0.0037	264	11	190	0.995
10/18/2022	8:56:10	-1.531	-0.0257	0.340	0.872	1.8850	49027	0.130	0.0076	0.024	0.363	0.0035	260	11	190	0.995
10/18/2022	8:57:10	-1.674	-0.0331	0.312	0.851	1.8742	48756	0.131	0.0081	0.026	0.328	0.0035	262	11	190	0.995
10/18/2022	8:58:10	-1.624	-0.0372	0.340	0.995	1.8802	48937	0.131	0.0078	0.026	0.375	0.0035	262	11	190	0.995
10/18/2022	8:59:10	-1.622	-0.0347	0.324	1.080	1.8860	48999	0.132	0.0078	0.026	0.371	0.0036	267	11	190	0.995
10/18/2022	9:00:10	-1.641	-0.0592	0.335	1.138	1.8833	49172	0.131	0.0079	0.026	0.355	0.0035	258	10	190	0.995
10/18/2022	9:01:10	-1.614	-0.0261	0.335	1.168	1.8631	48726	0.132	0.0078	0.025	0.347	0.0034	262	11	190	0.995
10/18/2022	9:02:10	-1.593	-0.0260	0.334	1.300	1.8738	49033	0.132	0.0078	0.026	0.346	0.0035	262	11	190	0.995
10/18/2022	9:03:10	-1.649	-0.0406	0.313	1.300	1.8695	48720	0.133	0.0076	0.026	0.318	0.0035	259	11	190	0.995
10/18/2022	9:04:10	-1.664	-0.0260	0.328	1.593	1.8828	49137	0.135	0.0077	0.026	0.388	0.0036	264	11	190	0.995
10/18/2022	9:05:12	-1.660	-0.0326	0.312	1.609	1.8830	48842	0.134	0.0080	0.026	0.385	0.0036	264	11	190	0.995
10/18/2022	9:06:10	-1.687	-0.0304	0.317	1.680	1.8790	48840	0.132	0.0079	0.026	0.379	0.0036	262	11	190	0.995
10/18/2022	9:07:10	-1.774	-0.0365	0.311	1.751	1.8857	48740	0.134	0.0077	0.025	0.360	0.0037	264	11	190	0.995
10/18/2022	9:08:10	-0.405	-0.0154	0.154	1.003	0.2475	91367	0.245	0.0108	0.044	0.668	0.0056	492	10	190	0.989
10/18/2022	9:09:10	-0.153	-0.0338	0.011	0.888	0.0163	70585	0.195	0.0090	0.034	0.640	0.0045	432	10	190	0.989

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	9:10:10	-0.231	-0.0215	0.018	0.615	0.0109	72625	0.188	0.0088	0.035	0.510	0.0044	388	10	190	0.989
10/18/2022	9:11:10	-0.225	-0.0386	0.003	0.592	0.0065	81039	0.202	0.0097	0.039	0.562	0.0047	422	10	190	0.990
10/18/2022	9:12:10	-0.247	-0.0311	-0.003	0.554	0.0120	84526	0.210	0.0099	0.040	0.441	0.0049	454	10	190	0.989
10/18/2022	9:13:10	-0.206	-0.0288	-0.008	0.660	0.0154	77190	0.200	0.0093	0.036	0.541	0.0046	428	10	190	0.989
10/18/2022	9:14:13	-0.298	-0.0320	0.106	1.494	0.1758	73198	0.190	0.0092	0.036	0.647	0.0044	406	10	190	0.994
10/18/2022	9:15:10	-0.397	-0.0229	0.209	2.055	0.2485	72725	0.185	0.0090	0.037	0.491	0.0043	384	10	190	0.995
10/18/2022	9:16:10	-0.376	-0.0258	0.256	1.890	0.2456	72207	0.186	0.0094	0.035	0.421	0.0043	380	10	190	0.995
10/18/2022	9:17:10	-0.376	-0.0279	0.242	2.035	0.2489	72220	0.191	0.0093	0.036	0.481	0.0044	384	10	190	0.995
10/18/2022	9:18:10	-0.361	-0.0068	0.210	2.131	0.2473	72473	0.187	0.0089	0.036	0.801	0.0043	388	10	190	0.995
10/18/2022	9:19:10	-0.351	-0.0080	0.245	1.864	0.2349	72489	0.187	0.0091	0.035	0.481	0.0043	387	10	190	0.995
10/18/2022	9:20:10	-0.325	-0.0026	0.240	1.871	0.2257	72581	0.189	0.0089	0.036	0.498	0.0044	388	10	190	0.995
10/18/2022	9:21:10	-0.349	-0.0260	0.187	1.945	0.2288	72648	0.187	0.0094	0.036	0.665	0.0044	386	10	190	0.995
10/18/2022	9:22:11	-0.347	-0.0213	0.244	1.848	0.2273	72793	0.189	0.0089	0.035	0.521	0.0044	393	10	190	0.995
10/18/2022	9:23:10	-0.337	-0.0251	0.202	1.656	0.2284	72510	0.190	0.0094	0.035	0.445	0.0044	393	10	190	0.995
10/18/2022	9:24:10	-0.378	-0.0069	0.220	1.877	0.2130	73404	0.190	0.0092	0.036	0.666	0.0045	392	10	190	0.995
10/18/2022	9:25:10	-0.361	-0.0213	0.170	1.580	0.2118	72749	0.188	0.0090	0.035	0.436	0.0044	386	10	190	0.995
10/18/2022	9:26:10	-0.387	-0.0269	0.208	1.792	0.2131	73845	0.189	0.0092	0.035	0.743	0.0044	392	10	190	0.995
10/18/2022	9:27:10	-0.426	-0.0406	0.175	1.590	0.2173	73189	0.190	0.0092	0.035	0.506	0.0043	392	10	190	0.995
10/18/2022	9:28:10	-0.337	-0.0226	0.176	1.834	0.2189	73910	0.188	0.0094	0.035	0.666	0.0044	392	10	190	0.995
10/18/2022	9:29:10	-0.347	-0.0230	0.185	1.650	0.2243	74043	0.186	0.0096	0.035	0.553	0.0043	386	10	190	0.995
10/18/2022	9:30:10	-0.389	-0.0084	0.177	1.599	0.2242	73376	0.188	0.0095	0.035	0.553	0.0043	386	10	190	0.995
10/18/2022	9:31:10	-0.330	-0.0245	0.135	1.175	0.1383	74817	0.194	0.0096	0.036	0.473	0.0045	396	10	190	0.992
10/18/2022	9:32:10	-0.208	-0.0120	0.027	0.662	0.0091	88577	0.215	0.0104	0.041	0.605	0.0049	450	10	190	0.990
Method 301 Validation HF																
10/18/2022	9:33:10	-0.210	-0.0292	-0.009	0.775	0.0151	74231	0.197	0.0092	0.035	0.518	0.0045	438	10	190	0.990
10/18/2022	9:34:10	-0.184	-0.0212	0.002	0.528	0.0087	70851	0.181	0.0092	0.033	0.483	0.0043	373	10	190	0.990
10/18/2022	9:35:10	-0.201	-0.0333	-0.011	0.584	0.0090	79897	0.200	0.0096	0.039	0.582	0.0046	417	10	190	0.990
10/18/2022	9:36:10	-0.176	-0.0260	0.011	0.599	0.0138	84053	0.207	0.0100	0.041	0.433	0.0048	449	10	190	0.990
10/18/2022	9:37:10	-0.221	-0.0366	0.026	0.913	0.0997	73238	0.192	0.0090	0.035	0.599	0.0045	411	10	190	0.994
10/18/2022	9:38:10	-0.329	-0.0122	0.148	1.252	0.2091	74071	0.195	0.0088	0.035	0.574	0.0046	405	10	190	0.995
10/18/2022	9:39:10	-0.279	-0.0559	0.148	1.279	0.2078	74351	0.192	0.0095	0.036	0.555	0.0045	399	10	190	0.995
10/18/2022	9:40:13	-0.349	-0.0165	0.149	1.358	0.2058	74347	0.195	0.0093	0.037	0.704	0.0045	407	10	190	0.995
10/18/2022	9:41:10	-0.236	-0.0011	0.155	1.315	0.2037	73898	0.195	0.0092	0.036	0.497	0.0046	406	10	190	0.995
10/18/2022	9:42:10	-0.266	-0.0151	0.143	1.439	0.2014	74840	0.196	0.0092	0.037	0.672	0.0046	410	10	190	0.995
10/18/2022	9:43:10	-0.318	-0.0052	0.139	1.191	0.1535	80182	0.207	0.0088	0.038	0.530	0.0049	434	10	190	0.993
10/18/2022	9:44:10	-0.158	-0.0207	-0.016	0.732	0.0145	70485	0.194	0.0084	0.033	0.540	0.0045	413	10	190	0.990
10/18/2022	9:45:10	-0.244	-0.0219	0.015	0.682	0.0092	80892	0.209	0.0095	0.038	0.593	0.0049	437	10	190	0.991
10/18/2022	9:46:10	-0.246	-0.0275	-0.015	0.711	0.0135	73647	0.198	0.0087	0.036	0.706	0.0046	429	10	190	0.991
10/18/2022	9:47:10	-0.213	-0.0333	-0.011	0.593	0.0117	75152	0.200	0.0091	0.036	0.586	0.0047	413	10	190	0.991
10/18/2022	9:48:10	-0.239	-0.0297	-0.008	0.651	0.0091	77097	0.197	0.0095	0.037	0.806	0.0046	409	10	190	0.990
10/18/2022	9:49:10	-0.341	-0.0305	0.073	0.964	0.2920	77982	0.194	0.0096	0.038	0.578	0.0046	425	10	190	0.995
10/18/2022	9:50:10	-0.363	-0.0272	0.125	1.309	0.1895	75307	0.188	0.0094	0.036	0.636	0.0045	411	10	190	0.995
10/18/2022	9:51:12	-0.273	-0.0236	0.134	1.344	0.1856	74745	0.191	0.0096	0.035	0.534	0.0045	408	10	190	0.995
10/18/2022	9:52:11	-0.348	-0.0125	0.146	1.182	0.1872	74639	0.193	0.0092	0.035	0.556	0.0044	398	10	190	0.995
10/18/2022	9:53:10	-0.318	-0.0393	0.165	1.296	0.1806	74657	0.191	0.0091	0.036	0.516	0.0044	394	10	190	0.995
10/18/2022	9:54:10	-0.359	-0.0245	0.145	1.225	0.1854	74594	0.192	0.0089	0.035	0.510	0.0045	404	10	190	0.995
10/18/2022	9:55:10	-0.192	-0.0323	0.044	0.931	0.0599	73832	0.192	0.0092	0.037	0.585	0.0044	398	10	190	0.991

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	9:56:13	-0.206	-0.0419	-0.008	0.641	0.0098	77533	0.198	0.0097	0.038	0.501	0.0046	410	10	190	0.990
10/18/2022	9:57:10	-0.202	-0.0274	-0.010	0.621	0.0142	71162	0.187	0.0092	0.035	0.468	0.0044	400	10	190	0.990
10/18/2022	9:58:10	-0.213	-0.0446	0.001	0.561	0.0085	82163	0.205	0.0096	0.039	0.468	0.0047	429	10	190	0.990
10/18/2022	9:59:10	-0.234	-0.0356	-0.021	0.667	0.0145	71617	0.189	0.0090	0.034	0.637	0.0044	403	10	190	0.991
10/18/2022	10:00:10	-0.315	-0.0188	0.081	0.828	0.1510	76699	0.192	0.0097	0.035	0.604	0.0045	396	10	190	0.994
10/18/2022	10:01:10	-0.286	-0.0245	0.137	1.153	0.2213	75010	0.199	0.0094	0.035	0.554	0.0046	424	10	190	0.995
10/18/2022	10:02:10	-0.314	-0.0164	0.118	1.134	0.2174	75207	0.192	0.0091	0.037	0.537	0.0045	401	10	190	0.995
10/18/2022	10:03:10	-0.340	-0.0104	0.125	1.263	0.2241	75282	0.198	0.0091	0.035	0.530	0.0047	422	10	190	0.995
10/18/2022	10:04:10	-0.311	-0.0372	0.125	1.341	0.2249	75745	0.197	0.0090	0.036	0.676	0.0045	429	10	190	0.995
10/18/2022	10:05:10	-0.336	0.0007	0.125	1.274	0.2218	75318	0.198	0.0091	0.035	0.499	0.0047	425	10	190	0.995
10/18/2022	10:06:10	-0.223	-0.0228	0.056	0.969	0.0672	78508	0.207	0.0091	0.037	0.601	0.0048	449	10	190	0.991
10/18/2022	10:07:14	-0.206	-0.0265	-0.019	0.783	0.0132	73909	0.196	0.0091	0.036	0.571	0.0046	420	10	190	0.990
10/18/2022	10:08:10	-0.184	-0.0276	-0.020	0.562	0.0111	76623	0.202	0.0091	0.037	0.519	0.0047	419	10	190	0.990
10/18/2022	10:09:10	-0.216	-0.0290	-0.001	0.701	0.0136	83120	0.211	0.0097	0.039	0.578	0.0049	458	10	190	0.990
10/18/2022	10:10:10	-0.248	-0.0312	0.003	0.703	0.0143	75488	0.200	0.0089	0.037	0.627	0.0046	428	10	190	0.990
10/18/2022	10:11:10	-0.441	-0.0428	0.057	0.751	0.2573	80595	0.206	0.0096	0.038	0.447	0.0048	449	10	190	0.994
10/18/2022	10:12:10	-0.392	0.0067	0.084	1.171	0.2151	76718	0.202	0.0094	0.037	0.619	0.0047	429	10	190	0.995
10/18/2022	10:13:10	-0.286	-0.0092	0.118	1.321	0.2057	76856	0.202	0.0091	0.036	0.694	0.0047	437	10	190	0.995
10/18/2022	10:14:10	-0.298	-0.0183	0.108	1.178	0.2117	76370	0.199	0.0091	0.037	0.500	0.0046	427	10	190	0.995
10/18/2022	10:15:13	-0.304	0.0113	0.123	1.318	0.2087	76458	0.197	0.0090	0.036	0.662	0.0045	426	10	190	0.995
10/18/2022	10:16:10	-0.391	-0.0186	0.112	1.226	0.2062	76287	0.199	0.0093	0.036	0.572	0.0046	429	10	190	0.995
10/18/2022	10:17:10	-0.309	-0.0276	0.117	1.284	0.2099	76206	0.200	0.0090	0.036	0.529	0.0046	428	10	190	0.995
10/18/2022	10:18:10	-0.263	-0.0270	0.032	0.871	0.0594	78672	0.203	0.0093	0.037	0.442	0.0047	438	10	190	0.991
10/18/2022	10:19:10	-0.236	-0.0258	0.004	0.696	0.0143	72949	0.193	0.0091	0.035	0.526	0.0045	412	10	190	0.991
10/18/2022	10:20:10	-0.237	-0.0100	0.006	0.603	0.0080	85662	0.210	0.0098	0.039	0.514	0.0048	440	10	190	0.990
10/18/2022	10:21:10	-0.228	-0.0072	-0.006	0.724	0.0150	80367	0.207	0.0094	0.038	0.586	0.0048	447	10	190	0.990
10/18/2022	10:22:10	-0.285	-0.0277	-0.020	0.691	0.0160	84209	0.211	0.0100	0.040	0.525	0.0048	454	10	190	0.990
10/18/2022	10:23:10	-0.256	-0.0213	-0.006	0.691	0.0150	79696	0.207	0.0092	0.038	0.534	0.0048	447	10	190	0.991
10/18/2022	10:24:10	-0.361	-0.0030	0.015	0.827	0.2778	76165	0.195	0.0096	0.036	0.487	0.0045	424	10	190	0.995
10/18/2022	10:25:12	-0.313	-0.0007	0.088	1.025	0.2143	75799	0.199	0.0094	0.036	0.439	0.0047	430	10	190	0.995
10/18/2022	10:26:10	-0.318	-0.0185	0.106	1.210	0.2113	76183	0.200	0.0091	0.036	0.528	0.0046	431	10	190	0.995
10/18/2022	10:27:11	-0.336	-0.0067	0.108	1.330	0.2100	76056	0.198	0.0094	0.036	0.708	0.0046	429	10	190	0.995
10/18/2022	10:28:10	-0.412	-0.0058	0.110	1.119	0.2156	75651	0.198	0.0090	0.036	0.443	0.0047	426	10	190	0.995
10/18/2022	10:29:10	-0.347	-0.0172	0.127	1.330	0.2131	76729	0.199	0.0092	0.036	0.591	0.0046	427	10	190	0.996
10/18/2022	10:30:10	-0.391	-0.0099	0.121	1.059	0.2140	75847	0.200	0.0091	0.035	0.438	0.0046	425	10	190	0.995
10/18/2022	10:31:10	-0.248	-0.0287	0.053	0.843	0.0784	72424	0.192	0.0087	0.035	0.433	0.0044	410	10	190	0.991
10/18/2022	10:32:10	-0.226	-0.0377	0.001	0.599	0.0103	77782	0.201	0.0094	0.037	0.468	0.0047	417	10	190	0.990
10/18/2022	10:33:10	-0.201	-0.0412	-0.011	0.729	0.0130	76432	0.198	0.0094	0.037	0.634	0.0046	425	10	190	0.990
10/18/2022	10:34:10	-0.235	-0.0197	0.005	0.609	0.0130	75898	0.197	0.0094	0.035	0.537	0.0046	425	10	190	0.990
10/18/2022	10:35:10	-0.195	-0.0173	-0.023	0.624	0.0140	80674	0.205	0.0094	0.038	0.571	0.0047	447	10	190	0.990
10/18/2022	10:36:10	-0.285	-0.0360	-0.001	0.610	0.2716	78009	0.198	0.0094	0.037	0.483	0.0046	429	10	190	0.992
10/18/2022	10:37:10	-0.302	-0.0098	0.095	1.147	0.2290	75211	0.198	0.0090	0.035	0.619	0.0046	423	10	190	0.996
10/18/2022	10:38:10	-0.399	-0.0269	0.121	1.168	0.2055	75209	0.198	0.0092	0.035	0.449	0.0046	425	10	190	0.995
10/18/2022	10:39:10	-0.357	-0.0144	0.134	1.317	0.2056	75402	0.195	0.0093	0.036	0.570	0.0045	422	10	190	0.996
10/18/2022	10:40:10	-0.281	-0.0257	0.117	1.358	0.2082	75960	0.198	0.0092	0.036	0.500	0.0045	421	10	190	0.995
10/18/2022	10:41:10	-0.321	-0.0258	0.108	1.310	0.2088	76079	0.199	0.0092	0.036	0.514	0.0045	426	10	190	0.995
10/18/2022	10:42:10	-0.259	-0.0079	0.044	0.961	0.0671	76161	0.961	0.0091	0.035	0.506	0.0046	427	10	190	0.991

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	10:43:13	-0.215	-0.0182	-0.002	0.751	0.0141	80457	0.204	0.0096	0.038	0.549	0.0047	440	10	190	0.990
10/18/2022	10:44:10	-0.235	-0.0063	-0.008	0.680	0.0154	74844	0.197	0.0091	0.035	0.479	0.0046	422	10	190	0.990
10/18/2022	10:45:10	-0.185	-0.040	-0.004	0.630	0.0088	78940	0.199	0.0094	0.037	0.651	0.0046	414	10	190	0.990
10/18/2022	10:46:10	-0.215	-0.0292	-0.017	0.639	0.0147	78504	0.203	0.0099	0.037	0.492	0.0047	437	10	190	0.991
10/18/2022	10:47:10	-0.450	-0.0253	0.046	0.953	0.3349	78243	0.201	0.0094	0.037	0.617	0.0046	438	10	190	0.994
10/18/2022	10:48:13	-0.321	-0.0264	0.100	1.277	0.2098	76481	0.200	0.0093	0.036	0.567	0.0046	431	10	190	0.995
10/18/2022	10:49:10	-0.301	-0.0253	0.116	1.220	0.2067	76024	0.201	0.0095	0.036	0.424	0.0047	428	10	190	0.995
10/18/2022	10:50:10	-0.304	-0.0233	0.108	1.275	0.2104	76279	0.198	0.0094	0.036	0.452	0.0046	428	10	190	0.995
10/18/2022	10:51:10	-0.294	-0.0096	0.099	1.299	0.2077	75994	0.194	0.0091	0.036	0.451	0.0046	422	10	190	0.995
10/18/2022	10:52:10	-0.250	-0.0208	0.114	1.397	0.2118	76469	0.199	0.0087	0.036	0.601	0.0045	431	10	190	0.995
10/18/2022	10:53:10	-0.270	-0.0330	0.057	1.247	0.1215	82770	0.206	0.0099	0.039	0.607	0.0047	448	10	190	0.993
10/18/2022	10:54:10	-0.244	-0.0040	-0.007	0.616	0.0143	72582	0.190	0.0091	0.034	0.393	0.0044	406	10	190	0.990
10/18/2022	10:55:10	-0.219	-0.0195	-0.006	0.590	0.0111	82317	0.204	0.0100	0.039	0.568	0.0047	426	10	190	0.990
10/18/2022	10:56:10	-0.214	-0.0472	-0.014	0.670	0.0152	81575	0.205	0.0096	0.038	0.586	0.0047	441	10	190	0.990
10/18/2022	10:57:10	-0.193	-0.0494	-0.010	0.670	0.0135	80850	0.202	0.0096	0.039	0.554	0.0047	439	10	190	0.990
10/18/2022	10:58:10	-0.215	-0.0253	-0.003	0.630	0.0146	80634	0.202	0.0096	0.037	0.499	0.0047	437	10	190	0.990
10/18/2022	10:59:10	-0.245	-0.0257	-0.014	0.633	0.0138	79517	0.201	0.0096	0.037	0.569	0.0047	435	10	190	0.990
10/18/2022	11:00:12	-0.385	-0.0242	0.069	0.989	0.4950	72689	0.187	0.0094	0.034	0.523	0.0043	401	10	190	0.995
10/18/2022	11:01:10	-0.314	-0.0122	0.104	1.359	0.1891	75461	0.191	0.0094	0.036	0.535	0.0044	392	10	190	0.995
10/18/2022	11:02:10	-0.264	-0.0322	0.108	1.357	0.1901	75021	0.195	0.0091	0.036	0.413	0.0046	417	10	190	0.995
10/18/2022	11:03:10	-0.281	-0.0263	0.118	1.613	0.1935	75741	0.196	0.0097	0.037	0.646	0.0045	417	10	190	0.995
10/18/2022	11:04:10	-0.270	-0.0090	0.096	1.649	0.1915	75425	0.197	0.0096	0.037	0.723	0.0045	417	10	190	0.995
10/18/2022	11:05:10	-0.314	-0.0230	0.123	1.606	0.1874	76003	0.198	0.0095	0.036	0.615	0.0046	423	10	190	0.995
10/18/2022	11:06:11	-0.280	-0.0239	0.104	1.534	0.1884	75930	0.200	0.0090	0.036	0.534	0.0046	424	10	190	0.995
10/18/2022	11:07:12	-0.326	-0.0389	0.123	1.495	0.1856	75413	0.195	0.0094	0.036	0.468	0.0046	422	10	190	0.996
10/18/2022	11:08:10	-0.246	-0.0275	0.094	1.699	0.1875	76479	0.196	0.0093	0.036	0.715	0.0045	420	10	190	0.995
10/18/2022	11:09:10	-0.369	-0.0151	0.089	1.361	0.1443	79681	0.204	0.0098	0.039	0.555	0.0047	442	10	190	0.993
10/18/2022	11:10:10	-0.241	-0.0360	0.014	0.894	0.0124	76899	0.200	0.0093	0.036	0.723	0.0046	426	10	190	0.990
10/18/2022	11:11:10	-0.277	-0.0324	-0.005	0.750	0.0136	79980	0.204	0.0094	0.037	0.605	0.0047	441	10	190	0.990
10/18/2022	11:12:12	-0.235	-0.0345	-0.037	0.740	0.0132	80534	0.205	0.0093	0.039	0.610	0.0047	445	10	190	0.990
10/18/2022	11:13:11	-0.234	-0.0262	-0.013	0.574	0.0127	76217	0.196	0.0092	0.036	0.453	0.0046	422	10	190	0.990
10/18/2022	11:14:10	-0.242	-0.0352	-0.005	0.628	0.0138	87311	0.217	0.0100	0.041	0.578	0.0050	473	10	190	0.990
10/18/2022	11:15:10	-0.398	-0.0200	0.044	1.074	0.1902	82514	0.207	0.0099	0.039	0.583	0.0048	450	10	190	0.995
10/18/2022	11:16:10	-0.324	-0.0261	0.070	1.235	0.2457	76441	0.200	0.0094	0.036	0.450	0.0047	425	10	190	0.995
10/18/2022	11:17:13	-0.398	-0.0305	0.091	1.429	0.2412	76562	0.193	0.0096	0.036	0.504	0.0045	422	10	190	0.995
10/18/2022	11:18:10	-0.391	-0.0284	0.081	1.311	0.2447	76132	0.202	0.0093	0.037	0.475	0.0047	432	10	190	0.995
10/18/2022	11:19:10	-0.355	-0.0153	0.081	1.429	0.2423	76725	0.196	0.0098	0.036	0.558	0.0046	424	10	190	0.995
10/18/2022	11:20:10	-0.328	-0.0207	0.075	1.491	0.2416	76749	0.198	0.0093	0.036	0.643	0.0046	430	10	190	0.995
10/18/2022	11:21:10	-0.240	-0.0338	0.044	0.992	0.1125	67016	0.210	0.0087	0.033	0.404	0.0051	389	10	190	0.992
10/18/2022	11:22:10	-0.221	-0.0293	-0.003	0.499	0.0101	58090	0.167	0.0082	0.029	0.416	0.0040	328	10	190	0.990
10/18/2022	11:23:10	-0.217	-0.0409	-0.015	0.352	0.0081	60021	0.172	0.0082	0.030	0.437	0.0041	326	10	190	0.990
10/18/2022	11:24:13	-0.208	-0.0451	-0.001	0.361	0.0071	62644	0.175	0.0087	0.031	0.434	0.0042	333	10	190	0.990
10/18/2022	11:25:10	-0.225	-0.0257	-0.011	0.558	0.0108	64796	0.179	0.0087	0.032	0.587	0.0042	360	10	190	0.990
10/18/2022	11:26:10	-0.191	-0.0223	-0.016	0.578	0.0092	66146	0.183	0.0085	0.032	0.591	0.0043	370	10	190	0.990
10/18/2022	11:27:10	-0.221	-0.0199	-0.027	0.476	0.0107	72813	0.194	0.0090	0.037	0.487	0.0045	397	10	190	0.990
10/18/2022	11:28:10	-0.221	-0.0357	-0.003	0.519	0.0107	72936	0.194	0.0087	0.035	0.563	0.0045	400	10	190	0.990
10/18/2022	11:29:12	-0.247	-0.0254	-0.020	0.486	0.0100	74478	0.197	0.0090	0.035	0.519	0.0046	408	10	190	0.991

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	11:30:10	-0.205	-0.0143	0.468	0.0088	76528	0.196	0.0094	0.036	0.492	0.0046	408	10	190	0.991	
10/18/2022	11:31:10	-0.228	-0.0457	-0.039	0.568	0.0172	77585	0.207	0.0097	0.039	0.604	0.0048	445	10	190	0.990
10/18/2022	11:32:10	-0.205	-0.0428	-0.010	0.569	0.0146	76395	0.198	0.0095	0.037	0.474	0.0046	426	10	190	0.990
10/18/2022	11:33:10	-0.214	-0.0320	-0.026	0.581	0.0153	75455	0.200	0.0091	0.036	0.492	0.0047	431	10	190	0.991
10/18/2022	11:34:10	-0.229	-0.0273	-0.032	0.557	0.0143	77191	0.203	0.0093	0.037	0.477	0.0047	439	10	190	0.990
10/18/2022	11:35:10	-0.335	-0.0363	0.004	0.866	0.2005	81367	0.209	0.0097	0.039	0.618	0.0049	458	10	190	0.995
10/18/2022	11:36:10	-0.341	-0.0017	0.044	1.132	0.2423	77712	0.205	0.0092	0.039	0.546	0.0047	444	10	190	0.995
10/18/2022	11:37:10	-0.331	-0.0270	0.071	1.248	0.2449	77129	0.204	0.0096	0.036	0.595	0.0048	434	10	190	0.995
10/18/2022	11:38:10	-0.359	-0.0094	0.072	1.161	0.2434	76862	0.205	0.0096	0.037	0.505	0.0047	440	10	190	0.995
10/18/2022	11:39:10	-0.246	-0.0197	0.077	1.127	0.2394	76234	0.201	0.0095	0.037	0.445	0.0046	431	10	190	0.995
10/18/2022	11:40:10	-0.342	-0.0251	0.054	1.104	0.2410	76069	0.196	0.0095	0.036	0.410	0.0045	425	10	190	0.995
10/18/2022	11:41:12	-0.257	-0.0239	0.032	0.962	0.0779	73028	0.196	0.0091	0.035	0.613	0.0045	419	10	190	0.989
10/18/2022	11:42:10	-0.253	-0.0256	-0.019	0.567	0.0120	71984	0.191	0.0094	0.036	0.438	0.0045	394	10	190	0.989
10/18/2022	11:43:10	-0.263	-0.0167	-0.017	0.472	0.0098	81563	0.210	0.0094	0.038	0.491	0.0049	439	10	190	0.989
10/18/2022	11:44:10	-0.254	-0.0315	-0.022	0.664	0.0149	77072	0.204	0.0090	0.036	0.661	0.0047	439	10	190	0.989
10/18/2022	11:45:10	-0.165	-0.0398	0.001	0.580	0.0134	76519	0.199	0.0092	0.036	0.542	0.0046	433	10	190	0.990
10/18/2022	11:46:10	-0.420	-0.0202	0.007	0.698	0.3283	75426	0.195	0.0087	0.036	0.501	0.0046	427	10	190	0.993
10/18/2022	11:47:10	-0.374	-0.0485	0.054	1.077	0.2198	76241	0.200	0.0097	0.036	0.512	0.0046	425	10	190	0.995
10/18/2022	11:48:10	-0.460	-0.0115	0.061	1.232	0.2188	77377	0.198	0.0093	0.037	0.579	0.0048	436	10	190	0.995
10/18/2022	11:49:10	-0.352	-0.0190	0.062	1.198	0.2138	76073	0.199	0.0093	0.036	0.532	0.0047	435	10	190	0.995
10/18/2022	11:50:12	-0.288	-0.0330	0.086	1.250	0.2162	75628	0.199	0.0092	0.036	0.590	0.0047	430	10	190	0.995
10/18/2022	11:51:10	-0.312	-0.0144	0.069	1.357	0.2219	75742	0.198	0.0091	0.036	0.602	0.0045	427	10	190	0.995
10/18/2022	11:52:13	-0.362	-0.0239	0.094	1.270	0.2207	76431	0.196	0.0097	0.036	0.570	0.0045	422	10	190	0.995
10/18/2022	11:53:11	-0.285	-0.0156	0.033	1.003	0.0836	80417	0.207	0.0092	0.038	0.539	0.0047	447	10	190	0.991
10/18/2022	11:54:10	-0.241	-0.0360	-0.009	0.659	0.0164	77261	0.202	0.0093	0.036	0.500	0.0047	434	10	190	0.990
10/18/2022	11:55:10	-0.241	-0.0098	-0.011	0.694	0.0149	81271	0.207	0.0095	0.039	0.724	0.0048	449	10	190	0.990
10/18/2022	11:56:10	-0.247	-0.0197	-0.008	0.685	0.0162	82155	0.211	0.0097	0.038	0.646	0.0049	457	10	190	0.990
10/18/2022	11:57:10	-0.229	-0.0347	-0.008	0.645	0.0159	80817	0.209	0.0093	0.038	0.636	0.0048	455	10	190	0.990
10/18/2022	11:58:10	-0.238	-0.020	-0.013	0.507	0.0155	77582	0.205	0.0091	0.036	0.429	0.0047	440	10	190	0.990
10/18/2022	11:59:11	-0.410	-0.0234	-0.003	0.696	0.3637	76132	0.203	0.0089	0.037	0.454	0.0047	438	10	190	0.994
10/18/2022	12:00:10	-0.327	-0.0297	0.074	1.033	0.1970	75450	0.202	0.0091	0.036	0.460	0.0047	440	10	190	0.995
10/18/2022	12:01:10	-0.312	-0.0177	0.075	1.313	0.1890	76289	0.208	0.0089	0.036	0.572	0.0048	441	10	190	0.995
10/18/2022	12:02:10	-0.375	-0.0253	0.073	1.362	0.1844	76463	0.207	0.0091	0.037	0.550	0.0047	443	10	190	0.995
10/18/2022	12:03:10	-0.333	-0.0104	0.100	1.292	0.1843	76372	0.202	0.0094	0.037	0.473	0.0048	437	10	190	0.995
10/18/2022	12:04:11	-0.338	-0.0304	0.078	1.446	0.1842	77582	0.204	0.0095	0.038	0.584	0.0048	442	10	190	0.994
10/18/2022	12:05:13	-0.235	-0.0056	0.004	0.754	0.0155	77007	0.204	0.0091	0.037	0.494	0.0047	441	10	190	0.990
10/18/2022	12:06:10	-0.246	-0.0362	0.003	0.637	0.0145	75630	0.201	0.0090	0.036	0.481	0.0047	434	10	190	0.990
10/18/2022	12:07:13	-0.247	-0.0181	-0.004	0.621	0.0149	79925	0.208	0.0092	0.037	0.480	0.0048	448	10	190	0.990
10/18/2022	12:08:10	-0.261	-0.0165	-0.006	0.741	0.0149	79047	0.206	0.0091	0.037	0.716	0.0048	445	10	190	0.990
10/18/2022	12:09:10	-0.266	-0.0280	-0.008	0.629	0.0147	92839	0.231	0.0096	0.043	0.663	0.0053	510	10	190	0.991
10/18/2022	12:10:10	-0.473	-0.0426	0.031	1.007	0.4078	75808	0.203	0.0087	0.037	0.495	0.0047	458	10	190	0.994
10/18/2022	12:11:10	-0.310	-0.0392	0.059	1.437	0.1979	77356	0.209	0.0092	0.038	0.856	0.0048	445	10	190	0.995
10/18/2022	12:12:10	-0.365	-0.0290	0.081	1.473	0.1974	77225	0.202	0.0099	0.037	0.599	0.0047	435	10	190	0.995
10/18/2022	12:13:10	-0.319	-0.0071	0.068	1.493	0.1912	76888	0.209	0.0093	0.036	0.556	0.0047	442	10	190	0.995
10/18/2022	12:14:10	-0.362	-0.0207	0.076	1.610	0.1927	76935	0.201	0.0095	0.038	0.761	0.0046	439	10	190	0.995
10/18/2022	12:15:10	-0.256	-0.0253	0.041	1.071	0.0514	83091	0.215	0.0089	0.039	0.669	0.0049	467	10	190	0.991
10/18/2022	12:16:13	-0.269	0.0012	0.007	0.666	0.0157	76408	0.204	0.0086	0.037	0.471	0.0047	438	10	190	0.990

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	12:17:10	-0.252	-0.0336	-0.012	0.663	0.0143	80689	0.212	0.0092	0.038	0.542	0.0049	462	10	190	0.991
10/18/2022	12:18:10	-0.251	-0.0258	-0.003	0.664	0.0141	78460	0.206	0.0091	0.036	0.584	0.0048	446	10	190	0.990
10/18/2022	12:19:10	-0.240	-0.0495	-0.024	0.650	0.0152	85417	0.220	0.0094	0.041	0.678	0.0051	482	10	190	0.990
10/18/2022	12:20:10	-0.263	-0.0229	-0.023	0.515	0.0141	77855	0.210	0.0089	0.037	0.478	0.0049	452	10	190	0.991
10/18/2022	12:21:10	-0.254	-0.0139	-0.014	0.666	0.0144	80466	0.211	0.0094	0.038	0.584	0.0049	456	10	190	0.990
10/18/2022	12:22:10	-0.260	-0.0194	-0.006	0.684	0.0138	82828	0.215	0.0092	0.039	0.602	0.0049	468	10	190	0.990
10/18/2022	12:23:10	-0.239	-0.0165	-0.029	0.674	0.0150	79234	0.209	0.0090	0.038	0.649	0.0048	453	10	190	0.990
10/18/2022	12:24:10	-0.261	-0.0246	-0.020	0.603	0.0146	79783	0.211	0.0091	0.037	0.558	0.0049	457	10	190	0.990
10/18/2022	12:25:10	-0.518	-0.0244	-0.033	0.691	0.6100	73832	0.189	0.0090	0.035	0.449	0.0045	425	10	190	0.994
10/18/2022	12:26:10	-1.155	-0.0411	-0.141	0.992	1.2289	62006	0.169	0.0082	0.031	0.423	0.0040	362	10	190	0.995
10/18/2022	12:27:10	-1.092	-0.0260	-0.251	1.236	1.2380	61493	0.167	0.0084	0.031	0.480	0.0039	359	10	190	0.995
10/18/2022	12:28:10	-1.072	-0.0375	-0.351	1.268	1.2318	60530	0.167	0.0085	0.031	0.431	0.0040	349	10	190	0.995
10/18/2022	12:29:10	-1.088	-0.0272	-0.443	1.252	1.2281	60268	0.165	0.0083	0.030	0.448	0.0040	337	10	190	0.995
10/18/2022	12:30:10	-1.022	-0.0243	-0.532	1.240	1.2157	60443	0.165	0.0084	0.031	0.442	0.0039	330	10	190	0.995
10/18/2022	12:31:10	-1.055	-0.0115	-0.601	1.253	1.2118	60669	0.164	0.0083	0.031	0.434	0.0040	331	10	190	0.995
10/18/2022	12:32:13	-1.141	-0.0124	-0.690	1.236	1.2098	60267	0.166	0.0087	0.031	0.443	0.0038	334	10	190	0.995
10/18/2022	12:33:10	-1.048	-0.0144	-0.752	1.190	1.2063	60284	0.165	0.0084	0.030	0.417	0.0039	334	10	190	0.995
10/18/2022	12:34:10	-1.111	-0.0118	-0.830	1.263	1.2173	60482	0.164	0.0089	0.031	0.447	0.0039	333	10	190	0.995
10/18/2022	12:35:10	-1.196	-0.0195	-0.846	1.420	1.2285	60320	0.166	0.0089	0.031	0.611	0.0040	339	10	190	0.995
10/18/2022	12:36:10	-0.737	-0.0258	-0.935	1.456	0.7689	66328	0.182	0.0090	0.034	0.581	0.0044	369	10	190	0.995
10/18/2022	12:37:10	-0.283	-0.0227	-0.802	1.747	0.1621	76317	0.205	0.0092	0.038	0.609	0.0047	428	10	190	0.995
10/18/2022	12:38:10	-0.466	-0.0157	-0.617	1.878	0.1634	76503	0.206	0.0095	0.037	0.645	0.0048	441	10	190	0.995
10/18/2022	12:39:10	-0.379	-0.0346	-0.500	1.690	0.1634	76539	0.204	0.0090	0.038	0.539	0.0047	439	10	190	0.995
10/18/2022	12:40:10	-0.290	-0.0061	-0.428	1.742	0.1661	76860	0.202	0.0092	0.038	0.676	0.0047	441	10	190	0.995
10/18/2022	12:41:10	-0.375	-0.0219	-0.393	1.628	0.1642	76548	0.201	0.0091	0.036	0.505	0.0048	437	10	190	0.995
10/18/2022	12:42:10	-0.379	-0.0200	-0.336	1.507	0.1615	76613	0.201	0.0088	0.037	0.455	0.0047	438	10	190	0.996
10/18/2022	12:43:10	-0.583	-0.0351	-0.314	1.533	0.4868	72724	0.193	0.0092	0.035	0.486	0.0043	418	10	190	0.995
10/18/2022	12:44:10	-0.969	-0.0150	-0.283	1.279	0.9377	66146	0.174	0.0085	0.031	0.457	0.0041	366	10	190	0.995
10/18/2022	12:45:10	-0.976	-0.0386	-0.306	1.407	0.9425	65992	0.177	0.0085	0.032	0.708	0.0042	377	10	190	0.995
10/18/2022	12:46:10	-0.992	-0.0357	-0.377	1.140	0.9340	65481	0.173	0.0084	0.032	0.404	0.0041	367	10	190	0.995
10/18/2022	12:47:10	-0.875	-0.0165	-0.481	1.246	0.9321	65153	0.172	0.0088	0.032	0.385	0.0040	360	10	190	0.995
10/18/2022	12:48:10	-1.073	-0.0448	-0.536	1.325	0.9302	65209	0.173	0.0090	0.033	0.518	0.0040	364	10	190	0.995
10/18/2022	12:49:10	-1.015	-0.0254	-0.587	1.309	0.9283	65521	0.174	0.0087	0.034	0.476	0.0041	369	10	190	0.995
10/18/2022	12:50:10	-0.903	-0.0198	-0.645	1.376	0.9215	65835	0.175	0.0088	0.034	0.657	0.0041	368	10	190	0.995
10/18/2022	12:51:10	-0.965	-0.0106	-0.701	1.301	0.9166	65410	0.173	0.0087	0.033	0.500	0.0040	366	10	190	0.995
10/18/2022	12:52:11	-0.993	-0.0244	-0.727	1.266	0.9127	65474	0.175	0.0091	0.033	0.467	0.0041	368	10	190	0.996
10/18/2022	12:53:10	-0.927	-0.0421	-0.752	1.295	0.9123	65511	0.172	0.0092	0.032	0.490	0.0040	365	10	190	0.995
10/18/2022	12:54:10	-1.015	-0.0148	-0.760	1.164	0.9225	64785	0.174	0.0092	0.033	0.418	0.0041	364	10	190	0.995
10/18/2022	12:55:10	-1.027	-0.0111	-0.779	1.225	0.9256	65202	0.176	0.0092	0.033	0.457	0.0042	367	10	190	0.996
10/18/2022	12:56:11	-0.975	-0.0155	-0.819	1.201	0.9262	65397	0.173	0.0091	0.033	0.455	0.0040	365	10	190	0.995
10/18/2022	12:57:12	-1.008	-0.0241	-0.823	1.356	0.9292	64756	0.174	0.0092	0.032	0.544	0.0041	366	10	190	0.995
10/18/2022	12:58:10	-0.914	-0.0356	-0.840	1.207	0.9303	64992	0.175	0.0092	0.032	0.458	0.0041	368	10	190	0.995
10/18/2022	12:59:12	-0.986	-0.0246	-0.862	1.201	0.9260	65182	0.175	0.0088	0.032	0.449	0.0042	372	10	190	0.995
10/18/2022	13:00:11	-0.993	-0.0143	-0.877	1.285	0.9216	65166	0.176	0.0088	0.033	0.553	0.0041	369	10	190	0.996
10/18/2022	13:01:10	-0.900	-0.0457	-0.897	1.243	0.9197	65418	0.177	0.0092	0.033	0.496	0.0041	370	10	190	0.995
10/18/2022	13:02:10	-0.960	-0.0065	-0.932	1.206	0.9125	65561	0.175	0.0090	0.032	0.467	0.0042	367	10	190	0.995
10/18/2022	13:03:10	-1.057	-0.0084	-0.927	1.228	0.9203	65062	0.178	0.0090	0.032	0.522	0.0042	379	10	190	0.995

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	13:04:10	-0.955	-0.0252	0.933	1.196	0.9260	65034	0.176	0.0089	0.032	0.451	0.0041	368	10	190	0.995
10/18/2022	13:05:10	-1.002	-0.0365	0.923	1.085	0.9261	64540	0.176	0.0092	0.033	0.408	0.0042	371	10	190	0.995
10/18/2022	13:06:10	-0.878	-0.0217	0.951	1.297	0.9326	64510	0.177	0.0093	0.033	0.559	0.0041	369	10	190	0.996
10/18/2022	13:07:10	-0.996	-0.0097	0.969	1.221	0.9380	64707	0.174	0.0088	0.033	0.501	0.0040	368	10	190	0.995
10/18/2022	13:08:10	-0.905	-0.0081	0.991	1.188	0.9389	64741	0.175	0.0088	0.032	0.445	0.0041	369	10	190	0.996
10/18/2022	13:09:10	-0.978	-0.0248	0.997	1.201	0.9398	64520	0.177	0.0091	0.032	0.586	0.0041	369	10	190	0.996
10/18/2022	13:10:10	-0.994	-0.0270	1.004	1.174	0.9398	64508	0.173	0.0096	0.032	0.430	0.0042	362	10	190	0.996
10/18/2022	13:11:10	-1.016	-0.0102	1.004	1.080	0.9423	64380	0.174	0.0090	0.032	0.417	0.0041	368	10	190	0.996
10/18/2022	13:12:11	-0.939	-0.0066	1.041	1.085	0.9370	64767	0.173	0.0093	0.033	0.441	0.0041	363	10	190	0.996
10/18/2022	13:13:10	-0.367	-0.0007	0.209	0.846	0.0713	91422	0.236	0.0104	0.045	0.545	0.0053	487	10	190	0.990
10/18/2022	13:14:10	-0.236	-0.0243	0.036	0.899	0.0174	80524	0.217	0.0094	0.038	0.716	0.0049	486	10	190	0.990
10/18/2022	13:15:10	-0.285	-0.0149	0.014	0.644	0.0147	81722	0.213	0.0094	0.037	0.533	0.0049	459	10	190	0.990
10/18/2022	13:16:10	-0.294	-0.0237	0.018	0.593	0.0155	80357	0.213	0.0093	0.037	0.509	0.0049	456	10	190	0.990
10/18/2022	13:17:10	-0.286	-0.0066	-0.029	0.751	0.0150	79257	0.210	0.0091	0.037	0.879	0.0048	453	10	190	0.990
10/18/2022	13:18:10	-0.285	-0.0226	-0.015	0.665	0.0153	80483	0.213	0.0091	0.039	0.608	0.0049	462	10	190	0.990
10/18/2022	13:19:13	-0.292	-0.0401	0.010	0.564	0.0131	77853	0.209	0.0090	0.036	0.560	0.0049	455	10	190	0.990
10/18/2022	13:20:10	-0.293	-0.0317	0.159	0.937	0.1204	86522	0.219	0.0104	0.042	0.711	0.0051	481	10	190	0.993
10/18/2022	13:21:10	-0.264	-0.0131	0.360	1.118	0.1914	77174	0.202	0.0093	0.037	0.465	0.0047	437	10	190	0.995
10/18/2022	13:22:10	-0.379	-0.0029	0.371	1.306	0.1916	77616	0.210	0.0093	0.037	0.710	0.0049	450	10	190	0.995
10/18/2022	13:23:10	-0.388	-0.0115	0.341	1.162	0.1868	77168	0.209	0.0092	0.037	0.465	0.0048	448	10	190	0.995
10/18/2022	13:24:10	-0.327	-0.0039	0.344	1.205	0.1860	76967	0.205	0.0089	0.036	0.483	0.0047	442	10	190	0.995
10/18/2022	13:25:10	-0.264	-0.0282	0.120	0.824	0.0565	70915	0.197	0.0089	0.034	0.461	0.0046	419	10	190	0.991
10/18/2022	13:26:10	-0.248	-0.0465	0.043	0.594	0.0088	81947	0.214	0.0092	0.038	0.597	0.0050	450	10	190	0.989
10/18/2022	13:27:10	-0.280	-0.0360	-0.006	0.694	0.0152	76067	0.205	0.0089	0.036	0.663	0.0048	444	10	190	0.989
10/18/2022	13:28:10	-0.247	-0.0334	-0.023	0.707	0.0170	76644	0.206	0.0089	0.038	0.648	0.0048	441	10	190	0.989
10/18/2022	13:29:10	-0.284	-0.0062	-0.007	0.650	0.0140	82225	0.215	0.0092	0.038	0.598	0.0049	467	10	190	0.990
10/18/2022	13:30:10	-0.423	-0.0265	0.286	0.701	0.4030	73628	0.196	0.0091	0.036	0.493	0.0046	426	10	190	0.992
10/18/2022	13:31:10	-0.295	-0.0011	0.975	0.998	0.1994	76549	0.203	0.0099	0.038	0.497	0.0047	420	10	190	0.995
10/18/2022	13:32:10	-0.416	-0.0163	0.783	1.183	0.1956	77267	0.209	0.0099	0.038	0.535	0.0048	451	10	190	0.995
10/18/2022	13:33:10	-0.377	-0.0373	0.645	1.242	0.1990	77036	0.210	0.0095	0.038	0.550	0.0048	454	10	190	0.995
10/18/2022	13:34:10	-0.266	-0.0176	0.563	1.259	0.1991	76691	0.205	0.0095	0.037	0.590	0.0047	446	10	190	0.995
10/18/2022	13:35:10	-0.371	-0.0073	0.522	1.269	0.1971	76979	0.208	0.0095	0.036	0.579	0.0047	440	10	190	0.995
10/18/2022	13:36:11	-0.278	-0.0158	0.188	0.902	0.0741	72738	0.201	0.0089	0.036	0.519	0.0046	427	10	190	0.991
10/18/2022	13:37:10	-0.290	-0.0318	0.014	0.562	0.0110	83734	0.219	0.0095	0.039	0.505	0.0051	461	10	190	0.990
10/18/2022	13:38:10	-0.269	-0.0110	-0.008	0.683	0.0152	78546	0.212	0.0089	0.038	0.607	0.0049	458	10	190	0.989
10/18/2022	13:39:10	-0.263	-0.0355	0.003	0.680	0.0156	83170	0.218	0.0091	0.037	0.541	0.0050	475	10	190	0.989
10/18/2022	13:40:10	-0.245	-0.0513	0.018	0.553	0.0125	81420	0.213	0.0095	0.039	0.579	0.0049	464	10	190	0.990
10/18/2022	13:41:10	-0.287	-0.0176	-0.011	0.678	0.0148	78789	0.211	0.0088	0.036	0.536	0.0049	456	10	190	0.990
10/18/2022	13:42:10	-0.292	-0.0334	-0.024	0.732	0.0155	81572	0.218	0.0089	0.039	0.727	0.0050	475	10	190	0.990
10/18/2022	13:43:10	-0.510	-0.0249	0.912	0.844	0.4756	74797	0.204	0.0094	0.037	0.505	0.0047	440	10	190	0.994
10/18/2022	13:44:13	-0.270	-0.0021	1.020	1.000	0.1882	76955	0.208	0.0097	0.038	0.578	0.0049	440	10	190	0.995
10/18/2022	13:45:10	-0.422	-0.0146	0.815	1.102	0.1938	76257	0.204	0.0096	0.037	0.447	0.0047	439	10	190	0.995
10/18/2022	13:46:10	-0.364	-0.0294	0.705	1.268	0.1902	76849	0.205	0.0094	0.038	0.674	0.0047	441	10	190	0.995
10/18/2022	13:47:10	-0.311	-0.0139	0.605	1.268	0.1919	76792	0.207	0.0098	0.037	0.599	0.0047	440	10	190	0.995
10/18/2022	13:48:10	-0.362	-0.0200	0.541	1.183	0.1941	76505	0.212	0.0092	0.038	0.549	0.0049	454	10	190	0.995
10/18/2022	13:49:10	-0.380	-0.0118	0.509	1.316	0.1912	76848	0.209	0.0086	0.037	0.704	0.0048	453	10	190	0.995
10/18/2022	13:50:12	-0.269	-0.0323	0.231	0.983	0.0725	78210	0.212	0.0090	0.037	0.673	0.0049	454	10	190	0.991

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	13:51:10	-0.232	-0.0332	0.015	0.692	0.0139	79331	0.216	0.0090	0.037	0.522	0.0050	467	10	190	0.990
Method 301 Validation HCl																
10/18/2022	13:52:10	-0.268	-0.0126	0.005	0.703	0.0168	77130	0.212	0.0090	0.036	0.559	0.0049	458	10	190	0.990
10/18/2022	13:53:10	-0.262	-0.0221	-0.004	0.651	0.0157	82542	0.222	0.0087	0.038	0.621	0.0051	484	10	190	0.990
10/18/2022	13:54:10	-0.265	-0.0353	-0.009	0.680	0.0166	78488	0.214	0.0090	0.037	0.540	0.0049	465	10	190	0.990
10/18/2022	13:55:10	-0.224	-0.0373	-0.019	0.637	0.0159	79465	0.215	0.0086	0.037	0.579	0.0050	467	10	190	0.990
10/18/2022	13:56:10	-0.419	-0.0331	0.457	0.713	0.3005	75218	0.204	0.0090	0.037	0.605	0.0047	443	10	190	0.993
10/18/2022	13:57:10	-0.399	-0.0185	1.121	0.189	0.2215	77435	0.215	0.0095	0.038	0.638	0.0049	467	10	190	0.995
10/18/2022	13:58:10	-0.314	-0.0215	0.380	1.130	0.2208	76298	0.204	0.0097	0.037	0.498	0.0048	444	10	190	0.995
10/18/2022	13:59:10	-0.489	-0.0229	0.724	1.080	0.2155	76455	0.208	0.0094	0.038	0.502	0.0049	455	10	190	0.995
10/18/2022	14:00:10	-0.382	-0.0049	0.674	1.224	0.2195	76478	0.210	0.0090	0.037	0.839	0.0048	455	10	190	0.995
10/18/2022	14:01:10	-0.287	-0.0122	0.597	1.208	0.2142	76379	0.205	0.0094	0.037	0.642	0.0048	444	10	190	0.995
10/18/2022	14:02:10	-0.318	-0.0266	0.544	1.213	0.2087	76856	0.206	0.0091	0.038	0.736	0.0047	445	10	190	0.995
10/18/2022	14:03:10	-0.359	0.0016	0.425	1.056	0.1727	76532	0.204	0.0090	0.036	0.444	0.0046	441	10	190	0.992
10/18/2022	14:04:13	-0.230	-0.0259	0.036	0.694	0.0149	70524	0.195	0.0087	0.033	0.439	0.0045	414	10	190	0.989
10/18/2022	14:05:10	-0.282	-0.0364	0.043	0.599	0.0082	81120	0.211	0.0099	0.038	0.495	0.0049	442	10	190	0.988
10/18/2022	14:06:10	-0.292	-0.0422	0.008	0.747	0.0143	81527	0.210	0.0102	0.039	0.647	0.0048	452	10	190	0.988
10/18/2022	14:07:10	-0.268	-0.0533	-0.028	0.636	0.0177	78924	0.206	0.0091	0.038	0.468	0.0048	446	10	190	0.988
10/18/2022	14:08:10	-0.260	-0.0225	-0.013	0.654	0.0153	79557	0.208	0.0095	0.037	0.513	0.0048	447	10	190	0.988
10/18/2022	14:09:10	-0.277	-0.0321	-0.005	0.613	0.0151	76416	0.203	0.0090	0.037	0.461	0.0047	434	10	190	0.988
10/18/2022	14:10:10	-0.399	-0.0086	0.746	0.868	0.3002	77917	0.201	0.0101	0.037	0.495	0.0046	430	10	190	0.995
10/18/2022	14:11:10	-0.283	-0.0114	0.962	1.142	0.1792	77263	0.197	0.0102	0.037	0.607	0.0046	424	10	190	0.995
10/18/2022	14:12:10	-0.316	-0.0177	0.782	1.073	0.1818	77269	0.202	0.0101	0.037	0.551	0.0048	431	10	190	0.995
10/18/2022	14:13:10	-0.391	-0.0164	0.676	1.072	0.1770	77528	0.201	0.0096	0.036	0.552	0.0047	438	10	190	0.995
10/18/2022	14:14:10	-0.317	-0.0272	0.622	1.115	0.1775	77282	0.201	0.0097	0.037	0.565	0.0047	434	10	190	0.995
10/18/2022	14:15:10	-0.397	-0.0246	0.457	1.047	0.1362	77727	0.204	0.0090	0.037	0.567	0.0047	440	10	190	0.993
10/18/2022	14:16:10	-0.263	-0.0301	0.027	0.703	0.0138	84494	0.215	0.0097	0.040	0.519	0.0049	469	10	190	0.989
10/18/2022	14:17:10	-0.261	-0.0324	0.000	0.599	0.0137	78229	0.205	0.0093	0.037	0.453	0.0047	441	10	190	0.989
10/18/2022	14:18:10	-0.266	-0.0254	-0.005	0.665	0.0134	74598	0.197	0.0089	0.036	0.548	0.0046	424	10	190	0.989
10/18/2022	14:19:10	-0.268	-0.0296	-0.027	0.656	0.0118	73575	0.197	0.0089	0.035	0.624	0.0046	405	10	190	0.990
10/18/2022	14:20:10	-0.263	-0.0204	-0.002	0.530	0.0093	81344	0.207	0.0097	0.038	0.553	0.0048	435	10	190	0.990
10/18/2022	14:21:10	-0.277	-0.0222	-0.025	0.666	0.0141	77453	0.201	0.0097	0.036	0.591	0.0046	432	10	190	0.990
10/18/2022	14:22:10	-0.258	-0.0159	-0.019	0.570	0.0142	79146	0.204	0.0093	0.037	0.462	0.0047	442	10	190	0.989
10/18/2022	14:23:10	-0.400	-0.0062	0.891	0.746	0.3153	75596	0.196	0.0096	0.036	0.446	0.0046	421	10	190	0.995
10/18/2022	14:24:10	-0.344	-0.0108	1.060	0.986	0.1880	77297	0.200	0.0101	0.037	0.502	0.0046	431	10	190	0.995
10/18/2022	14:25:10	-0.257	-0.0069	0.880	1.118	0.1854	77391	0.202	0.0101	0.037	0.701	0.0046	428	10	190	0.995
10/18/2022	14:26:10	-0.325	-0.0151	0.754	1.025	0.1841	77215	0.200	0.0099	0.037	0.512	0.0047	437	10	190	0.995
10/18/2022	14:27:10	-0.362	-0.0118	0.666	1.029	0.1879	76998	0.206	0.0098	0.037	0.550	0.0047	438	10	190	0.995
10/18/2022	14:28:10	-0.313	-0.0243	0.611	1.061	0.1896	76791	0.199	0.0098	0.036	0.544	0.0046	431	10	190	0.995
10/18/2022	14:29:13	-0.283	-0.0204	0.294	0.881	0.0769	75309	0.199	0.0091	0.036	0.453	0.0046	430	10	190	0.991
10/18/2022	14:30:10	-0.303	-0.0180	0.039	0.623	0.0123	72151	0.197	0.0094	0.035	0.480	0.0046	401	10	190	0.989
10/18/2022	14:31:10	-0.330	-0.0326	0.009	0.619	0.0108	78391	0.213	0.0093	0.037	0.551	0.0049	444	10	190	0.989
10/18/2022	14:32:10	-0.323	-0.0193	0.017	0.666	0.0135	81932	0.212	0.0095	0.038	0.538	0.0049	459	10	191	0.989
10/18/2022	14:33:10	-0.313	-0.0259	0.000	0.618	0.0159	78070	0.201	0.0099	0.037	0.461	0.0046	427	10	191	0.988
10/18/2022	14:34:10	-0.282	-0.0456	-0.003	0.739	0.0130	82759	0.209	0.0096	0.039	0.775	0.0048	454	10	190	0.988
10/18/2022	14:35:10	-0.276	-0.0380	-0.011	0.570	0.0139	79181	0.205	0.0096	0.036	0.478	0.0047	442	10	190	0.989
10/18/2022	14:36:10	-0.444	-0.0128	0.578	0.725	0.3862	78232	0.197	0.0097	0.038	0.521	0.0046	428	10	190	0.993

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	14:37:10	-0.402	0.0004	1.244	0.968	0.1847	77447	0.201	0.0107	0.038	0.494	0.0046	432	10	190	0.995
10/18/2022	14:38:10	-0.349	-0.0170	1.007	1.012	0.1840	76854	0.203	0.0103	0.037	0.544	0.0047	432	10	190	0.995
10/18/2022	14:39:10	-0.473	-0.0073	0.846	0.996	0.1843	76685	0.204	0.0100	0.037	0.522	0.0048	438	10	190	0.995
10/18/2022	14:40:10	-0.350	-0.0009	0.733	0.956	0.1833	76160	0.201	0.0099	0.036	0.431	0.0047	429	10	190	0.995
10/18/2022	14:41:10	-0.393	-0.0259	0.673	1.023	0.1815	76656	0.201	0.0101	0.036	0.493	0.0047	432	10	190	0.995
10/18/2022	14:42:10	-0.411	-0.0082	0.615	1.077	0.1836	77132	0.199	0.0096	0.037	0.540	0.0046	430	10	190	0.995
10/18/2022	14:43:10	-0.276	-0.0027	0.243	0.729	0.0571	72306	0.194	0.0094	0.035	0.444	0.0045	409	10	190	0.990
10/18/2022	14:44:10	-0.289	-0.0344	-0.008	0.716	0.0130	75903	0.202	0.0093	0.037	0.644	0.0047	414	10	190	0.989
10/18/2022	14:45:10	-0.303	-0.0185	0.633	0.0142	80241	0.206	0.0099	0.036	0.517	0.0048	441	10	190	0.989	
10/18/2022	14:46:10	-0.260	-0.0313	-0.012	0.696	0.0159	80608	0.209	0.0092	0.038	0.785	0.0048	450	10	190	0.989
10/18/2022	14:47:12	-0.293	-0.0280	0.006	0.612	0.0154	81485	0.211	0.0095	0.038	0.539	0.0048	455	10	190	0.989
10/18/2022	14:48:10	-0.262	-0.0314	-0.028	0.588	0.0156	73081	0.196	0.0093	0.034	0.538	0.0045	417	10	190	0.989
10/18/2022	14:49:10	-0.260	-0.0443	-0.012	0.520	0.0112	75978	0.196	0.0098	0.036	0.585	0.0045	404	10	190	0.990
10/18/2022	14:50:10	-0.243	-0.0390	-0.014	0.568	0.0142	75270	0.197	0.0094	0.036	0.538	0.0046	422	10	190	0.990
10/18/2022	14:51:10	-0.580	-0.0047	0.924	0.533	0.4452	74625	0.191	0.0097	0.036	0.457	0.0045	404	10	190	0.995
10/18/2022	14:52:11	-0.331	-0.0193	1.251	0.866	0.1801	77032	0.192	0.0106	0.038	0.478	0.0045	401	10	190	0.995
10/18/2022	14:53:13	-0.296	0.0210	1.037	1.016	0.1756	76779	0.200	0.0106	0.037	0.576	0.0047	433	10	190	0.996
10/18/2022	14:54:10	-0.399	-0.0250	0.875	1.113	0.1794	76784	0.206	0.0101	0.039	0.776	0.0048	439	10	190	0.996
10/18/2022	14:55:10	-0.363	-0.0108	0.743	1.102	0.1713	76712	0.201	0.0096	0.037	0.653	0.0046	432	10	190	0.995
10/18/2022	14:56:10	-0.347	-0.0374	0.718	1.094	0.1770	77050	0.204	0.0101	0.038	0.653	0.0046	435	10	190	0.996
10/18/2022	14:57:10	-0.385	-0.0013	0.629	1.119	0.1712	76674	0.203	0.0098	0.038	0.714	0.0047	434	10	190	0.995
10/18/2022	14:58:13	-0.324	-0.0281	0.300	0.912	0.0778	83658	0.213	0.0100	0.039	0.547	0.0049	462	10	190	0.992
10/18/2022	14:59:10	-0.307	-0.0224	0.029	0.712	0.0146	83259	0.211	0.0098	0.039	0.549	0.0049	456	10	190	0.990
10/18/2022	15:00:10	-0.310	0.0003	0.002	0.671	0.0161	79005	0.205	0.0098	0.037	0.536	0.0047	441	10	190	0.990
10/18/2022	15:01:11	-0.275	-0.0287	-0.007	0.597	0.0139	75361	0.199	0.0093	0.035	0.481	0.0046	427	10	190	0.989
10/18/2022	15:02:10	-0.260	-0.0376	-0.017	0.455	0.0093	78132	0.201	0.0095	0.037	0.478	0.0046	417	10	190	0.989
10/18/2022	15:03:10	-0.280	-0.0124	-0.009	0.553	0.0162	78523	0.205	0.0093	0.037	0.498	0.0047	440	10	190	0.989
10/18/2022	15:04:10	-0.363	-0.0299	0.125	0.712	0.2188	79119	0.205	0.0094	0.037	0.589	0.0048	443	10	190	0.991
10/18/2022	15:05:10	-0.368	0.0021	0.982	0.857	0.2050	78178	0.211	0.0099	0.038	0.506	0.0048	439	10	190	0.995
10/18/2022	15:06:10	-0.346	-0.0212	0.863	0.887	0.1716	76784	0.203	0.0098	0.037	0.469	0.0047	432	10	190	0.995
10/18/2022	15:07:10	-0.297	-0.0362	0.770	0.960	0.1706	77159	0.208	0.0099	0.038	0.542	0.0047	438	10	190	0.995
10/18/2022	15:08:10	-0.370	-0.0503	0.673	1.012	0.1871	77051	0.204	0.0099	0.037	0.715	0.0046	439	10	190	0.995
10/18/2022	15:09:10	-0.338	-0.0131	0.627	1.009	0.1870	76214	0.197	0.0098	0.036	0.479	0.0046	425	10	190	0.995
10/18/2022	15:10:10	-0.321	0.0068	0.231	0.820	0.0665	79715	0.210	0.0094	0.038	0.543	0.0048	449	10	190	0.991
10/18/2022	15:11:10	-0.267	-0.0321	0.014	0.624	0.0159	69775	0.192	0.0088	0.033	0.532	0.0045	408	10	190	0.989
10/18/2022	15:12:10	-0.321	-0.0217	0.024	0.452	0.0110	75970	0.204	0.0092	0.035	0.466	0.0047	422	10	190	0.989
10/18/2022	15:13:10	-0.257	-0.0387	-0.016	0.669	0.0157	81064	0.210	0.0098	0.040	0.682	0.0048	455	10	190	0.989
10/18/2022	15:14:10	-0.269	-0.0413	-0.008	0.657	0.0149	80248	0.209	0.0098	0.038	0.658	0.0048	451	10	190	0.989
10/18/2022	15:15:10	-0.289	-0.0400	-0.012	0.625	0.0155	82642	0.214	0.0092	0.038	0.514	0.0049	467	10	190	0.990
10/18/2022	15:16:10	-0.437	-0.0310	0.862	0.736	0.4114	81157	0.209	0.0100	0.039	0.459	0.0048	452	10	190	0.994
10/18/2022	15:17:10	-0.414	0.0116	1.084	0.855	0.1872	76663	0.205	0.0103	0.038	0.528	0.0048	441	10	190	0.995
10/18/2022	15:18:10	-0.397	-0.0082	0.906	0.956	0.1887	77035	0.210	0.0100	0.037	0.530	0.0049	449	10	190	0.995
10/18/2022	15:19:11	-0.350	-0.0321	0.782	1.008	0.1855	77025	0.202	0.0098	0.037	0.711	0.0046	436	10	190	0.995
10/18/2022	15:20:10	-0.453	-0.0279	0.728	0.932	0.1926	77809	0.206	0.0101	0.037	0.696	0.0047	446	10	190	0.995
10/18/2022	15:21:10	-0.441	-0.0218	0.651	1.022	0.1956	76632	0.202	0.0096	0.036	0.582	0.0047	437	10	190	0.995
10/18/2022	15:22:10	-0.305	-0.0041	0.529	0.965	0.1724	77504	0.206	0.0093	0.038	0.601	0.0047	445	10	190	0.994
10/18/2022	15:23:10	-0.269	-0.0386	0.070	0.701	0.0169	72083	0.197	0.0095	0.035	0.478	0.0046	417	10	190	0.989

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	15:24:10	-0.290	-0.0394	0.034	0.559	0.0111	65409	0.184	0.0087	0.031	0.582	0.0043	371	10	190	0.988
10/18/2022	15:25:12	-0.261	-0.0522	0.023	0.534	0.0118	64897	0.181	0.0086	0.032	0.453	0.0043	363	10	190	0.988
10/18/2022	15:26:10	-0.290	-0.0396	0.019	0.554	0.0114	68537	0.189	0.0089	0.032	0.598	0.0044	385	10	190	0.988
10/18/2022	15:27:10	-0.283	-0.0383	0.002	0.448	0.0114	71744	0.196	0.0091	0.035	0.427	0.0045	400	10	190	0.988
10/18/2022	15:28:12	-0.291	-0.0373	-0.008	0.512	0.0114	75770	0.201	0.0094	0.037	0.455	0.0046	414	10	190	0.988
10/18/2022	15:29:10	-0.301	-0.0233	-0.006	0.647	0.0162	75060	0.204	0.0094	0.035	0.579	0.0047	438	10	190	0.988
10/18/2022	15:30:12	-0.310	-0.0225	-0.010	0.533		79562	0.211	0.0090	0.038	0.682	0.0049	443	10	190	0.988
10/18/2022	15:31:11	-0.587	-0.0293	0.698	0.641	0.3940	79512	0.208	0.0103	0.039	0.493	0.0048	455	10	190	0.995
10/18/2022	15:32:10	-0.338	-0.0098	1.340	0.794	0.1905	76573	0.200	0.0109	0.038	0.437	0.0046	431	10	190	0.995
10/18/2022	15:33:10	-0.401	-0.0141	1.084	0.925	0.1825	76848	0.207	0.0101	0.039	0.610	0.0047	440	10	190	0.995
10/18/2022	15:34:10	-0.374	-0.0242	0.903	0.868	0.1831	76286	0.201	0.0097	0.037	0.469	0.0047	435	10	190	0.995
10/18/2022	15:35:10	-0.346	-0.0331	0.810	1.009	0.1825	77230	0.202	0.0100	0.038	0.616	0.0046	436	10	190	0.995
10/18/2022	15:36:13	-0.361	-0.0157	0.724	0.880	0.1789	76621	0.202	0.0100	0.037	0.435	0.0047	433	10	190	0.995
10/18/2022	15:37:10	-0.364	-0.0145	0.685	0.973	0.1811	77430	0.209	0.0094	0.038	0.588	0.0047	446	10	190	0.995
10/18/2022	15:38:10	-0.418	-0.0283	0.639	1.006	0.1804	77332	0.206	0.0096	0.038	0.603	0.0047	440	10	190	0.996
10/18/2022	15:39:12	-0.326	-0.0232	0.236	0.881	0.0585	81089	0.214	0.0102	0.039	0.605	0.0048	459	10	190	0.991
10/18/2022	15:40:10	-0.317	-0.0450	0.036	0.654	0.0175	68270	0.188	0.0092	0.034	0.433	0.0044	395	10	190	0.989
10/18/2022	15:41:10	-0.282	-0.0504	0.016	0.595	0.0123	71085	0.190	0.0090	0.034	0.505	0.0044	387	10	190	0.989
10/18/2022	15:42:11	-0.302	-0.0382	0.012	0.628	0.0110	80870	0.208	0.0096	0.039	0.582	0.0048	433	10	190	0.988
10/18/2022	15:43:10	-0.343	-0.0367	-0.023	0.830	0.0174	82744	0.217	0.0102	0.040	0.737	0.0050	469	10	190	0.988
10/18/2022	15:44:10	-0.281	-0.0353	-0.007	0.654	0.0167	78836	0.206	0.0094	0.037	0.587	0.0047	443	10	190	0.992
10/18/2022	15:45:10	-0.450	-0.0110	0.774	0.713	0.3230	71789	0.195	0.0096	0.035	0.578	0.0045	418	10	190	0.992
10/18/2022	15:46:10	-0.317	-0.0084	1.233	0.751	0.1703	76792	0.206	0.0106	0.039	0.525	0.0047	424	10	190	0.995
10/18/2022	15:47:10	-0.295	-0.0113	0.972	0.909	0.1712	77609	0.203	0.0103	0.039	0.564	0.0046	439	10	190	0.995
10/18/2022	15:48:10	-0.400	0.0013	0.814	0.834	0.1692	76830	0.205	0.0098	0.037	0.519	0.0047	442	10	190	0.995
10/18/2022	15:49:10	-0.252	0.0103	0.749	1.048	0.1695	77290	0.201	0.0102	0.038	0.893	0.0047	432	10	190	0.995
10/18/2022	15:50:10	-0.303	0.0170	0.683	0.934	0.1668	77468	0.203	0.0099	0.038	0.727	0.0046	439	10	190	0.995
10/18/2022	15:51:10	-0.312	-0.0194	0.632	0.913	0.1679	77217	0.204	0.0101	0.039	0.490	0.0047	430	10	190	0.995
10/18/2022	15:52:11	-0.264	-0.0457	0.344	0.831	0.0922	77217	0.201	0.0098	0.037	0.487	0.0046	432	10	190	0.991
10/18/2022	15:53:10	-0.298	-0.0212	0.035	0.680	0.0166	67964	0.189	0.0092	0.033	0.656	0.0044	399	10	190	0.988
10/18/2022	15:54:11	-0.315	-0.0172	0.035	0.694	0.0098	92927	0.232	0.0105	0.044	0.847	0.0053	492	10	190	0.988
10/18/2022	15:55:10	-0.334	-0.0330	0.026	0.836	0.0182	80181	0.217	0.0093	0.038	0.605	0.0050	488	10	190	0.988
10/18/2022	15:56:10	-0.329	-0.0089	0.011	0.648	0.0149	84817	0.219	0.0095	0.039	0.556	0.0050	476	10	190	0.988
10/18/2022	15:57:10	-0.292	-0.0337	0.003	0.594	0.0139	89293	0.222	0.0103	0.041	0.523	0.0051	484	10	190	0.989
10/18/2022	15:58:11	-0.297	-0.0023	0.011	0.703	0.0170	74474	0.208	0.0093	0.035	0.537	0.0048	464	10	190	0.988
10/18/2022	15:59:10	-0.340	-0.0256	-0.013	0.619	0.0128	79167	0.211	0.0093	0.037	0.655	0.0049	438	10	190	0.990
10/18/2022	16:00:10	-0.303	-0.0202	-0.038	0.632	0.0155	83532	0.216	0.0096	0.040	0.705	0.0050	470	10	190	0.990
10/18/2022	16:01:13	-0.300	-0.0326	-0.008	0.675	0.0157	82638	0.218	0.0096	0.038	0.709	0.0051	476	10	190	0.990
10/18/2022	16:02:13	-0.456	-0.0489	0.801	0.796	0.3945	78826	0.204	0.0097	0.038	0.749	0.0047	448	10	190	0.995
10/18/2022	16:03:10	-0.383	-0.0024	1.037	0.935	0.1845	78310	0.206	0.0104	0.038	0.685	0.0048	444	10	190	0.995
10/18/2022	16:04:10	-0.423	-0.0231	0.939	0.790	0.1813	77491	0.205	0.0102	0.037	0.512	0.0047	447	10	190	0.995
10/18/2022	16:05:10	-0.374	-0.0275	0.812	0.932	0.1849	77627	0.209	0.0098	0.038	0.673	0.0048	447	10	190	0.995
10/18/2022	16:06:12	-0.400	0.0039	0.762	0.866	0.1813	77466	0.205	0.0101	0.038	0.556	0.0046	442	10	190	0.995
10/18/2022	16:07:10	-0.318	-0.0352	0.658	0.906	0.1799	76640	0.206	0.0094	0.037	0.504	0.0048	446	10	190	0.995
10/18/2022	16:08:12	-0.373	-0.0045	0.635	0.927	0.1807	77318	0.209	0.0094	0.037	0.554	0.0048	448	10	190	0.995
10/18/2022	16:09:10	-0.347	-0.0306	0.576	0.864	0.1759	77142	0.205	0.0096	0.037	0.508	0.0047	441	10	190	0.995
10/18/2022	16:10:10	-0.393	-0.0264	-0.055	0.870	0.1753	77404	0.206	0.0098	0.036	0.528	0.0048	444	10	190	0.995

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	16:11:10	-0.324	-0.0304	0.533	0.934	0.1785	77754	0.206	0.0098	0.037	0.566	0.0047	440	10	190	0.995
10/18/2022	16:12:10	-0.377	-0.0235	0.524	0.831	0.1766	77648	0.207	0.0094	0.037	0.491	0.0047	443	10	190	0.995
10/18/2022	16:13:10	-0.375	-0.0246	0.479	0.916	0.1741	77797	0.205	0.0093	0.037	0.510	0.0047	444	10	190	0.995
10/18/2022	16:14:10	-0.380	-0.0261	0.470	0.868	0.1764	77850	0.207	0.0097	0.037	0.509	0.0048	443	10	190	0.995
10/18/2022	16:15:10	-0.301	-0.0318	0.271	0.935	0.0898	76777	0.205	0.0094	0.036	0.749	0.0047	440	10	190	0.992
10/18/2022	16:16:10	-0.280	-0.0514	0.055	0.647	0.0123	68821	0.190	0.0088	0.034	0.513	0.0045	402	10	190	0.389
10/18/2022	16:17:10	-0.330	-0.0473	0.016	0.630	0.0081	83749	0.217	0.0097	0.040	0.581	0.0050	455	10	190	0.389
10/18/2022	16:18:11	-0.298	-0.0089	0.008	0.574	0.0151	78387	0.207	0.0098	0.037	0.526	0.0048	443	10	190	0.388
10/18/2022	16:19:10	-0.331	-0.0205	-0.003	0.701	0.0144	86309	0.221	0.0095	0.041	0.663	0.0050	479	10	190	0.989
10/18/2022	16:20:10	-0.298	-0.0316	-0.008	0.616	0.0136	79602	0.207	0.0095	0.037	0.535	0.0047	443	10	190	0.989
10/18/2022	16:21:13	-0.481	-0.0370	0.688	0.697	0.3621	76839	0.198	0.0098	0.038	0.449	0.0045	429	10	190	0.995
10/18/2022	16:22:10	-0.335	0.0038	0.868	0.789	0.1693	77846	0.202	0.0099	0.037	0.473	0.0046	435	10	190	0.995
10/18/2022	16:23:13	-0.454	-0.0124	0.747	0.908	0.1648	78027	0.207	0.0101	0.038	0.627	0.0048	441	10	190	0.995
10/18/2022	16:24:10	-0.333	-0.0134	0.669	0.896	0.1692	78566	0.201	0.0106	0.038	0.583	0.0046	430	10	190	0.995
10/18/2022	16:25:10	-0.379	-0.0195	0.578	0.661	0.1666	77140	0.199	0.0099	0.038	0.414	0.0047	432	10	190	0.995
10/18/2022	16:26:10	-0.367	0.0013	0.453	0.907	0.1281	79809	0.210	0.0102	0.039	0.547	0.0048	448	10	190	0.992
10/18/2022	16:27:10	-0.253	-0.0417	0.044	0.622	0.0126	74075	0.199	0.0093	0.036	0.475	0.0046	425	10	190	0.988
10/18/2022	16:28:10	-0.327	-0.0554	0.023	0.593	0.0112	77660	0.206	0.0096	0.038	0.574	0.0048	427	10	190	0.988
10/18/2022	16:29:10	-0.305	-0.0248	0.002	0.652	0.0154	79610	0.208	0.0095	0.038	0.529	0.0048	447	10	190	0.988
10/18/2022	16:30:10	-0.304	-0.0386	-0.001	0.581	0.0130	79371	0.207	0.0099	0.037	0.470	0.0048	446	10	190	0.988
10/18/2022	16:31:13	-0.320	-0.0454	0.015	0.652	0.0127	78324	0.208	0.0093	0.037	0.624	0.0048	448	10	190	0.988
10/18/2022	16:32:10	-0.332	-0.0334	0.014	0.629	0.0139	81526	0.214	0.0100	0.038	0.634	0.0049	461	10	190	0.988
10/18/2022	16:33:13	-0.297	-0.0349	-0.016	0.559	0.0137	81389	0.211	0.0096	0.039	0.497	0.0049	457	10	190	0.988
10/18/2022	16:34:10	-0.310	-0.0402	-0.017	0.680	0.0144	77512	0.208	0.0090	0.036	0.725	0.0048	445	10	190	0.989
10/18/2022	16:35:10	-0.287	-0.0383	-0.019	0.583	0.0259	75507	0.201	0.0095	0.036	0.505	0.0046	428	10	190	0.990
10/18/2022	16:36:10	-0.577	-0.0208	1.015	0.679	0.3350	76818	0.199	0.0101	0.038	0.476	0.0046	432	10	190	0.995
10/18/2022	16:37:10	-0.334	-0.0214	0.998	0.820	0.1671	78112	0.206	0.0104	0.038	0.543	0.0047	442	10	190	0.995
10/18/2022	16:38:10	-0.297	-0.0261	0.871	0.856	0.1637	77886	0.205	0.0100	0.038	0.551	0.0046	441	10	190	0.995
10/18/2022	16:39:10	-0.411	-0.0050	0.762	0.876	0.1619	77951	0.204	0.0104	0.037	0.574	0.0048	437	10	190	0.995
10/18/2022	16:40:10	-0.263	-0.0105	0.587	0.913	0.1613	77935	0.206	0.0095	0.037	0.604	0.0047	439	10	190	0.995
10/18/2022	16:41:10	-0.346	-0.0096	0.642	0.878	0.1621	78138	0.203	0.0099	0.037	0.575	0.0047	440	10	190	0.995
10/18/2022	16:42:10	-0.425	-0.0120	0.584	0.836	0.1601	78093	0.205	0.0096	0.038	0.507	0.0047	443	10	190	0.996
10/18/2022	16:43:10	-0.346	-0.0110	0.552	0.811	0.2320	76725	0.199	0.0096	0.037	0.448	0.0046	431	10	190	0.995
10/18/2022	16:44:10	0.303	-0.0103	0.485	0.716	0.6698	62870	0.183	0.0089	0.032	0.414	0.0047	358	10	190	0.995
10/18/2022	16:45:10	94.557	-0.0174	0.076	0.010	0.0193	849	0.138	0.0029	0.007	0.026	0.0050	72	14	190	0.996
10/18/2022	16:46:10	94.035	-0.0081	0.063	-0.062	0.0065	427	0.087	0.0032	0.008	0.013	0.0066	11	14	190	0.995
10/18/2022	16:47:10	94.824	0.0097	0.052	-0.039	0.0152	273	0.100	0.0029	0.007	0.014	0.0074	6	14	190	0.995
10/18/2022	16:48:13	94.950	-0.0020	0.041	-0.020	0.0124	283	0.094	0.0027	0.007	0.016	0.0072	4	14	190	0.995
10/18/2022	16:49:10	94.949	0.0107	0.043	-0.023	0.0171	244	0.094	0.0029	0.007	0.014	0.0071	4	14	190	0.995
System CTS		94.949														
10/18/2022	16:50:10	49.236	0.0003	0.036	-0.022	0.0293	224	0.112	0.0029	0.007	0.012	0.0060	3	14	190	0.995
10/18/2022	16:51:10	0.091	-0.0147	0.049	-0.024	0.0023	202	0.034	0.0028	0.007	0.012	0.0006	1	14	190	0.995
10/18/2022	16:52:10	-0.046	0.0011	0.038	-0.014	0.0013	157	0.033	0.0031	0.007	0.010	0.0006	1	14	190	0.995
10/18/2022	16:53:10	-0.071	-0.0106	0.034	-0.017	-0.0006	148	0.027	0.0029	0.007	0.013	0.0006	1	14	190	0.995
10/18/2022	16:54:10	-0.074	0.0018	0.027	-0.013	0.0002	118	0.032	0.0030	0.007	0.012	0.0006	1	14	190	0.995
System Zero		-0.074														
10/18/2022	16:55:12	70.549	-0.0077	0.020	-0.011	0.0287	33	0.121	0.0028	0.007	0.011	0.0059	2	14	190	0.991

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/18/2022	16:56:10	93.319	-0.0001	0.009	-0.018	0.0180	-68	0.076	0.0028	0.006	0.012	0.0030	3	14	190	0.991
10/18/2022	16:57:10	94.810	-0.0084	0.005	-0.020	0.0110	-41	0.093	0.0027	0.006	0.010	0.0070	3	14	190	0.991
10/18/2022	16:58:10	94.660	-0.0077	0.006	-0.018	0.0115	-63	0.092	0.0025	0.006	0.010	0.0070	3	14	190	0.990
10/18/2022	16:59:13	94.747	-0.0164	-0.004	-0.017	0.0120	-38	0.094	0.0026	0.006	0.010	0.0070	3	14	190	0.990
Direct CTS	94.747															
10/18/2022	17:00:10	65.349	-0.0054	0.005	-0.020	0.0255	-6	0.102	0.0027	0.006	0.010	0.0058	2	14	190	0.990
10/18/2022	17:01:10	-0.095	-0.0027	0.011	-0.015	0.0014	74	0.024	0.0027	0.006	0.008	0.0002	0	14	190	0.990
10/18/2022	17:02:10	-0.114	-0.0150	-0.008	-0.003	0.0005	63	0.024	0.0028	0.007	0.008	0.0002	0	14	190	0.990
10/18/2022	17:03:10	-0.143	-0.0120	-0.006	-0.002	0.0014	87	0.030	0.0030	0.007	0.009	0.0002	0	14	190	0.990
Direct Zero	-0.143															
10/18/2022	17:06:42	0.140	0.0318	0.000	-0.024	0.0014	189	0.030	0.0030	0.007	0.016	0.0004	1	14	190	0.992
10/18/2022	17:07:42	-0.022	-0.0096	0.110	-0.478	0.0077	8566	0.211	0.0042	0.010	0.272	0.0049	26	13	190	0.997
Ambient Air																
10/18/2022	17:08:42	-0.065	-0.0072	0.077	0.068	0.0017	6049	0.025	0.0043	0.010	0.077	0.0007	32	13	190	0.998
10/18/2022	17:09:44	-0.016	-0.0276	0.071	0.070	0.0022	5987	0.026	0.0046	0.010	0.076	0.0007	32	13	190	0.998
10/18/2022	17:10:42	-0.020	-0.0146	0.071	0.062	0.0027	5913	0.024	0.0044	0.010	0.072	0.0007	30	13	190	0.997
10/18/2022	17:11:42	-0.043	-0.0145	0.043	0.066	-0.0013	5283	0.021	0.0043	0.010	0.064	0.0006	27	13	190	0.995
10/18/2022	17:12:42	0.007	0.0124	0.006	0.005	0.0000	-1	0.006	0.0023	0.005	0.006	0.0002	2	15	190	0.990

Condition: Natural Gas Max

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	7:06:20	0.429	-0.0003	0.006	-0.002	0.0075	-5	0.033	0.0038	0.009	0.008	0.0003	0	14	190	0.990
10/19/2022	7:07:20	0.433	-0.0058	0.015	-0.001	0.0090	25	0.034	0.0039	0.009	0.009	0.0005	1	14	190	0.990
10/19/2022	7:08:20	0.428	-0.0091	0.006	0.005	0.0082	32	0.032	0.0039	0.009	0.008	0.0004	0	14	190	0.990
10/19/2022	7:09:20	0.470	-0.0061	0.014	0.004	0.0095	27	0.032	0.0036	0.009	0.008	0.0004	0	14	190	0.990
10/19/2022	7:10:22	0.434	-0.0114	0.011	-0.008	0.0096	46	0.030	0.0035	0.009	0.009	0.0004	0	14	190	0.990
10/19/2022	7:13:23	-0.015	-0.0203	-0.001	-0.002	-0.0009	-48	0.006	0.0022	0.005	0.006	0.0002	0	14	190	0.990
10/19/2022	7:14:20	-0.012	0.0086	0.001	-0.002	0.0001	-34	0.006	0.0025	0.005	0.006	0.0002	0	14	190	0.990
10/19/2022	7:15:20	0.008	-0.0055	-0.006	0.005	-0.0015	-35	0.006	0.0025	0.005	0.006	0.0002	0	14	190	0.990
10/19/2022	7:16:23	0.015	-0.0094	-0.016	-0.002	-0.0012	-24	0.007	0.0027	0.006	0.006	0.0002	0	14	190	0.990
Direct Zero		0.015														
10/19/2022	7:17:22	13.067	0.0017	-0.003	0.005	0.0112	-25	0.051	0.0025	0.005	0.006	0.0026	1	14	190	0.990
10/19/2022	7:18:20	93.289	0.0104	0.002	-0.005	0.0168	-179	0.074	0.0023	0.005	0.009	0.0034	3	14	190	0.990
10/19/2022	7:19:20	95.387	-0.0052	-0.008	-0.010	0.0118	-151	0.086	0.0023	0.005	0.008	0.0072	3	14	190	0.990
10/19/2022	7:20:20	95.517	-0.0076	-0.003	-0.004	0.0087	-159	0.084	0.0024	0.005	0.008	0.0071	3	14	190	0.990
10/19/2022	7:21:20	95.456	-0.0116	-0.002	0.003	0.0067	-153	0.084	0.0024	0.005	0.008	0.0070	3	14	190	0.990
10/19/2022	7:22:20	95.307	0.0137	0.001	-0.003	0.0089	-165	0.085	0.0022	0.005	0.009	0.0071	3	14	190	0.990
10/19/2022	7:23:20	95.613	-0.0114	-0.008	0.010	0.0076	-160	0.085	0.0024	0.005	0.008	0.0071	3	14	190	0.990
Direct CTS		95.613														
10/19/2022	7:24:20	21.814	0.0051	0.032	-0.365	0.0153	4277	0.477	0.0034	0.008	0.205	0.0053	14	13	190	0.995
Ambient Air																
10/19/2022	7:25:20	-0.160	-0.0168	0.056	-0.304	0.0070	6606	0.076	0.0046	0.010	0.082	0.0010	27	13	190	0.997
10/19/2022	7:26:20	-0.111	-0.0436	0.048	0.069	0.0005	6426	0.045	0.0045	0.010	0.087	0.0008	40	13	190	0.997
10/19/2022	7:27:20	-0.051	-0.0193	0.035	0.029	-0.0015	6251	0.036	0.0044	0.010	0.084	0.0008	37	13	190	0.997
10/19/2022	7:28:20	-0.130	-0.0293	0.031	0.073	0.0003	6196	0.031	0.0042	0.010	0.080	0.0007	35	13	190	0.997
10/19/2022	7:29:20	-0.109	-0.0253	0.038	0.061	-0.0023	6774	0.031	0.0045	0.010	0.089	0.0007	37	13	190	0.997
10/19/2022	7:30:20	-0.052	-0.0443	0.044	0.078	0.0014	6902	0.030	0.0043	0.010	0.090	0.0007	39	13	190	0.997
10/19/2022	7:31:20	0.975	-0.1376	0.087	0.171	-0.0056	25184	0.124	0.052	0.017	0.260	0.0028	151	11	190	0.994
10/19/2022	7:32:20	-0.004	-0.0375	0.047	0.063	0.0014	8374	0.034	0.041	0.010	0.104	0.0007	54	13	190	0.994
10/19/2022	7:33:20	-0.047	0.0081	0.020	0.021	-0.0012	781	0.021	0.024	0.005	0.016	0.0005	10	14	190	0.994
10/19/2022	7:34:20	-0.055	0.0127	0.012	-0.015	0.0012	150	0.021	0.025	0.006	0.005	0.0005	2	14	190	0.994
10/19/2022	7:35:20	-0.032	-0.0052	0.000	-0.015	0.0003	119	0.020	0.024	0.005	0.009	0.0005	1	14	190	0.994
System Zero		-0.032														
10/19/2022	7:36:20	0.007	-0.0013	0.011	-0.006	-0.0033	116	0.019	0.0025	0.005	0.008	0.0005	1	14	190	0.994
10/19/2022	7:37:20	-0.015	0.0002	0.004	-0.004	0.0005	14	0.020	0.0024	0.005	0.007	0.0005	1	14	190	0.994
10/19/2022	7:38:20	7.932	-0.0162	0.007	-0.003	0.0061	103	0.040	0.0027	0.006	0.007	0.0018	1	14	190	0.994
10/19/2022	7:39:20	92.803	-0.0073	0.014	-0.006	0.0154	-53	0.091	0.025	0.006	0.009	0.0039	3	14	190	0.994
10/19/2022	7:40:20	94.490	-0.0174	0.002	-0.004	0.0072	-3	0.084	0.027	0.006	0.010	0.0067	3	14	190	0.994
10/19/2022	7:41:20	95.465	-0.0033	0.013	0.005	0.0120	-185	0.090	0.025	0.006	0.010	0.0073	3	14	190	0.994
10/19/2022	7:42:20	95.731	-0.0052	0.008	-0.002	0.0084	-75	0.086	0.027	0.006	0.008	0.0071	3	14	190	0.994
10/19/2022	7:43:20	95.558	-0.0007	0.006	-0.014	0.0074	-124	0.086	0.024	0.005	0.009	0.0071	3	14	190	0.994
System CTS		95.558														
10/19/2022	7:44:20	95.383	-0.0023	-0.003	-0.004	0.0105	-100	0.089	0.028	0.006	0.009	0.0074	3	14	190	0.994
10/19/2022	7:45:21	95.325	-0.0037	0.007	-0.010	0.0076	-150	0.086	0.025	0.006	0.009	0.0069	3	14	190	0.994

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	7:46:20	95.100	-0.0008	0.009	-0.010	0.0133	-131	0.094	0.0029	0.011	0.0076	3	14	190	0.994	
10/19/2022	7:47:20	-0.439	0.0234	0.239	-2.701	-0.0865	81890	1.807	0.0089	0.045	2.138	0.0388	163	10	190	0.994
10/19/2022	7:48:20	0.039	-0.0134	0.191	0.815	0.0128	77706	0.205	0.0087	0.038	0.470	0.0048	438	10	190	0.994
10/19/2022	7:49:20	-0.121	0.0004	0.201	0.866	0.0143	77873	0.205	0.0088	0.037	0.514	0.0048	443	10	190	0.994
10/19/2022	7:50:20	-0.096	0.0036	0.200	0.792	0.0140	78078	0.205	0.0090	0.036	0.482	0.0047	436	10	190	0.994
10/19/2022	7:51:20	-0.113	-0.0052	0.185	0.895	0.0147	78460	0.210	0.0086	0.037	0.540	0.0048	448	10	190	0.994
10/19/2022	7:52:20	-0.153	-0.0106	0.195	0.321	0.0135	78509	0.204	0.0093	0.037	0.547	0.0047	441	10	190	0.995
10/19/2022	7:53:20	-0.151	-0.0156	0.200	0.815	0.0122	78436	0.204	0.0091	0.035	0.476	0.0047	441	10	190	0.995
10/19/2022	7:54:23	-0.221	0.0039	0.190	0.822	0.0169	78578	0.207	0.0090	0.037	0.532	0.0048	441	10	190	0.995
10/19/2022	7:55:20	-0.148	-0.0063	0.172	0.796	0.0144	78417	0.203	0.0093	0.037	0.482	0.0046	436	10	190	0.995
10/19/2022	7:56:20	-0.098	-0.0352	0.160	0.880	0.0121	78521	0.211	0.0091	0.036	0.580	0.0049	445	10	190	0.995
10/19/2022	7:57:20	-0.258	-0.0102	0.138	0.876	0.0114	93660	0.235	0.0103	0.042	0.588	0.0053	507	10	190	0.992
10/19/2022	7:58:20	-0.155	-0.0175	-0.014	0.700	0.0167	79921	0.213	0.0095	0.038	0.613	0.0049	473	10	190	0.990
10/19/2022	7:59:20	-0.187	-0.0256	-0.015	0.575	0.0123	78780	0.206	0.0089	0.038	0.497	0.0048	442	10	190	0.990
10/19/2022	8:00:20	-0.169	-0.0427	-0.009	0.542	0.0136	75653	0.204	0.0086	0.037	0.475	0.0047	437	10	190	0.990
10/19/2022	8:01:20	-0.189	-0.0038	-0.014	0.492	0.0129	83982	0.212	0.0097	0.038	0.465	0.0049	461	10	190	0.990
10/19/2022	8:02:20	-0.178	0.0017	-0.011	0.571	0.0134	76733	0.200	0.0093	0.036	0.534	0.0046	428	10	190	0.990
10/19/2022	8:03:21	-0.147	-0.0003	0.111	0.695	0.1125	80038	0.206	0.0091	0.038	0.626	0.0048	446	10	190	0.995
10/19/2022	8:04:20	-0.292	0.034	0.152	0.747	0.4729	72798	0.194	0.0081	0.034	0.582	0.0046	422	10	190	0.995
10/19/2022	8:05:20	-0.432	0.0130	0.161	0.650	0.4745	72504	0.189	0.0087	0.035	0.499	0.0044	397	10	190	0.995
10/19/2022	8:06:20	-0.469	0.0439	0.168	0.667	0.4759	72261	0.191	0.0088	0.034	0.562	0.0044	393	10	190	0.995
10/19/2022	8:07:20	-0.466	0.0321	0.163	0.749	0.4755	72308	0.187	0.0091	0.034	0.684	0.0043	388	10	190	0.996
10/19/2022	8:08:20	-0.507	0.0260	0.155	0.672	0.4774	71812	0.189	0.0085	0.034	0.485	0.0043	394	10	190	0.996
10/19/2022	8:09:20	-0.438	0.0317	0.169	0.589	0.4747	72070	0.191	0.0087	0.035	0.544	0.0044	396	10	190	0.996
10/19/2022	8:10:20	-0.558	0.0500	0.172	0.806	0.4777	71778	0.191	0.0083	0.033	0.715	0.0045	402	10	190	0.996
10/19/2022	8:11:20	-0.465	0.0316	0.145	0.777	0.4777	71625	0.186	0.0086	0.035	0.604	0.0043	392	10	190	0.996
10/19/2022	8:12:20	-0.494	0.0368	0.147	0.663	0.4751	71728	0.188	0.0085	0.035	0.484	0.0044	392	10	190	0.996
10/19/2022	8:13:20	-0.449	0.0390	0.153	0.614	0.4767	71532	0.189	0.0084	0.035	0.447	0.0044	396	10	190	0.996
10/19/2022	8:14:20	-0.561	0.0452	0.150	0.705	0.4811	71795	0.191	0.0085	0.034	0.529	0.0045	398	10	190	0.996
10/19/2022	8:15:20	-0.527	0.0535	0.151	0.625	0.4787	71466	0.189	0.0086	0.034	0.488	0.0044	398	10	190	0.996
10/19/2022	8:16:20	-0.526	0.0443	0.149	0.717	0.4765	71519	0.190	0.0081	0.034	0.561	0.0044	399	10	190	0.996
10/19/2022	8:17:20	-0.593	0.0483	0.140	0.713	0.4804	72028	0.189	0.0081	0.035	0.603	0.0044	400	10	190	0.996
10/19/2022	8:18:20	-0.560	0.0290	0.151	0.638	0.4773	71377	0.190	0.0083	0.034	0.491	0.0044	398	10	190	0.996
10/19/2022	8:19:20	-0.497	0.0546	0.135	0.678	0.4797	71725	0.189	0.0087	0.035	0.551	0.0044	391	10	190	0.996
10/19/2022	8:20:20	-0.582	0.0495	0.137	0.657	0.4765	71523	0.195	0.0084	0.034	0.511	0.0045	407	10	190	0.996
10/19/2022	8:21:20	-0.467	0.0558	0.149	0.602	0.4755	71510	0.188	0.0088	0.036	0.474	0.0045	396	10	190	0.996
10/19/2022	8:22:23	-0.444	0.0548	0.149	0.631	0.4775	71461	0.191	0.0081	0.035	0.483	0.0045	398	10	190	0.996
10/19/2022	8:23:20	-0.506	0.0470	0.131	0.614	0.4792	71499	0.193	0.0083	0.034	0.464	0.0044	403	10	190	0.996
10/19/2022	8:24:20	-0.444	0.0377	0.121	0.747	0.4777	71187	0.190	0.0083	0.034	0.631	0.0044	403	10	190	0.996
10/19/2022	8:25:20	-0.482	0.0438	0.136	0.669	0.4771	71426	0.191	0.0082	0.033	0.556	0.0045	405	10	190	0.996
10/19/2022	8:26:20	-0.554	0.0706	0.126	0.624	0.4788	71344	0.195	0.0083	0.035	0.478	0.0045	410	10	190	0.996
10/19/2022	8:27:21	-0.516	0.0362	0.134	0.687	0.4809	71499	0.193	0.0084	0.034	0.544	0.0045	401	10	190	0.996
10/19/2022	8:28:20	-0.539	0.0500	0.128	0.667	0.4780	71052	0.193	0.0082	0.034	0.489	0.0046	404	10	190	0.996
10/19/2022	8:29:20	-0.473	0.0422	0.138	0.644	0.4799	71245	0.193	0.0085	0.035	0.482	0.0045	403	10	190	0.995
10/19/2022	8:30:20	-0.526	0.0227	0.119	0.669	0.4776	71048	0.190	0.0087	0.033	0.469	0.0044	399	10	190	0.995
10/19/2022	8:31:20	-0.506	0.0433	0.120	0.686	0.4806	70990	0.187	0.0088	0.034	0.528	0.0043	389	10	190	0.995
10/19/2022	8:32:20	-0.513	0.0545	0.117	0.734	0.4768	71225	0.187	0.0088	0.034	0.583	0.0043	388	10	190	0.996

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	8:33:20	-0.566	0.0382	0.113	0.593	0.4777	70980	0.188	0.0087	0.033	0.492	0.0044	383	10	190
10/19/2022	8:34:20	-0.502	0.0393	0.121	0.619	0.4783	71157	0.189	0.0083	0.034	0.469	0.0043	393	10	190
10/19/2022	8:35:20	-0.553	0.0515	0.108	0.562	0.4825	71429	0.184	0.0090	0.034	0.549	0.0042	385	10	190
10/19/2022	8:36:20	-0.495	0.0380	0.103	0.673	0.4777	70971	0.185	0.0086	0.034	0.537	0.0042	384	10	190
10/19/2022	8:37:20	-0.507	0.0487	0.129	0.623	0.4780	71198	0.187	0.0087	0.034	0.468	0.0043	389	10	190
10/19/2022	8:38:20	-0.466	0.0652	0.104	0.580	0.4778	71218	0.182	0.0088	0.035	0.436	0.0042	382	10	190
10/19/2022	8:39:20	-0.495	0.0570	0.126	0.613	0.4768	71210	0.185	0.0089	0.034	0.440	0.0043	383	10	190
10/19/2022	8:40:20	-0.524	0.0449	0.104	0.747	0.4801	71174	0.189	0.0086	0.034	0.579	0.0044	396	10	190
10/19/2022	8:41:20	-0.576	0.0401	0.112	0.595	0.4770	71004	0.191	0.0084	0.035	0.469	0.0044	397	10	190
10/19/2022	8:42:20	-0.521	0.0508	0.099	0.632	0.4797	71101	0.187	0.0086	0.034	0.472	0.0044	395	10	190
10/19/2022	8:43:20	-0.591	0.0550	0.121	0.691	0.4791	71456	0.189	0.0086	0.034	0.515	0.0044	395	10	190
10/19/2022	8:44:20	-0.574	0.0621	0.102	0.738	0.4818	71451	0.194	0.0087	0.034	0.601	0.0046	407	10	190
10/19/2022	8:45:20	-0.575	0.0595	0.121	0.611	0.4789	70883	0.184	0.0084	0.033	0.471	0.0043	388	10	190
10/19/2022	8:46:20	-0.456	0.0376	0.110	0.671	0.4787	70889	0.182	0.0090	0.035	0.608	0.0042	382	10	190
10/19/2022	8:47:20	-0.523	0.0473	0.119	0.632	0.4800	71477	0.182	0.0093	0.036	0.548	0.0042	381	10	190
10/19/2022	8:48:20	-0.490	0.0433	0.094	0.688	0.4796	71277	0.184	0.0085	0.035	0.512	0.0042	380	10	190
10/19/2022	8:49:20	-0.468	0.0466	0.098	0.634	0.4786	70992	0.186	0.0087	0.033	0.482	0.0044	386	10	190
10/19/2022	8:50:20	-0.528	0.0463	0.081	0.610	0.4815	70751	0.188	0.0081	0.035	0.449	0.0043	389	10	190
10/19/2022	8:51:20	-0.492	0.0355	0.112	0.661	0.4781	71292	0.183	0.0089	0.034	0.579	0.0043	383	10	190
10/19/2022	8:52:20	-0.615	0.0677	0.107	0.553	0.4789	70773	0.186	0.0086	0.033	0.435	0.0043	390	10	190
10/19/2022	8:53:20	-0.545	0.0420	0.098	0.621	0.4503	71256	0.190	0.0085	0.033	0.463	0.0044	394	10	190
10/19/2022	8:54:23	-0.210	-0.0138	0.019	0.593	0.0115	83348	0.211	0.0095	0.039	0.543	0.0048	439	10	190
10/19/2022	8:55:20	-0.202	-0.0406	-0.020	0.563	0.0143	77344	0.204	0.0089	0.037	0.600	0.0047	440	10	190
10/19/2022	8:56:20	-0.214	-0.0117	-0.027	0.585	0.0153	81214	0.211	0.0090	0.038	0.497	0.0049	455	10	190
10/19/2022	8:57:20	-0.240	-0.0169	-0.015	0.572	0.0146	78368	0.207	0.0092	0.036	0.483	0.0048	444	10	190
10/19/2022	8:58:20	-0.168	-0.0471	-0.010	0.615	0.0134	73738	0.198	0.0085	0.035	0.626	0.0046	425	10	190
10/19/2022	8:59:20	-0.210	-0.0305	-0.030	0.477	0.0101	76678	0.203	0.0087	0.037	0.609	0.0047	420	10	190
10/19/2022	9:00:20	-0.166	-0.0390	-0.026	0.484	0.0144	75260	0.199	0.0090	0.036	0.410	0.0046	425	10	190
10/19/2022	9:01:20	-0.201	-0.0349	-0.028	0.533	0.0093	80523	0.208	0.0089	0.037	0.588	0.0048	436	10	190
10/19/2022	9:02:20	-0.198	-0.0310	-0.034	0.526	0.0115	80544	0.211	0.0086	0.037	0.551	0.0049	459	10	190
10/19/2022	9:03:20	-0.455	0.0616	0.024	0.726	0.4747	79225	0.201	0.0090	0.038	0.793	0.0047	448	10	190
10/19/2022	9:04:20	-0.447	0.0590	0.086	0.635	0.4840	71837	0.194	0.0086	0.033	0.540	0.0044	420	10	190
10/19/2022	9:05:20	-0.332	0.0646	0.089	0.601	0.4813	70567	0.189	0.0081	0.034	0.460	0.0044	398	10	190
10/19/2022	9:06:20	-0.616	0.0583	0.093	0.568	0.4798	70757	0.192	0.0083	0.034	0.491	0.0044	396	10	190
10/19/2022	9:07:20	-0.434	0.0385	0.069	0.581	0.4805	70588	0.183	0.0087	0.035	0.465	0.0043	381	10	190
10/19/2022	9:08:20	-0.382	0.0770	0.092	0.591	0.4784	70787	0.188	0.0084	0.035	0.452	0.0044	387	10	190
10/19/2022	9:09:20	-0.454	0.0404	0.098	0.639	0.4774	71108	0.188	0.0090	0.034	0.616	0.0044	390	10	190
10/19/2022	9:10:20	-0.420	0.0182	0.072	0.621	0.2749	70750	0.194	0.0081	0.033	0.475	0.0045	401	10	190
10/19/2022	9:11:22	-0.207	-0.0209	-0.003	0.529	0.0102	69734	0.194	0.0089	0.034	0.451	0.0045	396	10	190
10/19/2022	9:12:22	-0.196	-0.0296	-0.008	0.606	0.0088	76999	0.202	0.0090	0.036	0.781	0.0047	420	10	190
10/19/2022	9:13:20	-0.188	-0.0198	-0.022	0.582	0.0145	75599	0.203	0.0084	0.036	0.504	0.0047	437	10	190
10/19/2022	9:14:20	-0.195	-0.0332	-0.015	0.571	0.0129	78569	0.206	0.0090	0.038	0.488	0.0048	443	10	190
10/19/2022	9:15:20	-0.236	-0.0319	-0.020	0.667	0.0142	81395	0.214	0.0089	0.037	0.554	0.0049	462	10	190
10/19/2022	9:16:20	-0.208	-0.0182	-0.031	0.678	0.0137	77912	0.206	0.0089	0.036	0.655	0.0048	444	10	190
10/19/2022	9:17:20	-0.224	-0.0209	-0.029	0.566	0.0135	76666	0.202	0.0086	0.037	0.508	0.0047	435	10	190
10/19/2022	9:18:20	-0.223	-0.0440	-0.036	0.508	0.0142	75821	0.200	0.0086	0.036	0.446	0.0046	431	10	190
10/19/2022	9:19:20	-0.269	-0.0247	-0.021	0.620	0.0371	76428	0.202	0.0083	0.035	0.544	0.0047	436	10	190

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	9:20:20	-0.617	0.0449	0.063	0.617	0.4796	73609	0.193	0.087	0.036	0.455	0.0046	416	10	190	0.996
10/19/2022	9:21:20	-0.446	0.0577	0.064	0.551	0.4821	70938	0.185	0.087	0.035	0.484	0.0044	383	10	190	0.996
10/19/2022	9:22:20	-0.488	0.0342	0.082	0.535	0.4830	70544	0.187	0.090	0.034	0.442	0.0043	392	10	190	0.995
10/19/2022	9:23:20	-0.590	0.0652	0.093	0.595	0.4833	70680	0.187	0.084	0.034	0.454	0.0045	389	10	190	0.996
10/19/2022	9:24:20	-0.545	0.0448	0.090	0.576	0.4827	70423	0.190	0.081	0.034	0.452	0.0044	390	10	190	0.996
10/19/2022	9:25:20	-0.512	0.0583	0.084	0.581	0.4800	70481	0.187	0.083	0.034	0.447	0.0043	387	10	190	0.996
10/19/2022	9:26:20	-0.473	0.0302	0.054	0.595	0.3006	71860	0.192	0.085	0.035	0.516	0.0044	398	10	190	0.993
10/19/2022	9:27:20	-0.211	-0.0166	-0.007	0.526	0.0108	76392	0.203	0.089	0.036	0.505	0.0047	416	10	190	0.991
10/19/2022	9:28:20	-0.258	-0.0168	-0.021	0.533	0.0140	71785	0.194	0.086	0.033	0.430	0.0046	413	10	190	0.990
10/19/2022	9:29:20	-0.227	-0.0280	-0.006	0.460	0.0112	76081	0.204	0.087	0.035	0.499	0.0047	422	10	190	0.990
10/19/2022	9:30:20	-0.213	-0.0475	-0.013	0.637	0.0134	78430	0.208	0.088	0.037	0.587	0.0048	448	10	190	0.990
10/19/2022	9:31:20	-0.225	-0.0240	-0.027	0.677	0.0145	76473	0.205	0.088	0.037	0.654	0.0048	439	10	190	0.990
10/19/2022	9:32:20	-0.200	-0.0369	-0.006	0.560	0.0129	76116	0.202	0.087	0.035	0.501	0.0047	436	10	190	0.991
10/19/2022	9:33:20	-0.587	0.0404	0.015	0.655	0.3779	73485	0.194	0.087	0.035	0.586	0.0044	420	10	190	0.995
10/19/2022	9:34:20	-0.533	0.0502	0.052	0.538	0.4793	71239	0.194	0.092	0.034	0.441	0.0045	391	10	190	0.996
10/19/2022	9:35:20	-0.387	0.0517	0.060	0.573	0.4838	70694	0.190	0.085	0.034	0.485	0.0044	395	10	190	0.996
10/19/2022	9:36:20	-0.647	0.0563	0.065	0.558	0.4846	70247	0.188	0.085	0.034	0.437	0.0044	392	10	190	0.996
10/19/2022	9:37:20	-0.474	0.0625	0.080	0.584	0.4818	70865	0.188	0.090	0.034	0.493	0.0043	388	10	190	0.995
10/19/2022	9:38:20	-0.481	0.0405	0.078	0.619	0.4812	71506	0.192	0.086	0.035	0.544	0.0045	398	10	190	0.996
10/19/2022	9:39:20	-0.424	0.0193	0.037	0.609	0.2763	76566	0.205	0.088	0.037	0.530	0.0047	421	10	190	0.993
Method 301 Validation CH2O																
10/19/2022	9:40:20	-0.162	-0.0402	-0.015	0.576	0.0134	73777	0.201	0.087	0.035	0.459	0.0047	429	10	190	0.990
10/19/2022	9:41:20	-0.283	-0.0507	-0.033	0.652	0.0113	79551	0.213	0.091	0.038	0.757	0.0049	445	10	190	0.990
10/19/2022	9:42:20	-0.213	-0.0296	-0.019	0.619	0.0140	77907	0.207	0.086	0.037	0.580	0.0048	445	10	190	0.990
10/19/2022	9:43:20	-0.236	-0.0257	-0.024	0.667	0.0144	80220	0.212	0.088	0.037	0.612	0.0049	459	10	190	0.990
10/19/2022	9:44:20	-0.220	-0.0302	-0.020	0.730	0.0115	78734	0.204	0.093	0.037	0.790	0.0048	440	10	190	0.991
10/19/2022	9:45:20	-0.218	-0.0563	-0.014	0.569	0.0121	77638	0.206	0.087	0.036	0.578	0.0048	445	10	190	0.991
10/19/2022	9:46:20	-0.399	0.0263	0.001	0.623	0.3067	75950	0.202	0.087	0.037	0.532	0.0047	433	10	190	0.993
10/19/2022	9:47:20	-0.507	0.0680	0.051	0.584	0.4839	73852	0.195	0.088	0.034	0.439	0.0046	424	10	190	0.996
10/19/2022	9:48:21	-0.566	0.0465	0.068	0.572	0.4774	72423	0.189	0.089	0.034	0.489	0.0045	398	10	190	0.996
10/19/2022	9:49:20	-0.496	0.0577	0.078	0.582	0.4787	72542	0.190	0.086	0.035	0.495	0.0045	400	10	190	0.996
10/19/2022	9:50:20	-0.526	0.0595	0.091	0.573	0.4777	72610	0.189	0.087	0.034	0.495	0.0043	400	10	190	0.996
10/19/2022	9:51:20	-0.537	0.0612	0.087	0.577	0.4802	72391	0.192	0.086	0.034	0.458	0.0044	399	10	190	0.996
10/19/2022	9:52:20	-0.555	0.0612	0.097	0.587	0.4736	72363	0.193	0.084	0.034	0.458	0.0045	401	10	190	0.996
10/19/2022	9:53:21	-0.598	0.0495	0.079	0.749	0.4777	72345	0.190	0.084	0.035	0.715	0.0044	399	10	190	0.996
10/19/2022	9:54:21	-0.421	0.0462	0.053	0.627	0.4035	75005	0.198	0.084	0.036	0.514	0.0046	416	10	190	0.994
10/19/2022	9:55:21	-0.250	-0.0304	0.013	0.577	0.0058	77097	0.208	0.088	0.037	0.555	0.0048	428	10	190	0.990
10/19/2022	9:56:20	-0.229	-0.0024	-0.008	0.591	0.0137	75655	0.202	0.088	0.035	0.480	0.0047	432	10	190	0.991
10/19/2022	9:57:20	-0.265	-0.0114	-0.016	0.616	0.0152	77758	0.211	0.090	0.036	0.520	0.0049	452	10	190	0.991
10/19/2022	9:58:20	-0.202	-0.0484	-0.024	0.705	0.0120	81753	0.214	0.092	0.039	0.771	0.0050	464	10	190	0.991
10/19/2022	9:59:20	-0.218	-0.0183	-0.026	0.661	0.0131	80480	0.211	0.086	0.037	0.623	0.0049	458	10	190	0.991
10/19/2022	10:00:21	-0.275	0.0091	-0.031	0.645	0.0154	85319	0.223	0.089	0.039	0.603	0.0051	485	10	190	0.991
10/19/2022	10:01:20	-0.501	0.0174	0.003	0.647	0.3411	83074	0.216	0.089	0.039	0.608	0.0050	469	10	190	0.995
10/19/2022	10:02:20	-0.604	0.0573	0.065	0.700	0.4844	74210	0.198	0.085	0.035	0.692	0.0045	432	10	190	0.996
10/19/2022	10:03:20	-0.464	0.0505	0.066	0.655	0.4805	73150	0.196	0.083	0.035	0.647	0.0047	410	10	190	0.996
10/19/2022	10:04:20	-0.501	0.0583	0.058	0.579	0.4795	72742	0.192	0.084	0.035	0.515	0.0046	405	10	190	0.995
10/19/2022	10:05:20	-0.571	0.0545	0.058	0.575	0.4795	72528	0.195	0.087	0.035	0.495	0.0046	406	10	190	0.995

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)	
10/19/2022	10:06:20	-0.448	0.0547	0.078	0.614	0.4898	72627	0.194	0.0083	0.035	0.525	0.0046	405	10	190	0.996
10/19/2022	10:07:21	-0.572	0.0671	0.057	0.623	0.4802	72688	0.193	0.0084	0.034	0.525	0.0044	403	10	190	0.996
10/19/2022	10:08:22	-0.317	0.0037	0.023	0.519	0.2030	70860	0.194	0.0082	0.034	0.475	0.0046	399	10	190	0.992
10/19/2022	10:09:20	-0.206	-0.0322	-0.016	0.514	0.0084	73413	0.200	0.0084	0.035	0.467	0.0046	410	10	190	0.990
10/19/2022	10:10:20	-0.282	-0.0304	0.004	0.554	0.0087	83386	0.219	0.0090	0.038	0.571	0.0051	461	10	190	0.990
10/19/2022	10:11:20	-0.245	-0.0275	-0.013	0.638	0.0151	76484	0.208	0.0088	0.036	0.553	0.0048	444	10	190	0.991
10/19/2022	10:12:20	-0.243	-0.0179	-0.030	0.592	0.0143	81334	0.215	0.0091	0.039	0.552	0.0050	467	10	190	0.991
10/19/2022	10:13:21	-0.249	-0.0087	-0.030	0.655	0.0143	83706	0.221	0.0087	0.038	0.602	0.0051	481	10	190	0.991
10/19/2022	10:14:20	-0.243	-0.0305	-0.009	0.657	0.0132	79929	0.211	0.0090	0.037	0.696	0.0049	455	10	190	0.991
10/19/2022	10:15:20	-0.217	-0.0435	-0.032	0.550	0.0150	78580	0.208	0.0088	0.037	0.481	0.0048	449	10	190	0.991
10/19/2022	10:16:22	-0.577	0.0352	0.016	0.654	0.4690	77659	0.203	0.0086	0.037	0.584	0.0048	443	10	190	0.996
10/19/2022	10:17:21	-0.505	0.0575	0.077	0.718	0.4814	72681	0.194	0.0089	0.035	0.649	0.0045	420	10	190	0.996
10/19/2022	10:18:20	-0.584	0.0535	0.059	0.670	0.4789	72509	0.195	0.0087	0.035	0.610	0.0045	402	10	190	0.996
10/19/2022	10:19:20	-0.486	0.0375	0.059	0.563	0.4785	72571	0.196	0.0084	0.035	0.491	0.0046	404	10	190	0.996
10/19/2022	10:20:20	-0.510	0.0552	0.073	0.599	0.4796	72400	0.189	0.0083	0.035	0.509	0.0045	402	10	190	0.996
10/19/2022	10:21:20	-0.515	0.0514	0.064	0.582	0.4800	72454	0.190	0.0086	0.034	0.511	0.0044	397	10	190	0.996
10/19/2022	10:22:20	-0.515	0.0526	0.068	0.652	0.4788	72777	0.197	0.0085	0.036	0.513	0.0045	403	10	190	0.995
10/19/2022	10:23:20	-0.481	0.0424	0.058	0.611	0.4133	74934	0.200	0.0089	0.035	0.540	0.0046	417	10	190	0.993
10/19/2022	10:24:21	-0.196	-0.0372	0.005	0.557	0.0089	76557	0.204	0.0090	0.036	0.522	0.0047	421	10	190	0.990
10/19/2022	10:25:21	-0.254	-0.0186	-0.022	0.646	0.0141	82241	0.217	0.0089	0.038	0.550	0.0050	469	10	190	0.990
10/19/2022	10:26:22	-0.231	-0.0300	-0.021	0.562	0.0145	82428	0.215	0.0094	0.039	0.476	0.0049	465	10	190	0.990
10/19/2022	10:27:20	-0.247	-0.0181	-0.022	0.639	0.0149	78657	0.210	0.0090	0.037	0.569	0.0049	453	10	190	0.990
10/19/2022	10:28:20	-0.252	0.0045	-0.018	0.613	0.0131	77902	0.211	0.0086	0.037	0.520	0.0049	450	10	190	0.991
10/19/2022	10:29:20	-0.211	-0.0302	-0.033	0.587	0.0137	76773	0.205	0.0086	0.035	0.468	0.0048	440	10	190	0.991
10/19/2022	10:30:20	-0.245	-0.0166	-0.027	0.684	0.0146	76296	0.207	0.0084	0.035	0.715	0.0048	446	10	190	0.990
10/19/2022	10:31:20	-0.217	-0.0307	-0.012	0.558	0.0137	78108	0.206	0.0092	0.036	0.483	0.0048	442	10	190	0.990
10/19/2022	10:32:20	-0.238	-0.0270	-0.028	0.667	0.0147	83411	0.219	0.0086	0.039	0.699	0.0051	477	10	190	0.991
10/19/2022	10:33:20	-0.486	0.0224	0.002	0.652	0.3154	78855	0.209	0.0086	0.037	0.594	0.0049	455	10	190	0.995
10/19/2022	10:34:20	-0.478	0.0382	0.035	0.647	0.4822	74046	0.200	0.0088	0.036	0.512	0.0047	435	10	190	0.996
10/19/2022	10:35:20	-0.602	0.0735	0.051	0.580	0.4802	72614	0.197	0.0085	0.034	0.500	0.0046	412	10	190	0.996
10/19/2022	10:36:20	-0.498	0.0585	0.064	0.617	0.4821	72841	0.193	0.0087	0.035	0.599	0.0046	409	10	190	0.996
10/19/2022	10:37:20	-0.527	0.0436	0.044	0.559	0.4835	72386	0.198	0.0082	0.035	0.505	0.0046	412	10	190	0.996
10/19/2022	10:38:20	-0.449	0.0564	0.069	0.545	0.4776	72402	0.193	0.0087	0.034	0.498	0.0044	404	10	190	0.996
10/19/2022	10:39:20	-0.567	0.0533	0.069	0.591	0.4815	72457	0.195	0.0083	0.035	0.474	0.0045	408	10	190	0.996
10/19/2022	10:40:20	-0.441	0.0342	0.037	0.556	0.2845	72521	0.197	0.0086	0.034	0.496	0.0046	412	10	190	0.993
10/19/2022	10:41:22	-0.221	-0.0141	0.000	0.704	0.0091	69310	0.194	0.0081	0.033	0.658	0.0045	394	10	190	0.990
10/19/2022	10:42:20	-0.253	-0.0190	-0.005	0.574	0.0079	83478	0.216	0.0090	0.039	0.518	0.0050	455	10	190	0.990
10/19/2022	10:43:20	-0.273	-0.0105	-0.011	0.607	0.0145	77820	0.209	0.0088	0.036	0.582	0.0048	450	10	190	0.990
10/19/2022	10:44:20	-0.243	-0.0441	-0.009	0.718	0.0137	79697	0.212	0.0085	0.037	0.692	0.0049	462	10	190	0.990
10/19/2022	10:45:20	-0.228	-0.0470	-0.040	0.641	0.0142	78956	0.208	0.0087	0.037	0.595	0.0048	451	10	190	0.990
10/19/2022	10:46:20	-0.260	-0.0324	-0.020	0.650	0.0137	83918	0.218	0.0092	0.039	0.529	0.0050	470	10	190	0.990
10/19/2022	10:47:20	-0.413	0.0411	-0.003	0.615	0.3693	81896	0.213	0.0099	0.039	0.540	0.0049	450	10	190	0.995
10/19/2022	10:48:20	-0.548	0.0664	0.049	0.619	0.4828	73833	0.195	0.0086	0.035	0.509	0.0046	422	10	190	0.996
10/19/2022	10:49:20	-0.603	0.0687	0.047	0.569	0.4790	73249	0.200	0.0086	0.034	0.551	0.0047	413	10	190	0.996
10/19/2022	10:50:20	-0.528	0.0510	0.038	0.610	0.4812	72479	0.197	0.0085	0.036	0.590	0.0046	408	10	190	0.996
10/19/2022	10:51:20	-0.557	0.0501	0.066	0.573	0.4787	72732	0.195	0.0083	0.034	0.530	0.0045	411	10	190	0.996
10/19/2022	10:52:20	-0.503	0.0537	0.052	0.568	0.4795	72875	0.194	0.0086	0.035	0.497	0.0044	404	10	190	0.996

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	10:53:20	-0.546	0.0687	0.075	0.602	0.4769	72612	0.197	0.0085	0.035	0.501	0.0045	412	10	190
10/19/2022	10:54:20	-0.309	0.0024	0.021	0.518	0.2574	67781	0.222	0.0082	0.033	0.464	0.0054	386	10	190
10/19/2022	10:55:20	-0.200	-0.0520	-0.024	0.210	0.0078	29977	0.244	0.0069	0.019	0.273	0.0068	220	11	190
10/19/2022	10:56:22	-0.182	-0.0493	-0.033	0.066	0.0019	15815	0.227	0.0067	0.016	0.165	0.0065	104	11	190
10/19/2022	10:57:22	-0.192	-0.0411	-0.036	0.013	0.0002	7246	0.223	0.0062	0.015	0.098	0.0065	57	12	190
10/19/2022	10:58:20	-0.210	-0.0220	-0.032	0.020	-0.0015	5141	0.225	0.0065	0.015	0.077	0.0065	44	12	190
10/19/2022	10:59:20	-0.172	-0.0197	-0.032	-0.252	0.0029	3889	0.225	0.0057	0.013	0.050	0.0065	21	12	190
10/19/2022	11:00:22	-0.146	-0.0229	-0.037	-0.169	0.0018	2464	0.225	0.0060	0.014	0.034	0.0065	18	13	190
10/19/2022	11:01:20	-0.196	-0.0137	-0.031	-0.122	-0.0007	1721	0.224	0.0052	0.012	0.026	0.0065	17	13	190
10/19/2022	11:02:20	-0.153	0.0687	0.059	-1.747	0.5095	72384	0.451	0.0092	0.042	0.823	0.0100	291	10	190
10/19/2022	11:03:20	-0.462	0.0504	0.495	0.4796	72437	0.196	0.0082	0.036	0.472	0.0045	408	10	190	
10/19/2022	11:04:22	-0.365	-0.0031	0.019	0.430	0.1877	50681	0.175	0.0078	0.027	0.386	0.0044	306	10	190
10/19/2022	11:05:20	-0.260	-0.0347	-0.003	0.323	0.0079	53533	0.166	0.0078	0.027	0.358	0.0040	304	10	190
10/19/2022	11:06:20	-0.242	-0.0234	-0.011	0.376	0.0085	57761	0.174	0.0077	0.028	0.451	0.0042	326	10	190
10/19/2022	11:07:20	-0.216	-0.0599	-0.021	0.375	0.0076	60739	0.180	0.0078	0.030	0.454	0.0043	342	10	190
10/19/2022	11:08:20	-0.252	-0.0413	-0.033	0.412	0.0074	63212	0.187	0.0080	0.031	0.501	0.0044	359	10	190
10/19/2022	11:09:20	-0.246	-0.0504	-0.006	0.567	0.0091	64880	0.187	0.0080	0.032	0.656	0.0044	378	10	190
10/19/2022	11:10:20	-0.257	-0.0294	-0.026	0.404	0.0092	66132	0.187	0.0078	0.032	0.478	0.0044	380	10	190
10/19/2022	11:11:20	-0.266	-0.0287	-0.014	0.425	0.0099	66871	0.191	0.0082	0.031	0.495	0.0045	387	10	190
10/19/2022	11:12:20	-0.268	-0.0465	-0.023	0.430	0.0096	66984	0.187	0.0082	0.033	0.440	0.0044	379	10	190
10/19/2022	11:13:20	-0.260	-0.0440	-0.025	0.453	0.0097	71646	0.196	0.0087	0.033	0.473	0.0046	400	10	190
10/19/2022	11:14:20	-0.227	-0.0480	-0.032	0.435	0.0100	70782	0.195	0.0080	0.034	0.467	0.0046	399	10	190
10/19/2022	11:15:22	-0.227	-0.0218	-0.016	0.567	0.0090	69523	0.192	0.0083	0.034	0.623	0.0045	393	10	190
10/19/2022	11:16:20	-0.242	-0.0427	-0.027	0.437	0.0093	70109	0.194	0.0080	0.034	0.495	0.0046	398	10	190
10/19/2022	11:17:20	-0.256	-0.0392	-0.042	0.475	0.0094	75693	0.204	0.0088	0.036	0.503	0.0047	424	10	190
10/19/2022	11:18:20	-0.301	-0.0402	-0.025	0.540	0.0155	75872	0.208	0.0089	0.035	0.497	0.0048	444	10	190
10/19/2022	11:19:20	-0.242	-0.0228	-0.024	0.605	0.0144	72416	0.203	0.0081	0.034	0.587	0.0048	435	10	190
10/19/2022	11:20:20	-0.486	0.0378	-0.015	0.487	0.3766	74773	0.208	0.0081	0.036	0.553	0.0048	430	10	190
10/19/2022	11:21:20	-0.589	0.0602	0.028	0.508	0.4799	73801	0.201	0.0084	0.036	0.541	0.0046	426	10	190
10/19/2022	11:22:20	-0.516	0.0681	0.048	0.600	0.4781	73314	0.203	0.0080	0.035	0.598	0.0047	423	10	190
10/19/2022	11:23:20	-0.537	0.0538	0.048	0.625	0.4812	73282	0.202	0.0083	0.035	0.576	0.0047	423	10	190
10/19/2022	11:24:20	-0.482	0.0320	0.058	0.641	0.4815	73546	0.202	0.0081	0.035	0.581	0.0047	423	10	190
10/19/2022	11:25:20	-0.511	0.0374	0.041	0.537	0.4766	72874	0.199	0.0086	0.036	0.479	0.0046	420	10	190
10/19/2022	11:26:20	-0.577	0.0332	0.061	0.541	0.4774	73022	0.201	0.0082	0.035	0.504	0.0047	423	10	190
10/19/2022	11:27:20	-0.346	-0.0199	0.037	0.612	0.1915	71158	0.201	0.0083	0.034	0.614	0.0046	414	10	190
10/19/2022	11:28:20	-0.263	-0.0211	0.000	0.541	0.0101	71017	0.204	0.0080	0.034	0.559	0.0047	417	10	190
10/19/2022	11:29:20	-0.278	-0.0277	-0.015	0.434	0.0114	77438	0.213	0.0086	0.037	0.492	0.0049	443	10	190
10/19/2022	11:30:20	-0.233	-0.0370	-0.011	0.594	0.0148	78972	0.216	0.0085	0.037	0.557	0.0050	465	10	190
10/19/2022	11:31:20	-0.281	-0.0136	-0.012	0.647	0.0134	80798	0.221	0.0082	0.037	0.622	0.0051	478	10	190
10/19/2022	11:32:20	-0.234	-0.0299	-0.021	0.650	0.0135	82707	0.222	0.0085	0.039	0.655	0.0051	483	10	190
10/19/2022	11:33:20	-0.242	-0.0335	-0.008	0.668	0.0135	85132	0.225	0.0089	0.040	0.655	0.0052	491	10	190
10/19/2022	11:34:20	-0.459	0.0327	-0.022	0.505	0.2003	87439	0.233	0.0089	0.041	0.538	0.0053	507	10	190
10/19/2022	11:35:20	-0.536	0.0510	0.025	0.605	0.4821	75678	0.213	0.0086	0.037	0.497	0.0049	454	10	190
10/19/2022	11:36:20	-0.453	0.0721	0.044	0.722	0.4853	73682	0.204	0.0085	0.036	0.844	0.0046	439	10	190
10/19/2022	11:37:20	-0.502	0.0509	0.042	0.567	0.4797	72850	0.195	0.0088	0.035	0.482	0.0046	417	10	190
10/19/2022	11:38:20	-0.590	0.0336	0.048	0.506	0.4794	72642	0.198	0.0088	0.035	0.478	0.0046	414	10	190
10/19/2022	11:39:20	-0.630	0.0498	0.046	0.546	0.4818	73018	0.202	0.0085	0.036	0.494	0.0045	418	10	190

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	11:40:20	-0.348	0.0025	0.045	0.516	0.1478	74198	0.201	0.0083	0.035	0.545	0.0046	418	10	190	0.992
10/19/2022	11:41:20	-0.221	-0.0471	-0.014	0.513	0.0097	69605	0.195	0.0081	0.035	0.491	0.0046	396	10	190	0.990
10/19/2022	11:42:20	-0.252	-0.0139	-0.017	0.510	0.0113	78878	0.212	0.0088	0.037	0.519	0.0049	440	10	190	0.990
10/19/2022	11:43:20	-0.243	-0.0173	0.006	0.613	0.0140	80230	0.214	0.0087	0.038	0.581	0.0050	466	10	190	0.990
10/19/2022	11:44:20	-0.267	-0.0048	-0.020	0.667	0.0124	92415	0.235	0.0093	0.044	0.600	0.0054	516	10	190	0.990
10/19/2022	11:45:20	-0.228	-0.0315	-0.031	0.745	0.0161	80635	0.219	0.0088	0.038	0.630	0.0050	493	10	190	0.991
10/19/2022	11:46:20	-0.265	-0.0329	-0.017	0.658	0.0135	80133	0.216	0.0088	0.037	0.788	0.0050	466	10	190	0.991
10/19/2022	11:47:20	-0.477	0.0268	0.010	0.630	0.2899	77529	0.206	0.0088	0.036	0.562	0.0048	446	10	190	0.994
10/19/2022	11:48:20	-0.493	0.0734	0.030	0.603	0.4809	74896	0.199	0.0084	0.036	0.476	0.0046	428	10	190	0.996
10/19/2022	11:49:21	-0.549	0.0549	0.038	0.604	0.4790	74263	0.195	0.0088	0.036	0.669	0.0046	406	10	190	0.996
10/19/2022	11:50:20	-0.636	0.0493	0.058	0.585	0.4798	73003	0.196	0.0089	0.035	0.492	0.0045	406	10	190	0.996
10/19/2022	11:51:20	-0.605	0.0700	0.044	0.583	0.4811	73212	0.198	0.0086	0.034	0.545	0.0045	402	10	190	0.996
10/19/2022	11:52:20	-0.561	0.0446	0.071	0.584	0.4787	72786	0.192	0.0087	0.034	0.473	0.0044	400	10	190	0.995
10/19/2022	11:53:21	-0.371	0.0150	0.031	0.567	0.1754	72346	0.193	0.0089	0.035	0.516	0.0044	395	10	190	0.990
10/19/2022	11:54:20	-0.238	-0.0403	-0.002	0.481	0.0107	70076	0.191	0.0088	0.033	0.449	0.0044	389	10	190	0.989
10/19/2022	11:55:20	-0.266	-0.0189	-0.024	0.538	0.0098	81279	0.211	0.0094	0.037	0.555	0.0049	442	10	190	0.990
10/19/2022	11:56:21	-0.231	-0.0074	-0.026	0.531	0.0127	76064	0.203	0.0089	0.036	0.471	0.0047	434	10	190	0.989
10/19/2022	11:57:20	-0.256	-0.0298	-0.014	0.599	0.0140	79871	0.215	0.0093	0.037	0.520	0.0050	461	10	190	0.990
10/19/2022	11:58:20	-0.259	-0.0120	-0.023	0.605	0.0122	86872	0.221	0.0093	0.039	0.579	0.0051	484	10	190	0.990
10/19/2022	11:59:20	-0.284	-0.0214	-0.027	0.577	0.0145	80023	0.215	0.0087	0.037	0.576	0.0050	462	10	190	0.990
10/19/2022	12:00:21	-0.291	-0.0199	-0.001	0.655	0.0120	77048	0.213	0.0088	0.035	0.733	0.0049	459	10	190	0.990
10/19/2022	12:01:20	-0.531	0.0467	0.005	0.497	0.3690	74896	0.209	0.0087	0.036	0.523	0.0048	446	10	190	0.995
10/19/2022	12:02:20	-0.628	0.0469	0.022	0.492	0.4800	73002	0.204	0.0083	0.036	0.470	0.0047	428	10	190	0.996
10/19/2022	12:03:20	-0.600	0.0691	0.036	0.471	0.4812	72514	0.202	0.0078	0.035	0.474	0.0048	422	10	190	0.996
10/19/2022	12:04:20	-0.477	0.0505	0.022	0.563	0.4816	72678	0.203	0.0086	0.035	0.466	0.0046	419	10	190	0.996
10/19/2022	12:05:20	-0.556	0.0530	0.041	0.580	0.4762	72782	0.199	0.0081	0.035	0.503	0.0047	422	10	190	0.996
10/19/2022	12:06:21	-0.665	0.0562	0.022	0.671	0.4823	72936	0.205	0.0081	0.036	0.588	0.0046	417	10	190	0.996
10/19/2022	12:07:20	-0.569	0.0597	0.029	0.613	0.4806	72812	0.200	0.0090	0.035	0.541	0.0047	422	10	190	0.996
10/19/2022	12:08:20	-0.404	0.0451	0.019	0.612	0.2269	82712	0.218	0.0091	0.039	0.652	0.0050	461	10	190	0.991
10/19/2022	12:09:20	-0.254	0.0302	-0.020	0.620	0.0143	80960	0.221	0.0088	0.037	0.498	0.0050	476	10	190	0.990
10/19/2022	12:10:20	-0.236	-0.0415	-0.019	0.504	0.0141	77601	0.212	0.0088	0.036	0.462	0.0049	455	10	190	0.990
10/19/2022	12:11:20	-0.245	-0.0167	-0.026	0.568	0.0150	82792	0.219	0.0092	0.039	0.510	0.0051	474	10	190	0.990
10/19/2022	12:12:22	-0.277	-0.0126	-0.034	0.524	0.0154	76503	0.211	0.0088	0.037	0.436	0.0049	451	10	190	0.990
10/19/2022	12:13:20	-0.234	-0.0282	-0.032	0.592	0.0135	82343	0.218	0.0089	0.038	0.522	0.0050	474	10	190	0.990
10/19/2022	12:14:20	-0.529	0.0457	-0.005	0.616	0.2941	78493	0.212	0.0084	0.038	0.610	0.0050	463	10	190	0.994
10/19/2022	12:15:23	-0.637	0.0463	0.023	0.603	0.4847	73615	0.205	0.0084	0.035	0.456	0.0048	440	10	190	0.996
10/19/2022	12:16:20	-0.586	0.0577	0.034	0.581	0.4824	73549	0.198	0.0089	0.036	0.803	0.0047	415	10	190	0.996
10/19/2022	12:17:20	-0.481	0.0474	0.042	0.528	0.4778	73515	0.196	0.0087	0.034	0.496	0.0045	407	10	190	0.996
10/19/2022	12:18:20	-0.562	0.0731	0.043	0.657	0.4827	72923	0.192	0.0085	0.035	0.641	0.0045	403	10	190	0.996
10/19/2022	12:19:20	-0.545	0.0710	0.057	0.544	0.4784	73021	0.197	0.0087	0.035	0.535	0.0044	406	10	190	0.996
10/19/2022	12:20:20	-0.565	0.0482	0.037	0.668	0.4776	72988	0.192	0.0088	0.037	0.577	0.0044	400	10	190	0.996
10/19/2022	12:21:20	-0.399	0.0245	0.023	0.609	0.2835	76738	0.202	0.0090	0.037	0.539	0.0046	420	10	190	0.992
10/19/2022	12:22:20	-0.244	-0.0482	-0.018	0.532	0.0127	68110	0.192	0.0085	0.033	0.449	0.0045	404	10	190	0.990
10/19/2022	12:23:20	-0.258	-0.0401	-0.014	0.389	0.0097	71121	0.194	0.0086	0.034	0.411	0.0045	395	10	190	0.990
10/19/2022	12:24:20	-0.265	-0.0288	-0.024	0.517	0.0084	79501	0.209	0.0089	0.037	0.536	0.0049	436	10	190	0.990
10/19/2022	12:25:20	-0.305	-0.0160	-0.031	0.570	0.0146	82326	0.218	0.0093	0.038	0.492	0.0050	468	10	190	0.990
10/19/2022	12:26:20	-0.264	-0.0240	-0.013	0.513	0.0132	75603	0.205	0.0089	0.037	0.458	0.0048	440	10	190	0.990

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	12:27:20	-0.272	-0.0277	-0.042	0.593	0.0140	891.97	0.228	0.097	0.040	0.602	0.0052	501	10	190	0.991
10/19/2022	12:28:20	-0.223	-0.0246	-0.028	0.637	0.0167	835.02	0.222	0.094	0.040	0.607	0.0051	501	10	190	0.991
10/19/2022	12:29:20	-0.462	0.0235	-0.005	0.577	0.3520	789.38	0.206	0.094	0.037	0.476	0.0048	445	10	190	0.995
10/19/2022	12:30:20	-0.438	0.0390	0.052	0.592	0.4825	740.58	0.200	0.089	0.037	0.510	0.0046	422	10	190	0.996
10/19/2022	12:31:20	-0.566	0.0327	0.015	0.610	0.4801	736.59	0.189	0.088	0.036	0.472	0.0045	406	10	190	0.996
10/19/2022	12:32:20	-0.601	0.0323	0.018	0.694	0.4786	738.26	0.200	0.089	0.036	0.705	0.0045	412	10	190	0.996
10/19/2022	12:33:20	-0.621	0.0388	0.035	0.456	0.4786	729.62	0.194	0.089	0.036	0.443	0.0045	407	10	190	0.995
10/19/2022	12:34:20	-0.521	0.0548	0.034	0.577	0.4812	731.37	0.195	0.089	0.036	0.563	0.0045	410	10	190	0.995
10/19/2022	12:35:20	-0.535	0.0764	0.049	0.560	0.4779	732.22	0.193	0.090	0.035	0.505	0.0045	404	10	190	0.996
10/19/2022	12:36:20	-0.563	0.0429	0.043	0.484	0.4795	732.32	0.192	0.090	0.035	0.507	0.0045	403	10	190	0.996
10/19/2022	12:37:20	-0.475	0.0425	0.037	0.564	0.3750	752.54	0.200	0.090	0.037	0.488	0.0046	416	10	190	0.994
10/19/2022	12:38:20	-0.265	-0.0222	-0.009	0.547	0.0140	706.24	0.198	0.085	0.034	0.461	0.0046	419	10	190	0.989
10/19/2022	12:39:20	-0.305	-0.0139	-0.018	0.499	0.0099	860.47	0.223	0.091	0.041	0.537	0.0051	468	10	190	0.989
10/19/2022	12:40:20	-0.279	-0.0297	-0.027	0.717	0.0141	822.20	0.217	0.092	0.038	0.657	0.0050	470	10	190	0.989
10/19/2022	12:41:20	-0.296	-0.0131	-0.021	0.569	0.0154	737.29	0.202	0.092	0.034	0.526	0.0047	429	10	190	0.990
10/19/2022	12:42:20	-0.312	-0.0039	-0.007	0.526	0.0085	875.77	0.226	0.094	0.040	0.615	0.0052	478	10	190	0.990
10/19/2022	12:43:20	-0.279	-0.0483	-0.038	0.635	0.0128	802.01	0.213	0.092	0.038	0.559	0.0049	460	10	190	0.990
10/19/2022	12:44:20	-0.275	-0.0361	-0.046	0.606	0.0157	745.21	0.204	0.090	0.036	0.488	0.0047	434	10	190	0.990
10/19/2022	12:45:20	-0.248	-0.0450	-0.027	0.438	0.0101	764.95	0.204	0.093	0.037	0.496	0.0047	422	10	190	0.990
10/19/2022	12:46:20	-0.435	0.0249	-0.030	0.694	0.3446	806.52	0.211	0.090	0.039	0.735	0.0049	460	10	190	0.994
10/19/2022	12:47:20	-0.536	0.0537	0.020	0.709	0.4869	747.07	0.199	0.088	0.036	0.723	0.0047	433	10	190	0.996
10/19/2022	12:48:20	-0.500	0.0478	0.035	0.580	0.4829	728.19	0.197	0.092	0.034	0.552	0.0045	402	10	190	0.996
10/19/2022	12:49:20	-0.572	0.0364	0.048	0.553	0.4824	730.97	0.197	0.085	0.035	0.496	0.0045	409	10	190	0.996
10/19/2022	12:50:20	-0.655	0.0503	0.039	0.544	0.4822	732.76	0.194	0.086	0.036	0.503	0.0045	407	10	190	0.995
10/19/2022	12:51:20	-0.609	0.0590	0.037	0.517	0.4814	729.38	0.196	0.089	0.034	0.451	0.0047	406	10	190	0.996
10/19/2022	12:52:20	-0.572	0.0439	0.045	0.521	0.4773	730.51	0.192	0.088	0.034	0.432	0.0045	403	10	190	0.996
10/19/2022	12:53:20	-0.590	0.0414	0.031	0.493	0.4797	727.66	0.193	0.089	0.035	0.427	0.0044	404	10	190	0.996
10/19/2022	12:54:22	-0.278	0.0327	0.052	0.553	0.1207	783.19	0.209	0.093	0.037	0.497	0.0047	427	10	190	0.996
10/19/2022	12:55:20	-0.304	-0.0119	0.037	0.761	0.0157	811.06	0.211	0.090	0.037	0.756	0.0049	452	10	190	0.996
10/19/2022	12:56:20	-0.265	-0.0126	0.050	0.715	0.0122	809.73	0.211	0.089	0.038	0.584	0.0050	455	10	190	0.996
10/19/2022	12:57:20	-0.201	-0.0255	0.046	0.692	0.0133	807.27	0.212	0.091	0.037	0.511	0.0048	456	10	190	0.996
10/19/2022	12:58:20	-0.199	-0.0350	0.054	0.784	0.0169	812.99	0.214	0.089	0.038	0.706	0.0050	465	10	190	0.995
10/19/2022	12:59:20	-0.320	-0.0200	0.037	0.734	0.0123	810.41	0.217	0.091	0.037	0.665	0.0050	462	10	190	0.996
10/19/2022	13:00:20	-0.188	-0.0217	0.045	0.754	0.0122	812.06	0.219	0.091	0.038	0.576	0.0050	463	10	190	0.995
10/19/2022	13:01:20	-0.232	-0.0108	0.061	0.608	0.0147	807.60	0.211	0.095	0.038	0.507	0.0049	453	10	190	0.996
10/19/2022	13:02:20	-0.171	-0.0230	0.045	0.626	0.0125	810.99	0.212	0.093	0.036	0.475	0.0049	456	10	190	0.996
10/19/2022	13:03:20	-0.335	0.0017	0.085	0.639	0.0131	807.78	0.209	0.094	0.037	0.491	0.0049	453	10	190	0.996
10/19/2022	13:04:20	-0.281	-0.0080	0.056	0.651	0.0131	809.90	0.210	0.091	0.040	0.544	0.0049	451	10	190	0.995
10/19/2022	13:05:20	-0.267	-0.0097	0.047	0.737	0.0134	816.78	0.211	0.094	0.038	0.565	0.0048	454	10	190	0.996
10/19/2022	13:06:20	-0.268	-0.0190	0.035	0.798	0.0135	811.78	0.213	0.092	0.038	0.614	0.0049	457	10	190	0.996
10/19/2022	13:07:20	-0.241	-0.0350	0.057	0.657	0.0131	810.95	0.209	0.095	0.038	0.461	0.0048	447	10	190	0.996
10/19/2022	13:08:22	-0.259	-0.0177	0.027	0.745	0.0157	814.25	0.214	0.096	0.038	0.572	0.0050	457	10	190	0.996
10/19/2022	13:09:22	-0.261	-0.0124	0.049	0.750	0.0159	811.01	0.214	0.096	0.039	0.602	0.0048	452	10	190	0.996
10/19/2022	13:10:21	-0.265	-0.0248	0.035	0.693	0.0134	813.46	0.213	0.093	0.038	0.520	0.0049	457	10	190	0.996
10/19/2022	13:11:20	-0.251	-0.0379	0.031	0.721	0.0135	812.52	0.210	0.094	0.038	0.598	0.0049	459	10	190	0.996
10/19/2022	13:12:20	-0.329	-0.0246	0.039	0.719	0.0170	813.01	0.214	0.091	0.038	0.532	0.0049	463	10	190	0.996
10/19/2022	13:13:20	-0.243	0.0307	0.371	0.4795	0.3719	475.95	0.149	0.076	0.027	0.314	0.0033	283	11	190	0.996

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	13:14:20	-0.105	-0.0164	-0.003	0.002	0.0047	686	0.032	0.0029	0.006	0.020	0.0005	11	14	190	0.996
10/19/2022	13:15:20	-0.105	-0.0091	-0.009	-0.028	0.0035	314	0.029	0.0027	0.007	0.009	0.0005	2	14	190	0.996
10/19/2022	13:16:22	-0.135	-0.0109	-0.006	-0.020	0.0012	178	0.033	0.0028	0.007	0.012	0.0006	1	14	190	0.996
10/19/2022	13:17:20	-0.194	-0.0084	-0.006	-0.023	0.0017	121	0.034	0.0028	0.007	0.010	0.0006	1	14	190	0.996
10/19/2022	13:18:20	-0.124	-0.0297	-0.008	-0.012	0.0010	58	0.032	0.0028	0.007	0.010	0.0005	1	14	190	0.996
10/19/2022	13:19:22	-0.125	-0.0069	0.001	-0.010	-0.0017	60	0.030	0.0029	0.007	0.010	0.0006	1	14	190	0.996
10/19/2022	13:20:20	-0.187	-0.0165	-0.012	-0.014	-0.007	127	0.030	0.0028	0.007	0.009	0.0006	1	14	190	0.996
System Zero		-0.187														
10/19/2022	13:21:20	-0.117	-0.0117	0.000	-0.006	-0.0041	80	0.029	0.0028	0.006	0.008	0.0006	1	14	190	0.996
10/19/2022	13:22:20	61.671	-0.0123	-0.002	-0.013	0.0330	56	0.134	0.0028	0.006	0.010	0.0067	2	14	190	0.996
10/19/2022	13:23:20	93.958	-0.0166	0.003	-0.004	0.0218	-122	0.081	0.0029	0.007	0.010	0.0031	3	14	190	0.996
10/19/2022	13:24:20	94.887	-0.0008	-0.003	-0.015	0.0119	-106	0.093	0.0030	0.007	0.013	0.0070	3	14	190	0.996
10/19/2022	13:25:20	95.243	-0.0282	-0.003	-0.001	0.0105	-158	0.092	0.0027	0.006	0.009	0.0068	3	14	190	0.995
10/19/2022	13:26:20	95.041	-0.0118	-0.001	-0.007	0.0129	-57	0.098	0.0028	0.006	0.010	0.0071	3	14	190	0.995
10/19/2022	13:27:20	95.197	-0.0151	-0.006	-0.005	0.0112	-144	0.095	0.0027	0.006	0.010	0.0072	3	14	190	0.995
10/19/2022	13:28:20	95.226	-0.0099	-0.001	0.001	0.0119	-103	0.094	0.0029	0.006	0.009	0.0071	3	14	190	0.995
System CTS		95.226														
10/19/2022	13:29:20	43.205	-0.0105	-0.008	-0.005	0.0289	-65	0.107	0.0026	0.006	0.008	0.0058	2	14	190	0.993
10/19/2022	13:30:20	-0.053	-0.0235	-0.018	-0.008	0.0004	-52	0.018	0.0028	0.007	0.010	0.0002	0	14	190	0.991
10/19/2022	13:31:20	-0.161	-0.0187	-0.008	0.003	0.0017	26	0.040	0.0035	0.008	0.010	0.0010	1	14	190	0.991
10/19/2022	13:32:20	-0.105	-0.0147	-0.010	-0.001	-0.001	-43	0.022	0.0027	0.006	0.008	0.0002	0	15	190	0.991
10/19/2022	13:33:20	-0.096	-0.0136	-0.022	-0.003	-0.006	-54	0.023	0.0027	0.006	0.007	0.0002	0	14	190	0.991
10/19/2022	13:34:20	-0.097	-0.0138	-0.005	0.008	0.0007	-23	0.020	0.0025	0.006	0.006	0.0002	0	14	190	0.991
10/19/2022	13:35:22	-0.118	-0.0138	-0.016	0.014	-0.0003	-30	0.022	0.0025	0.006	0.007	0.0002	0	15	190	0.991
10/19/2022	13:36:20	-0.105	-0.0075	-0.015	0.005	0.0001	-38	0.019	0.0025	0.006	0.007	0.0002	0	15	190	0.991
10/19/2022	13:37:20	-0.124	-0.0118	-0.005	0.008	0.0001	-50	0.022	0.0028	0.006	0.008	0.0002	0	15	190	0.991
10/19/2022	13:38:22	-0.109	-0.0108	-0.009	0.009	-0.003	-64	0.018	0.0026	0.006	0.007	0.0002	0	15	190	0.991
10/19/2022	13:39:22	-0.091	-0.0222	-0.009	0.019	0.0006	-48	0.020	0.0026	0.006	0.007	0.0002	0	14	190	0.991
Direct Zero		-0.091														
10/19/2022	13:40:20	54.192	-0.0097	-0.007	0.016	0.0315	-103	0.133	0.0026	0.006	0.008	0.0068	2	14	190	0.991
10/19/2022	13:41:20	93.155	-0.0136	-0.010	0.003	0.0139	-206	0.065	0.0028	0.007	0.011	0.0025	3	14	190	0.991
10/19/2022	13:42:20	95.285	-0.0200	-0.010	0.003	0.0110	-188	0.089	0.0028	0.006	0.010	0.0069	3	14	190	0.991
10/19/2022	13:43:20	95.377	-0.0038	0.001	0.003	0.0077	-191	0.085	0.0026	0.006	0.010	0.0068	3	14	190	0.991
10/19/2022	13:44:20	94.992	-0.0114	-0.002	0.008	0.0138	-164	0.091	0.0025	0.006	0.010	0.0070	3	14	190	0.991
10/19/2022	13:45:20	95.193	-0.0050	-0.004	0.001	0.0101	-176	0.087	0.0025	0.006	0.008	0.0069	3	14	190	0.991
Direct CTS		95.193														
10/19/2022	13:46:20	26.842	-0.0144	-0.014	0.015	0.0212	-97	0.082	0.0027	0.006	0.007	0.0042	1	14	190	0.991
10/19/2022	13:47:20	-0.093	-0.0149	-0.018	0.014	0.006	-54	0.020	0.0028	0.006	0.007	0.0002	0	15	190	0.991
10/19/2022	13:48:22	-0.091	-0.0101	-0.019	0.006	-0.008	-91	0.017	0.0028	0.007	0.007	0.0002	0	14	190	0.991
10/19/2022	13:49:20	-0.115	-0.0142	-0.013	0.006	-0.003	-39	0.019	0.0026	0.006	0.007	0.0002	0	14	190	0.991
10/19/2022	13:50:20	-0.127	-0.0054	-0.007	0.009	0.0010	-23	0.023	0.0024	0.006	0.006	0.0002	0	14	190	0.991
10/19/2022	13:53:40	-0.013	0.0001	0.006	-0.003	-0.009	6	0.007	0.0023	0.005	0.005	0.0002	0	14	190	0.990
10/19/2022	13:54:40	0.005	-0.0039	-0.006	-0.009	-0.004	11	0.006	0.0023	0.005	0.005	0.0002	0	14	190	0.990
10/19/2022	13:55:40	-0.005	0.0014	-0.004	0.002	-0.006	19	0.007	0.0025	0.005	0.006	0.0002	0	14	190	0.990
10/19/2022	13:56:40	-0.033	0.0071	-0.004	0.005	-0.001	-14	0.006	0.0024	0.005	0.006	0.0002	0	14	190	0.990
10/19/2022	13:57:40	0.008	-0.0042	-0.013	-0.006	-0.017	-1	0.008	0.0025	0.006	0.006	0.0002	0	14	190	0.990
10/19/2022	13:58:40	0.004	-0.0095	-0.012	0.012	-0.013	30	0.006	0.0022	0.005	0.006	0.0002	0	14	190	0.990

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	13:59:42	23.557	0.3278	-0.013	-0.141	1.3281	1244	0.123	0.029	0.071	0.0063	4	14	190	0.994	
10/19/2022	14:00:40	-2.939	0.7394	0.002	-0.021	4.8061	168	0.087	0.030	0.007	0.006	2	14	190	0.995	
10/19/2022	14:01:40	-3.365	0.7605	0.002	-0.006	4.8067	82	0.092	0.033	0.008	0.007	1	14	190	0.995	
10/19/2022	14:02:40	-3.165	0.7993	-0.002	-0.010	4.8194	103	0.085	0.030	0.007	0.007	1	14	190	0.995	
10/19/2022	14:03:40	-3.183	0.8127	0.004	-0.006	4.8099	105	0.087	0.033	0.007	0.006	1	14	190	0.994	
10/19/2022	14:04:40	-3.343	0.8039	-0.001	-0.001	4.8169	41	0.090	0.031	0.007	0.0042	1	14	190	0.994	
System CH2O		0.8039			4.8169											
10/19/2022	14:05:43	-3.292	0.8356	-0.009	-0.001	4.8077	36	0.091	0.030	0.007	0.006	1	14	190	0.994	
10/19/2022	14:06:42	-3.524	0.8671	-0.013	0.005	4.8081	38	0.092	0.031	0.007	0.006	0	14	190	0.990	
10/19/2022	14:07:40	-3.589	0.8858	-0.003	0.010	4.7961	19	0.092	0.029	0.007	0.005	0	14	190	0.990	
10/19/2022	14:08:43	-3.177	0.8742	-0.008	0.001	4.8039	34	0.081	0.031	0.007	0.005	0	14	190	0.990	
10/19/2022	14:09:40	-3.517	0.8685	-0.010	-0.008	4.8149	36	0.090	0.032	0.008	0.005	0	14	190	0.990	
10/19/2022	14:10:40	-3.502	0.8749	-0.007	-0.005	4.7991	28	0.090	0.030	0.007	0.006	0	14	190	0.990	
Direct CH2O		0.8725			4.8060											
10/19/2022	14:11:40	-3.530	0.8682	-0.008	0.002	4.7920	35	0.090	0.030	0.007	0.005	0	14	190	0.990	
10/19/2022	14:12:40	-3.542	0.8523	0.002	-0.004	4.7934	26	0.091	0.033	0.008	0.005	0	14	190	0.990	
10/19/2022	14:13:40	-0.036	0.0706	-0.010	0.006	0.2861	22	0.019	0.024	0.005	0.005	0	14	190	0.990	
10/19/2022	14:14:40	0.008	0.0126	-0.010	0.002	-0.003	14	0.012	0.026	0.006	0.006	0	14	190	0.986	
10/19/2022	14:15:40	0.114	0.1374	11.997	0.009	2.9928	-24	0.114	0.031	0.071	0.072	0.006	1	14	190	0.991
10/19/2022	14:16:40	-2.892	0.1651	18.674	0.013	4.7675	22	0.078	0.033	0.109	0.006	0.0038	0	14	190	0.995
10/19/2022	14:17:40	-2.965	0.1776	19.257	0.013	4.7892	-5	0.080	0.056	0.122	0.006	0.0036	0	14	190	0.995
10/19/2022	14:18:40	-2.674	0.1745	19.130	0.005	4.7757	34	0.076	0.050	0.120	0.006	0.0034	0	14	190	0.996
10/19/2022	14:19:40	-2.560	0.1808	19.331	0.012	4.7763	11	0.075	0.058	0.122	0.006	0.0034	0	14	190	0.996
10/19/2022	14:20:40	-2.379	0.1841	19.593	0.004	4.7929	-15	0.075	0.060	0.122	0.006	0.0032	1	14	189	0.996
10/19/2022	14:21:40	-2.090	0.1816	19.557	0.012	4.7995	20	0.076	0.044	0.119	0.006	0.0034	1	14	189	0.996
10/19/2022	14:22:40	-2.283	0.1893	19.768	0.017	4.8119	16	0.077	0.070	0.125	0.006	0.0034	1	14	189	0.996
10/19/2022	14:23:40	-2.246	0.1998	19.802	0.019	4.8097	-67	0.079	0.071	0.125	0.006	0.0033	1	14	189	0.996
10/19/2022	14:24:40	-2.180	0.1776	19.730	0.013	4.8055	-10	0.080	0.078	0.126	0.006	0.0034	1	14	189	0.996
10/19/2022	14:25:40	-2.036	0.1911	19.946	0.021	4.8213	-36	0.082	0.069	0.124	0.007	0.0037	1	14	189	0.997
10/19/2022	14:26:40	-2.052	0.2117	20.131	0.012	4.8312	-33	0.086	0.073	0.125	0.006	0.0039	1	14	189	0.997
Direct HCl		19.936		4.819												
10/19/2022	14:27:40	-2.679	0.1981	20.039	-0.002	4.7863	56	0.079	0.076	0.126	0.007	0.0035	1	14	189	0.993
10/19/2022	14:28:40	-3.677	0.1470	14.362	1.830	4.7662	-47	0.122	0.040	0.094	0.016	0.0046	0	14	189	0.989
10/19/2022	14:29:40	-2.763	-0.0096	0.258	19.188	5.0409	-34	0.156	0.028	0.006	0.097	0.0034	0	14	190	0.993
10/19/2022	14:30:40	-3.085	-0.0115	0.122	20.949	5.0520	4	0.153	0.024	0.005	0.135	0.0036	0	14	190	0.992
10/19/2022	14:31:43	-3.095	0.0100	0.090	21.051	5.0392	-24	0.151	0.026	0.006	0.137	0.0036	0	14	190	0.992
10/19/2022	14:32:40	-3.309	-0.0149	0.078	23.462	5.0670	3	0.153	0.028	0.006	0.146	0.0039	0	14	190	0.992
10/19/2022	14:33:40	-3.140	-0.0114	0.078	21.127	5.0293	12	0.150	0.025	0.005	0.141	0.0038	0	14	190	0.992
10/19/2022	14:34:40	-2.976	-0.0066	0.071	20.571	5.0202	5	0.147	0.024	0.005	0.134	0.0034	0	14	190	0.992
10/19/2022	14:35:40	-3.099	-0.0087	0.053	21.350	5.0351	-26	0.147	0.026	0.006	0.137	0.0034	0	14	190	0.992
10/19/2022	14:36:41	-3.177	-0.0017	0.056	22.380	5.0414	0	0.150	0.025	0.006	0.140	0.0036	0	14	190	0.992
10/19/2022	14:37:40	-3.236	-0.0143	0.048	20.747	5.0223	-20	0.148	0.026	0.006	0.139	0.0036	0	14	190	0.992
10/19/2022	14:38:40	-3.168	-0.0098	0.050	20.928	5.0284	-17	0.148	0.024	0.005	0.137	0.0036	0	14	190	0.992
10/19/2022	14:39:40	-3.161	0.0040	0.040	22.109	5.0397	-47	0.147	0.025	0.006	0.139	0.0036	0	14	190	0.992
10/19/2022	14:40:40	-3.146	0.0011	0.043	21.640	5.0346	-17	0.147	0.023	0.005	0.138	0.0036	0	14	190	0.992
Direct HF		21.559	5.034													
10/19/2022	14:41:40	-3.779	-0.0002	0.049	20.617	4.9935	-29	0.158	0.005	0.005	0.136	0.0045	0	14	190	0.989

Date	Time	Ethylene (ppm)	Formaldehyde (ppm)	HCl (ppm)	HF (ppm)	SF6 (ppm)	Water (ppm)	Ethylene Resid (ppm)	Formaldehyde Resid (ppm)	HCl Resid (ppm)	HF Resid (ppm)	SF6 Resid (ppm)	Water Resid (ppm)	Signal	Temp(C)	Press (atm)
10/19/2022	14:42:40	-5.083	-0.0075	0.101	17.600	4.9016	-25	0.207	0.0024	0.005	0.124	0.0075	0	14	190	0.985
10/19/2022	14:43:41	-5.140	-0.0039	0.130	17.316	4.9289	9	0.220	0.0031	0.007	0.116	0.0075	0	14	190	0.985
10/19/2022	14:44:40	0.090	0.0205	0.081	4.982	1.4545	46	0.127	0.0025	0.006	0.049	0.0060	0	14	190	0.988
10/19/2022	14:45:40	-0.053	-0.0005	0.004	0.252	-0.0007	-15	0.011	0.0024	0.005	0.007	0.0002	0	14	190	0.990
10/19/2022	14:46:40	-0.045	-0.0024	0.001	0.174	-0.0022	2	0.011	0.0023	0.005	0.006	0.0002	0	14	190	0.990
10/19/2022	14:47:40	-0.062	0.0019	0.001	0.135	-0.0009	-9	0.011	0.0022	0.005	0.005	0.0002	0	14	190	0.990
10/19/2022	14:48:40	-0.053	0.0038	0.005	0.113	0.0000	-31	0.012	0.0026	0.005	0.005	0.0002	0	14	190	0.990
10/19/2022	14:49:40	-0.043	0.0085	0.014	0.102	-0.0022	-4	0.013	0.0023	0.005	0.005	0.0002	0	14	190	0.990
10/19/2022	14:50:40	-0.332	-0.0066	0.018	0.035	0.0498	5106	0.151	0.0038	0.009	0.241	0.0031	14	13	190	0.995
Ambient Air																
10/19/2022	14:51:40	-0.061	-0.0161	0.018	-0.065	0.0067	6429	0.040	0.0045	0.010	0.077	0.0009	24	13	190	0.996
10/19/2022	14:52:40	-0.100	-0.0205	0.014	0.224	-0.0008	6467	0.024	0.0042	0.010	0.083	0.0006	34	13	190	0.996
10/19/2022	14:53:40	-0.114	-0.0278	0.013	0.161	0.0001	6473	0.025	0.0043	0.010	0.081	0.0006	34	13	190	0.996
10/19/2022	14:54:40	-0.083	-0.0141	0.012	0.161	-0.0016	6499	0.023	0.0044	0.010	0.084	0.0006	35	13	190	0.996
10/19/2022	14:55:40	-0.077	-0.0177	0.017	0.136	-0.0009	6478	0.024	0.0044	0.010	0.084	0.0006	34	13	190	0.996

Method 320 QA Data

Instrument Checks

Test Information			
Project Number	499970	Date	10/13/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information		Pressure Sensor Verification	
FTIR Analyzer	Spectrum Waverunner	Date Conducted	10/12/2022
Background Averaging Time (sec)	180 or 600	Barometric Pressure (" Hg)	29.25
Spectrum Averaging Time (sec)	60 or 300	Barometric Pressure (Converted to Atmospheres)	0.98
FTIR Cell Temperature (°C)	191	FTIR Barometric Pressure (ATM)	0.99
Wavenumber Range (cm ⁻¹)	2200-5000	% Difference	-1.27%
		Pass/Fail	PASS

Sampling System Leak Check	
Date Conducted	10/12/2022
Length of Sample Line (feet)	220
System Flow Rate (lpm)	5
Leak Check Flow Rate (lpm)	0.01
Allowable Leak Check Flow Rate (lpm)	0.2
Pass/Fail	PASS

Sampling System Leak Check - System 2	
Date Conducted	10/15/2022
Length of Sample Line (feet)	220
System Flow Rate (lpm)	5
Leak Check Flow Rate (lpm)	0.01
Allowable Leak Check Flow Rate (lpm)	0.2
Pass/Fail	PASS

CTS Calibration Checks

Test Information

Project Number	499970	Date	10/13/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

Reference Method Calibration Measurements

	Cal Gas Test	Measured Concentration	% Error	% Difference (Pre/Post)
CTS	Pre-Test Direct	95.905	-3.0%	
	Post-Test Direct	95.400	-3.5%	0.5%
	Pre-Test System	95.616	-3.3%	
	Post-Test System	95.545	-3.4%	0.1%
Zero	Pre-Test Direct	0.424	NA	
	Post-Test Direct	0.236	NA	NA
	Pre-Test System	0.463	NA	
	Post-Test System	0.209	NA	NA

Minimum Detection Limit

Test Information

Project Number	499970	Date	10/13/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
Spectrum Averaging Time (sec)	60		

SYSTEM INSTRUMENT DETECTION LIMIT

Measurement	Time	Formaldehyde	HCl
		ppmvw	ppmvw
Spectrum 1	18:30:32	-0.033	0.055
Spectrum 2	18:31:32	-0.021	0.028
Spectrum 3	18:32:32	-0.013	0.031
Spectrum 4	18:33:32	-0.027	0.030
Spectrum 5	18:34:32	-0.037	0.023
Spectrum 6	18:35:32	-0.028	0.030
Spectrum 7	18:36:34	-0.048	0.011
Spectrum 8	18:37:32	-0.034	0.027
Average		-0.0300	0.029
Standard Deviation		0.0099	0.012
Instrument Detection Limit		0.0298	0.035

Detection Limit = 3 X Standard Deviation of 8 Consecutive Measurements

SYSTEM INSTRUMENT DETECTION LIMIT

Measurement	Time	HF	Water
		ppmvw	ppmvw
Spectrum 1	18:30:32	0.677	84674
Spectrum 2	18:31:32	0.686	84699
Spectrum 3	18:32:32	0.730	84591
Spectrum 4	18:33:32	0.652	84641
Spectrum 5	18:34:32	0.728	84595
Spectrum 6	18:35:32	0.675	84418
Spectrum 7	18:36:34	0.676	84372
Spectrum 8	18:37:32	0.719	84423
Average		0.693	84552
Standard Deviation		0.027	120
Method Detection Limit		0.082	359

FTIR Response Time

Project Number	499970	Date	10/13/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
Spectrum Averaging Time	15		
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

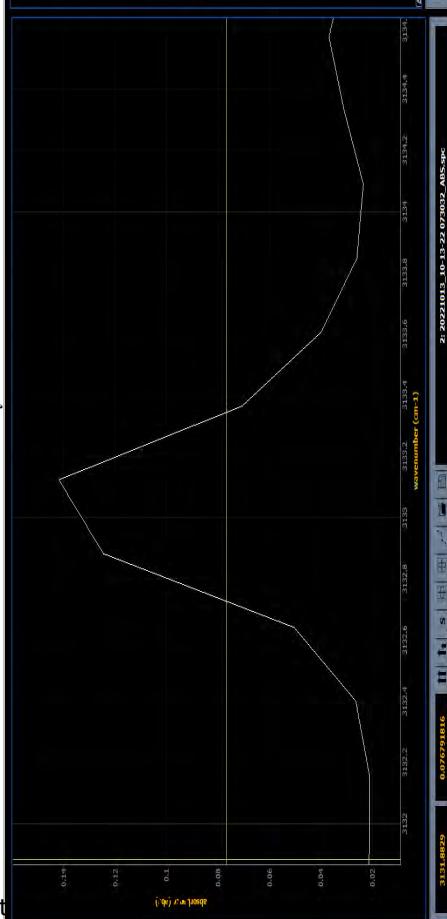
Reference Method Calibration Measurements

	Date	Time	Ethylene (ppmv)	% Cyl. Conc.	Response Time (min:sec)
CTS	10/13/2022	18:50:32	0.007		
	10/13/2022	18:51:35	19.988	20.2%	
	10/13/2022	18:52:33	93.120	94.2%	
	10/13/2022	18:53:35	95.142	96.2%	03:03
	10/13/2022	18:54:32	95.080	96.2%	04:00

Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizzel/W. McKibben
Project Number: 499970

Report

Pre Peak Analysis



Post Peak Analysis



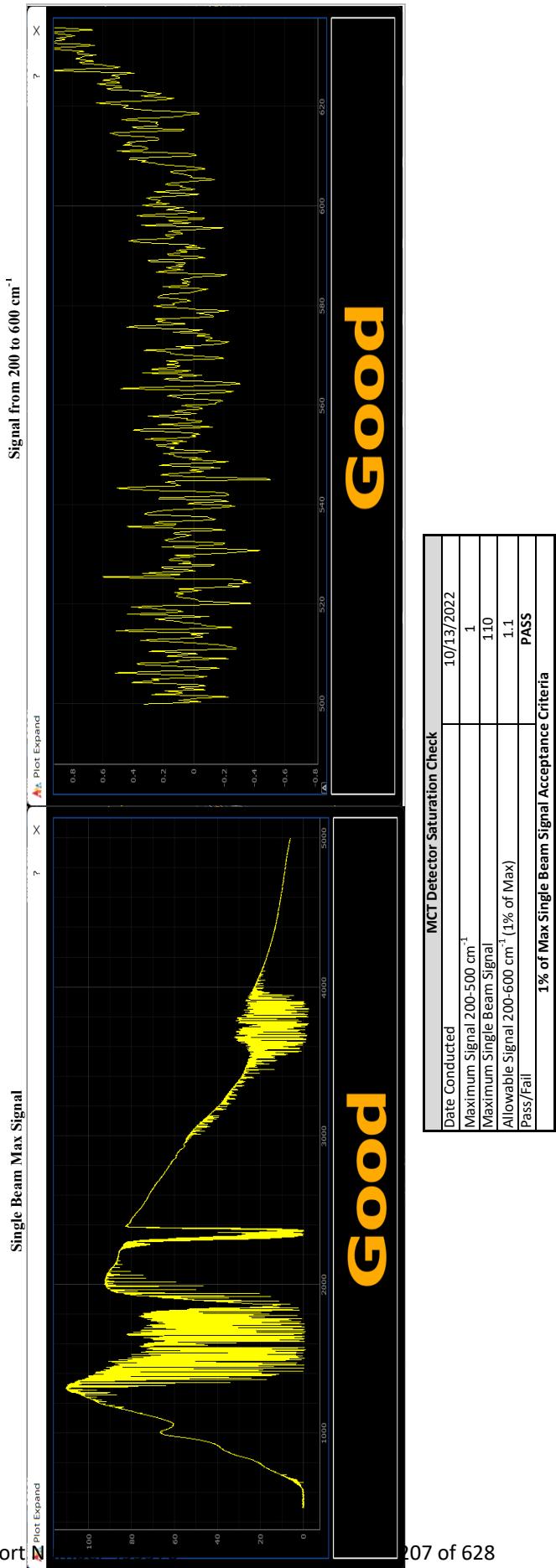
206 of 628

Resolution Setting for Analysis	
Line Position Pre Peak Analysis	3133.1263 cm⁻¹
Line Position Post Peak Analysis	3133.1276 cm⁻¹
Requirement by ASTM D6348	
Line Position shift	-0.0013 ± 0.1500

206 of 628

GPC Plant McDonough ICR Testing

Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizel/W. McKibben
Project Number: 499970



Manual Validation of Spectra

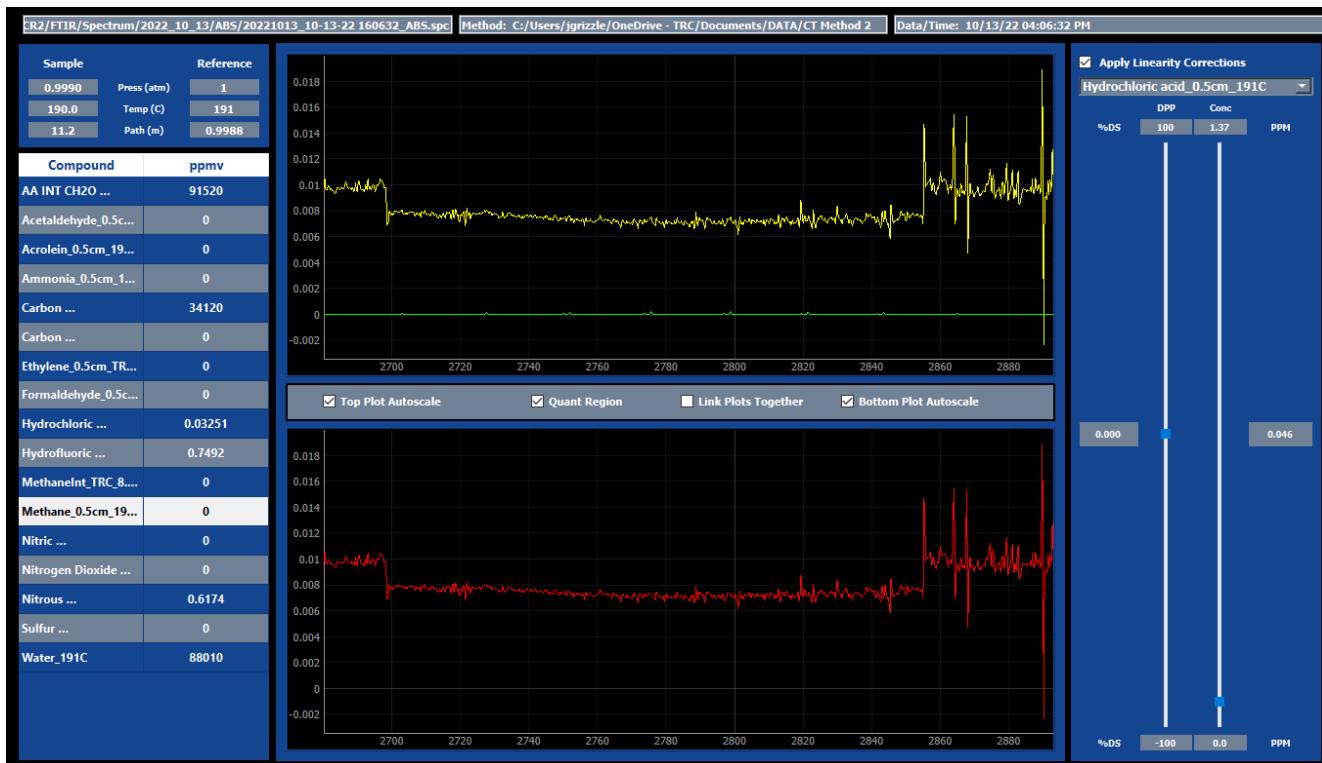
Project Number: 499970

Client Name: Georgia Power

Facility: Plant McDonough

Date: 10/13/2022

Technician: JSG, WM



Manual Validation		File Name	20221013_10-13-22_160632_ABS.spc		
Target Analyte(s)	Automated Result	Manual Result	% Difference		
H2O	87478.70	88010	0.60		
CH2O	-0.022	0	#DIV/0!		
HCl	0.054	0.046	18.16		
HF	0.843	0.7492	12.55		

CTS Calibration Checks

Test Information

Project Number	499970	Date	10/14/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

Reference Method Calibration Measurements

	Cal Gas Test	Measured Concentration	% Error	% Difference (Pre/Post)
CTS	Pre-Test Direct	95.651	-3.3%	
	Post-Test Direct	95.516	-3.4%	0.1%
	Pre-Test System	95.437	-3.5%	
	Post-Test System	95.485	-3.4%	-0.1%
Zero	Pre-Test Direct	-0.012	NA	
	Post-Test Direct	-0.025	NA	NA
	Pre-Test System	0.005	NA	
	Post-Test System	-0.002	NA	NA

Matrix Spiking

Test Information

Project Number	499970	Date	10/14/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Spike Gas:	Formaldehyde	0.873	Measured Concentration (Direct Cal)
Tracer Gas:	SF6	4.806	Measured Concentration (Direct Cal)
	Avg Spike	Avg Tracer	% RPD
Tracer Off 1		0.012	Enter Spike Flow Rate (lpm)
Tracer On 1		0.484	0.15
Spike Off 1	-0.006		
Spike On 1	0.072		
Expected Spike Concentration	0.08		
Avg Spike Off	-0.006	0.012	
Diluted Spike Off	-0.006		Corrected for Dilution by Spike
Avg Spike On	0.07	0.484	
Dilution Factor		0.0981	10.2 Dilution Ratio
Measured Spike	0.08	0.472	
Bias	-0.01		Limit
Spike Recovery	90.5%		PASS
			70-130%

Criteria	Acceptable Limit	Measured Value	Pass/Fail
Dilution Ratio	>10	10.19	PASS
Spike Recovery	70-130%	90.5%	PASS

Matrix Spiking

Test Information

Project Number	499970	Date	10/14/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

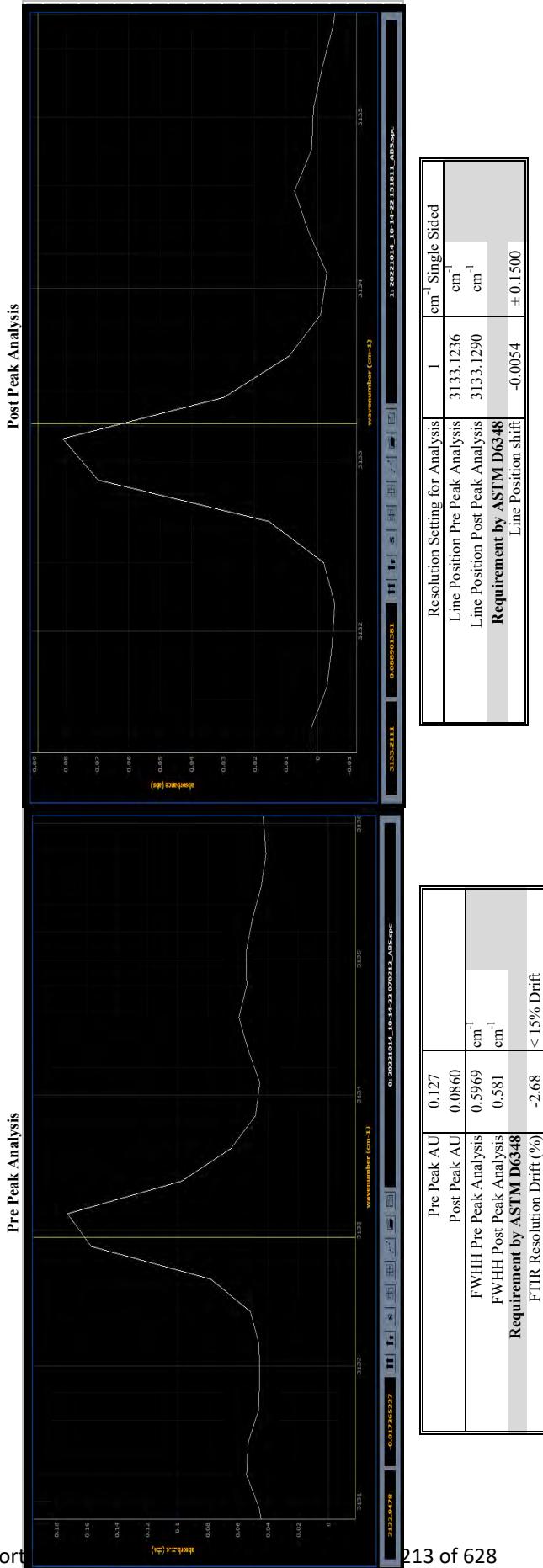
Spike Gas:	HCl	19.936	Measured Concentration (Direct Cal)
Tracer Gas:	SF6	4.819	Measured Concentration (Direct Cal)
	Avg Spike	Avg Tracer	% RPD
Tracer Off 1		0.014	Enter Spike Flow Rate (lpm)
Tracer On 1		0.215	0.15
Spike Off 1	-0.007		
Spike On 1	0.659		
Expected Spike Concentration	0.83		
Avg Spike Off	-0.007	0.014	Corrected for Dilution by Spike
Diluted Spike Off	-0.007		
Avg Spike On	0.66	0.215	
Dilution Factor		0.0418	
Measured Spike	0.67	0.201	Limit
Bias	-0.17		
Spike Recovery	79.9%		PASS
			70-130%

Criteria	Acceptable Limit	Measured Value	Pass/Fail
Dilution Ratio	>10	23.94	PASS
Spike Recovery	70-130%	79.9%	PASS

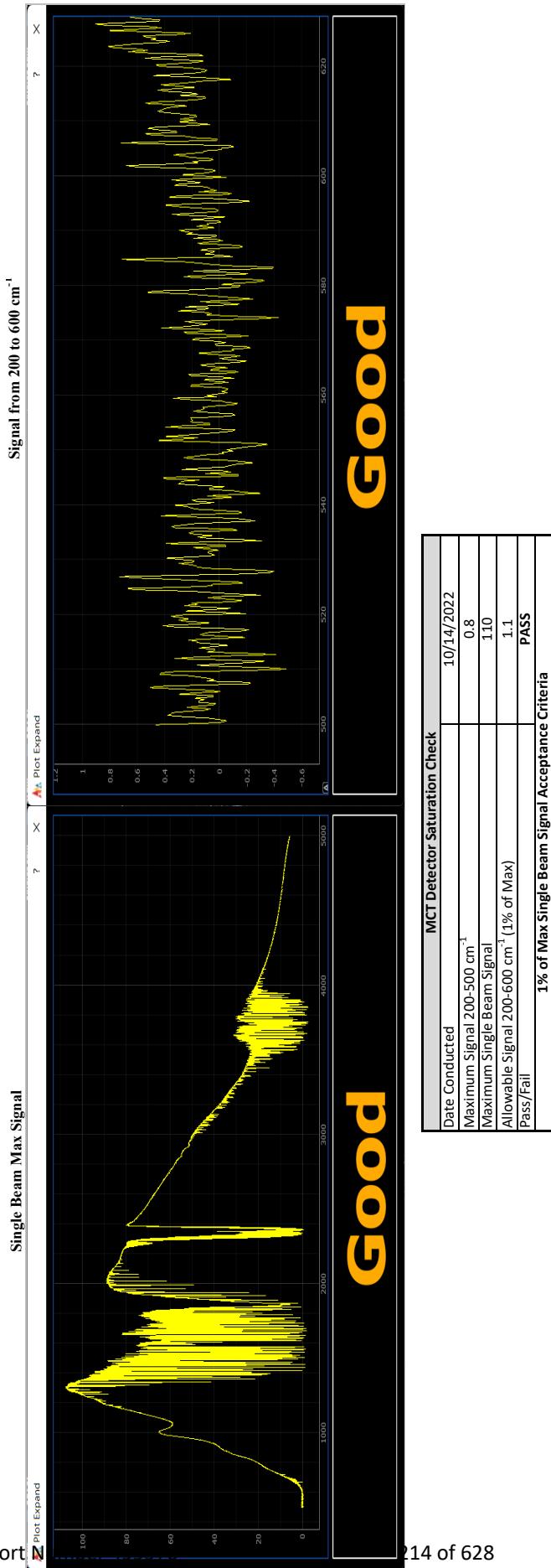
Matrix Spiking

Test Information				
Project Number	499970	Date	10/14/2022	
Client	Georgia Power	Facility	Plant McDonough	
Unit Identification	Unit 4A	Test Condition/Load	Natural Gas	
Sampling Location	Exhaust	FTIR Operator	JSG, WM	
Spike Gas:	HF	21.559	Measured Concentration (Direct Cal)	
Tracer Gas:	SF6	5.034	Measured Concentration (Direct Cal)	
	Avg Spike	Avg Tracer	% RPD	
Tracer Off 1		0.012		Enter Spike Flow Rate (lpm)
Tracer On 1		0.230		0.15
Spike Off 1	0.710			
Spike On 1	1.452			
Expected Spike Concentration	1.61		Corrected for Dilution by Spike	
Avg Spike Off	0.710	0.012		
Diluted Spike Off	0.679			
Avg Spike On	1.45	0.230		
Dilution Factor		0.0434	23.0 Dilution Ratio	
Measured Spike	0.77	0.219	Limit	
Bias	-0.16			
Spike Recovery	82.6%		PASS	70-130%
Criteria	Acceptable Limit	Measured Value	Pass/Fail	
Dilution Ratio	>10	23.04	PASS	
Spike Recovery	70-130%	82.6%	PASS	

Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizzle/W. McKibben
Project Number: 499970



Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizel/W. McKibben
Project Number: 499970



MCT Detector Saturation Check	
Date Conducted	10/14/2022
Maximum Signal 200-500 cm^{-1}	0.8
Maximum Single Beam Signal	110
Allowable Signal 200-600 cm^{-1} (1% of Max)	1.1
Pass/Fail	PASS
1% of Max Single Beam Signal Acceptance Criteria	

Instrument Checks

Test Information			
Project Number	499970	Date	10/17/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4B	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information		Pressure Sensor Verification	
FTIR Analyzer	Spectrum WR	Date Conducted	10/12/2022
Background Averaging Time (sec)	180 or 600	Barometric Pressure (" Hg)	29.25
Spectrum Averaging Time (sec)	60 or 300	Barometric Pressure (Converted to Atmospheres)	0.98
FTIR Cell Temperature (°C)	191	FTIR Barometric Pressure (ATM)	0.99
Wavenumber Range (cm ⁻¹)	2200-5000	% Difference	-1.27%
		Pass/Fail	PASS

Sampling System Leak Check	
Date Conducted	10/15/2022
Length of Sample Line (feet)	220
System Flow Rate (lpm)	5
Leak Check Flow Rate (lpm)	0.01
Allowable Leak Check Flow Rate (lpm)	0.2
Pass/Fail	PASS

Sampling System Leak Check - System 2	
Date Conducted	10/20/2022
Length of Sample Line (feet)	220
System Flow Rate (lpm)	5
Leak Check Flow Rate (lpm)	0.01
Allowable Leak Check Flow Rate (lpm)	0.2
Pass/Fail	PASS

CTS Calibration Checks

Test Information

Project Number	499970	Date	10/17/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4B	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

Reference Method Calibration Measurements

	Cal Gas Test	Measured Concentration	% Error	% Difference (Pre/Post)
CTS	Pre-Test Direct	94.700	-4.2%	
	Post-Test Direct	94.980	-3.9%	-0.3%
	Pre-Test System	94.898	-4.0%	
	Post-Test System	94.705	-4.2%	0.2%
Zero	Pre-Test Direct	0.007	NA	
	Post-Test Direct	-0.012	NA	NA
	Pre-Test System	-0.012	NA	
	Post-Test System	-0.017	NA	NA

Minimum Detection Limit

Test Information

Project Number	499970	Date	10/17/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4B	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
Spectrum Averaging Time (sec)	60		

SYSTEM INSTRUMENT DETECTION LIMIT

Measurement	Time	Formaldehyde	HCl
		ppmvw	ppmvw
Spectrum 1	8:25:09	-0.001	0.092
Spectrum 2	8:30:09	0.006	0.103
Spectrum 3	8:35:09	-0.008	0.104
Spectrum 4	8:40:11	-0.016	0.098
Spectrum 5	8:45:09	-0.009	0.102
Spectrum 6	8:50:09	-0.013	0.099
Spectrum 7	8:55:10	-0.019	0.093
Spectrum 8	9:00:09	-0.010	0.094
Average		-0.0086	0.098
Standard Deviation		0.0074	0.005
Instrument Detection Limit		0.0221	0.014

Detection Limit = 3 X Standard Deviation of 8 Consecutive Measurements

SYSTEM INSTRUMENT DETECTION LIMIT

Measurement	Time	HF	Water
		ppmvw	ppmvw
Spectrum 1	8:25:09	1.002	89481
Spectrum 2	8:30:09	0.954	89643
Spectrum 3	8:35:09	0.982	89341
Spectrum 4	8:40:11	0.961	88839
Spectrum 5	8:45:09	0.958	88913
Spectrum 6	8:50:09	0.953	89223
Spectrum 7	8:55:10	0.998	89144
Spectrum 8	9:00:09	0.990	90117
Average		0.975	89338
Standard Deviation		0.019	387
Method Detection Limit		0.057	1162

FTIR Response Time

Project Number	499970	Date	10/17/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4B	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

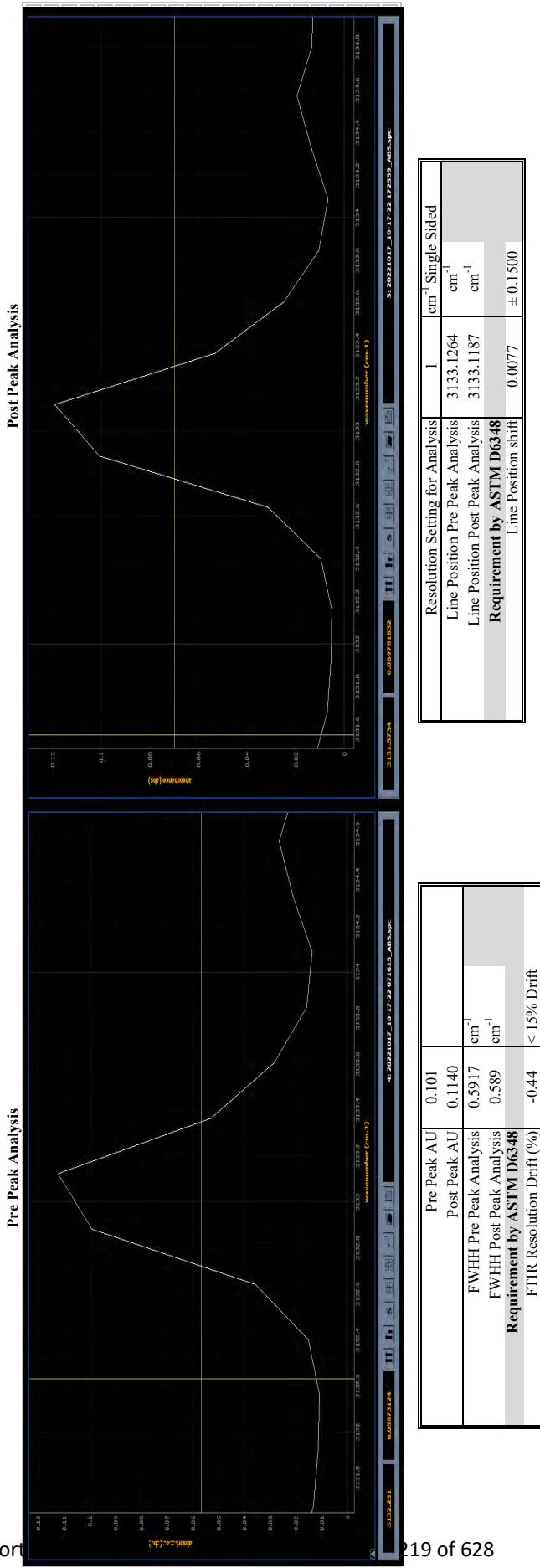
Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
Spectrum Averaging Time	15		
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

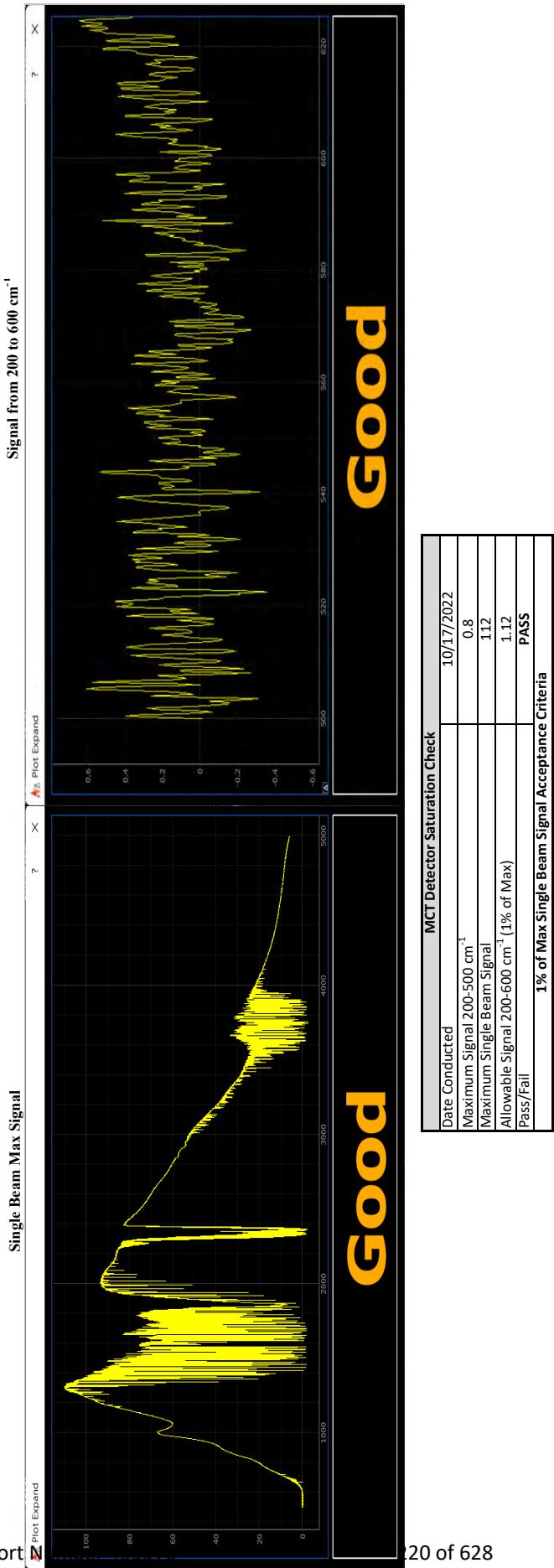
Reference Method Calibration Measurements

	Date	Time	Ethylene (ppmv)	% Cyl. Conc.	Response Time (min:sec)
CTS	10/17/2022	16:58:23	-0.174	-0.2%	
	10/17/2022	16:59:23	50.707	51.3%	
	10/17/2022	17:00:23	92.757	93.8%	
	10/17/2022	17:01:23	94.659	95.7%	03:00

Company: Georgia Power
Plant McDonough
Technicians: J. Grizzle/W. McKibben
Project Number: 499970



Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizel/W. McKibben
Project Number: 499970



Manual Validation of Spectra

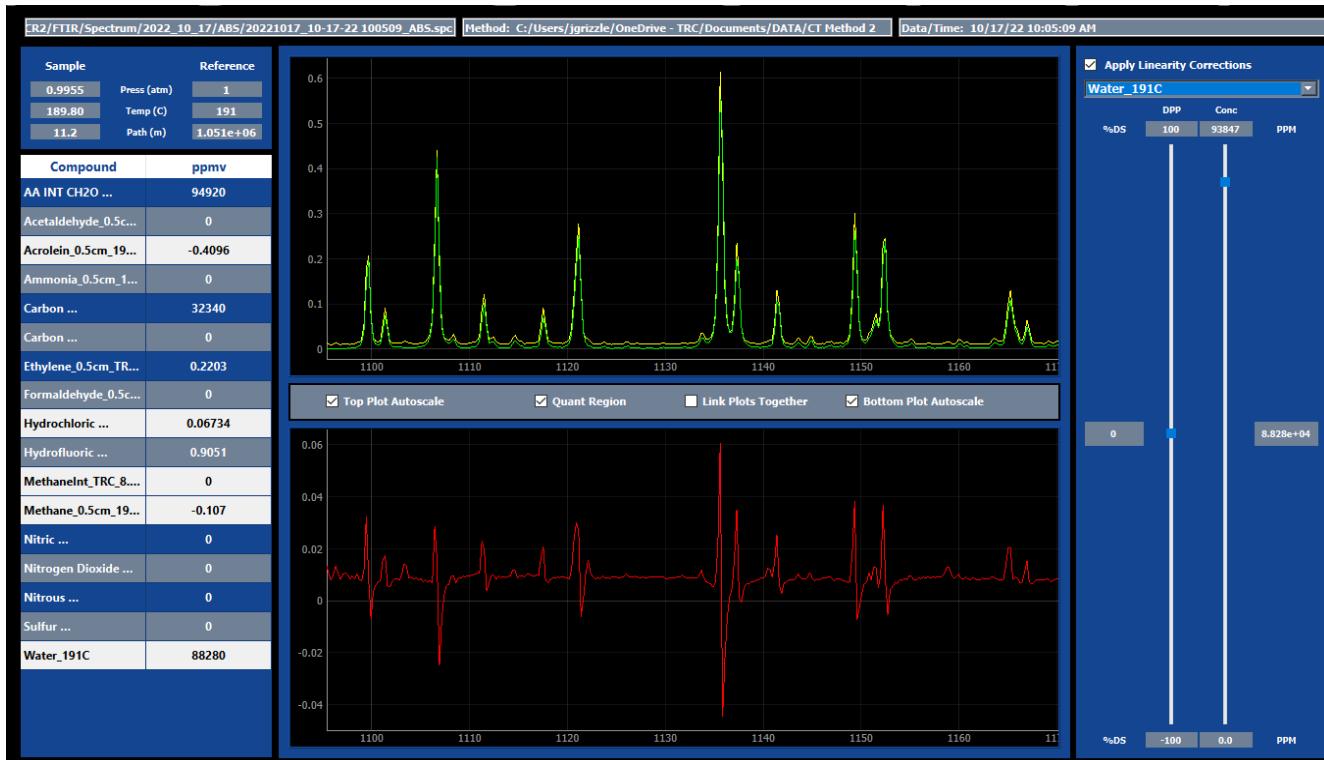
Project Number: 499970

Client Name: Georgia Power

Facility: Plant McDonough

Date: 10/17/2022

Technician: JSG, WM



Manual Validation		File Name	20221017_10-17-22 100509_ABS.spc	
Target Analyte(s)	Automated Result	Manual Result	% Difference	
H2O	89743.30	88280	1.66	
CH2O	-0.01	0	NA	
HCl	0.07	0.067	4.36	
HF	0.92	0.9051	1.22	

CTS Calibration Checks

Test Information

Project Number	499970	Date	10/18/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4B	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

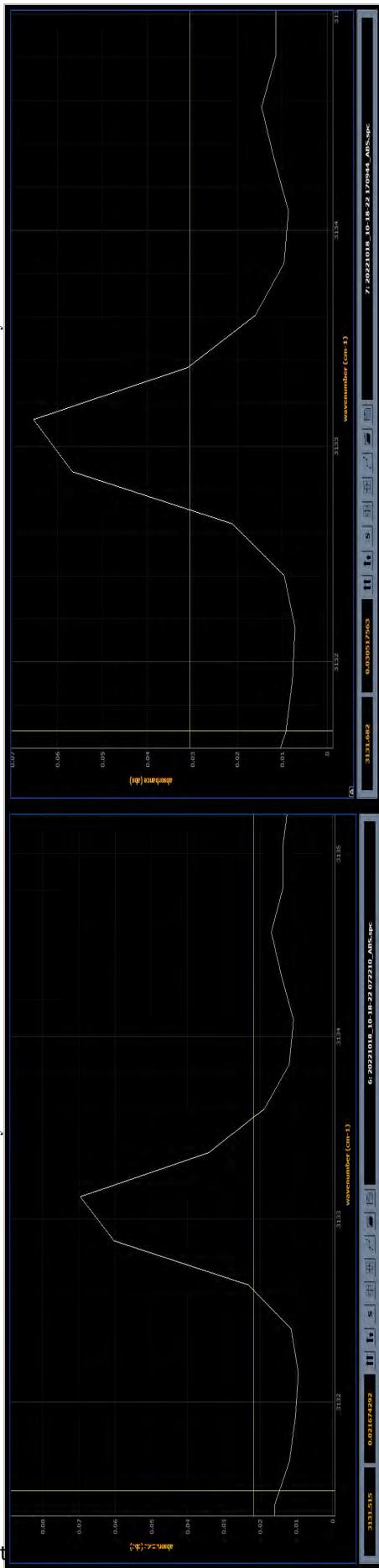
Reference Method Calibration Measurements

	Cal Gas Test	Measured Concentration	% Error	% Difference (Pre/Post)
CTS	Pre-Test Direct	94.910	-4.0%	
	Post-Test Direct	94.747	-4.2%	0.2%
	Pre-Test System	95.234	-3.7%	
	Post-Test System	94.949	-4.0%	0.3%
Zero	Pre-Test Direct	0.001	NA	
	Post-Test Direct	-0.143	NA	NA
	Pre-Test System	-0.054	NA	
	Post-Test System	-0.074	NA	NA

Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizel/W. McKibben
Project Number: 499970

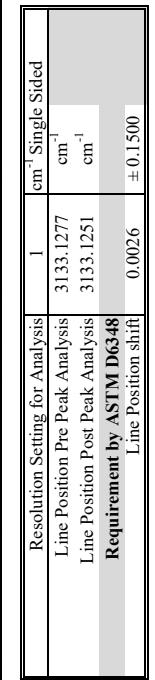
Report

Pre Peak Analysis



223 of 628

Post Peak Analysis



	Pre Peak AU	0.061	Post Peak AU	0.0580	
FWHH Pre Peak Analysis	0.5836	cm⁻¹	0.5836	cm⁻¹	
FWHH Post Peak Analysis	0.583	cm⁻¹			
Requirement by ASTM D6348					
FTIR Resolution Drift (%)	-0.14		< 15%	Drift	

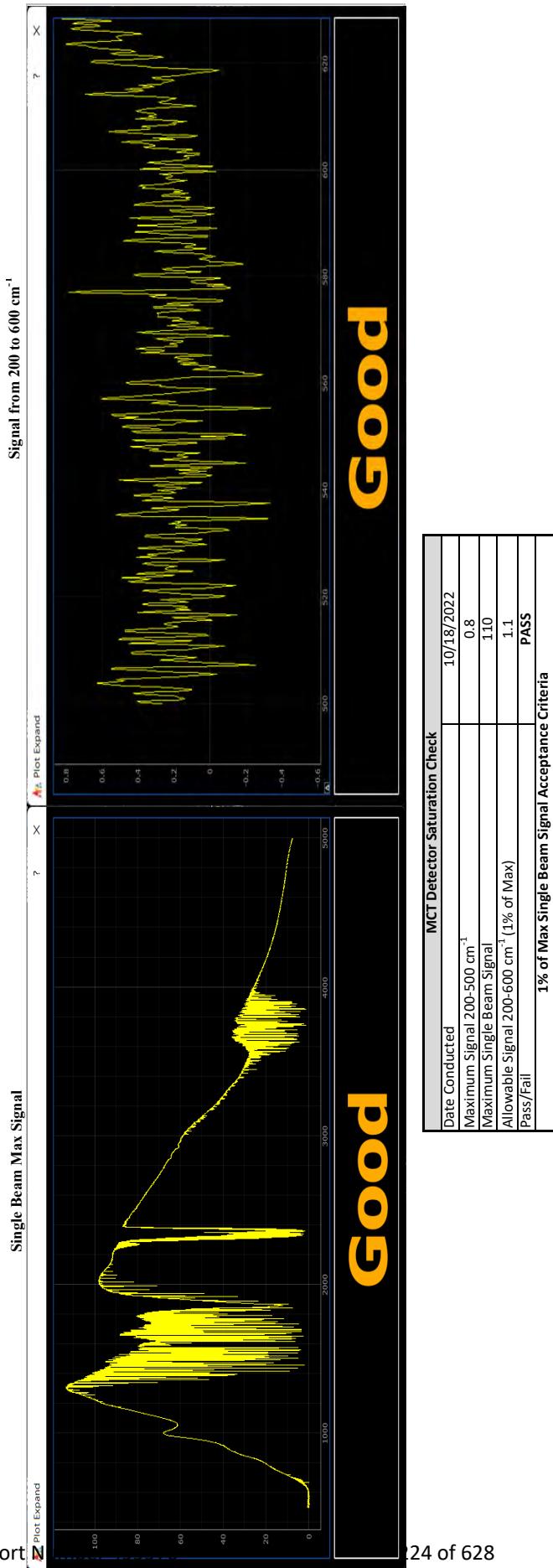
223 of 628

GPC Plant McDonough ICR Testing

Resolution Setting for Analysis	1	cm⁻¹ Single Sided
Line Position Pre Peak Analysis	3133.1277	cm⁻¹
Line Position Post Peak Analysis	3133.1251	cm⁻¹
Requirement by ASTM D6348		
Line Position shift	0.0026	± 0.1500

223 of 628

Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizel/W. McKibben
Project Number: 499970



CTS Calibration Checks

Test Information

Project Number	499970	Date	10/19/2022
Client	Georgia Power	Facility	Plant McDonough
Unit Identification	Unit 4B	Test Condition/Load	Natural Gas
Sampling Location	Exhaust	FTIR Operator	JSG, WM

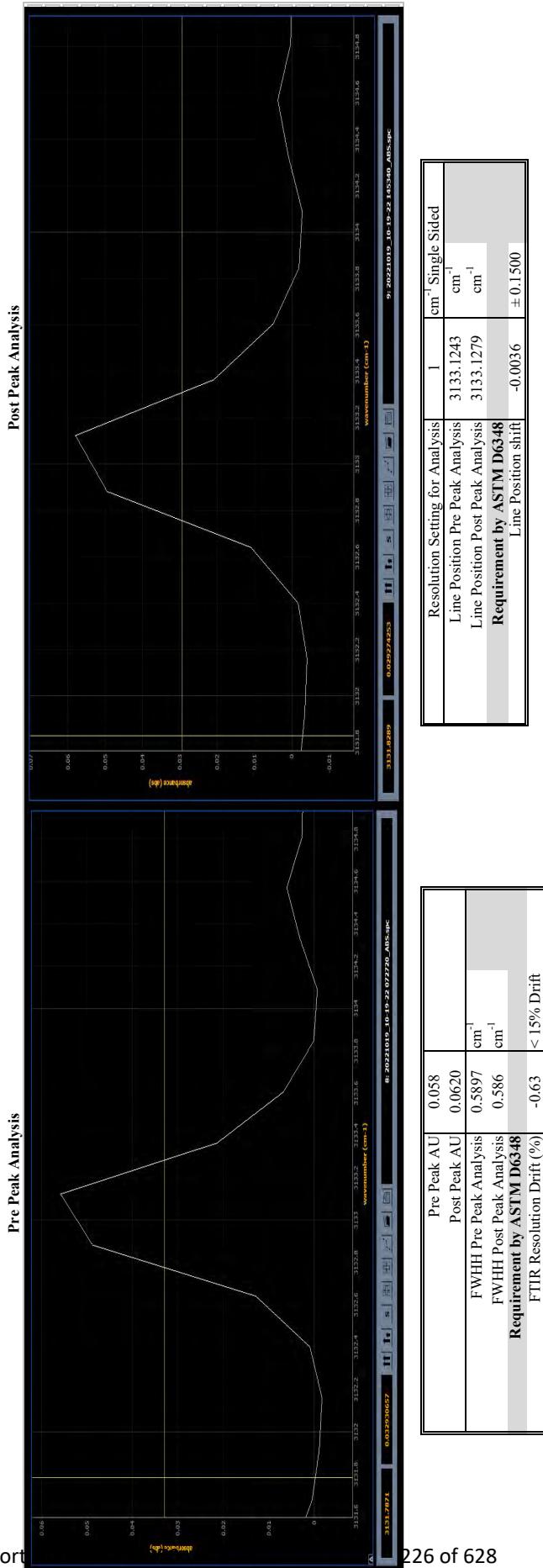
Equipment Information

FTIR Analyzer	Spectrum WR	Test Method	EPA Method 320
CTS Gas Used	Ethylene		
CTS Gas Cylinder ID	CC723276		
CTS Gas Conc. (ppm)	98.88		

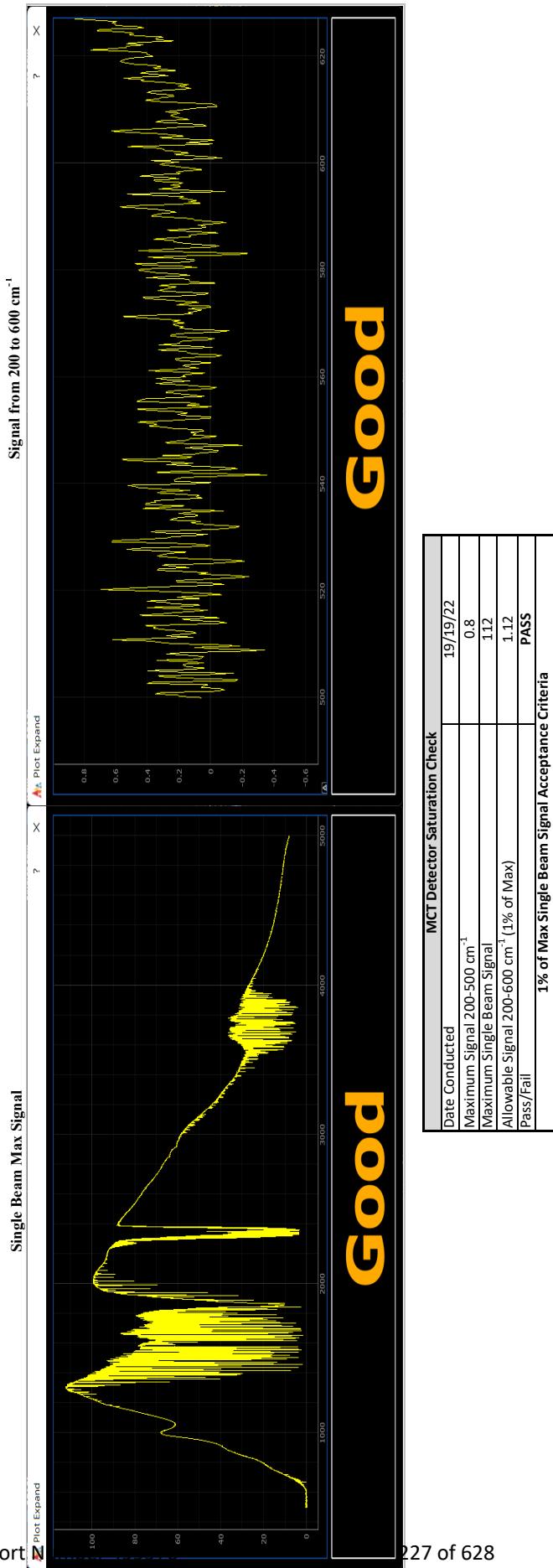
Reference Method Calibration Measurements

	Cal Gas Test	Measured Concentration	% Error	% Difference (Pre/Post)
CTS	Pre-Test Direct	95.613	-3.3%	
	Post-Test Direct	95.193	-3.7%	0.4%
	Pre-Test System	95.558	-3.4%	
	Post-Test System	95.226	-3.7%	0.3%
Zero	Pre-Test Direct	0.015	NA	
	Post-Test Direct	-0.091	NA	NA
	Pre-Test System	-0.032	NA	
	Post-Test System	-0.187	NA	NA

Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizzie/W. McKibben
Project Number: 499970



Company: Georgia Power
Facility: Plant McDonough
Technicians: J. Grizzel/W. McKibben
Project Number: 499970



Matrix Spiking

Test Information			
Project Number	499970	Date	10/19/2022
Client	Georgia Power	Facility	McDonough Plant
Unit Identification	Unit 4B	Test Condition/Load	Max
Sampling Location	Exhaust	FTIR Operator	J. Grizzle/W. McKibben

Spike Gas:	Formaldehyde	0.873	Measured Concentration (Direct Cal)
Tracer Gas:	SF6	4.806	Measured Concentration (Direct Cal)
	Spike Off	Tracer Off	Tracer Diff
Point 1	-0.028	0.013	0.467
Point 2	-0.033	0.013	0.468
Point 3	0.020	0.014	0.466
Point 4	-0.029	0.014	0.465
Point 5	-0.040	0.014	0.466
Point 6	-0.032	0.015	0.462
Point 7	-0.032	0.014	0.467
Point 8	-0.032	0.015	0.466
Point 9	-0.021	0.013	0.468
Point 10	-0.020	0.014	0.466
Point 11	-0.026	0.014	0.465
Point 12	-0.041	0.013	0.469
	Spike On	Tracer On	Spike Diff
Point 1	0.061	0.479	0.089
Point 2	0.055	0.480	0.088
Point 3	0.057	0.479	0.037
Point 4	0.055	0.480	0.084
Point 5	0.060	0.480	0.100
Point 6	0.035	0.477	0.067
Point 7	0.042	0.481	0.073
Point 8	0.060	0.480	0.092
Point 9	0.068	0.481	0.089
Point 10	0.072	0.481	0.092
Point 11	0.060	0.479	0.086
Point 12	0.055	0.482	0.095
Expected Spike Concentration	0.0611		
Avg Spike Off	-0.0261	0.014	
Diluted Spike Off	-0.0236		Corrected for Dilution by Spike
Avg Spike On	0.0565	0.480	
Dilution Factor		0.0970	10.3 Dilution Ratio
Measured Spike	0.0801	0.466	
Bias (Eq. 301-4)	0.005		Limit
Relative Bias (Eq. 301-7)	7.4%		±10% All Sources, ±30% Correction Factor
Correction Factor (Eq. 301-8)	0.93		Source Specific Bias Correction Factor
Spike Recovery	94.6%	PASS	70-130%

Criteria	Acceptable Limit	Measured Value	Pass/Fail
Dilution Ratio	>10	10.31	PASS
Spike Recovery	70-130%	92.6%	PASS

Matrix Spiking

Test Information			
Project Number	499970	Date	10/18/2022
Client	Georgia Power	Facility	McDonough Plant
Unit Identification	Unit 4B	Test Condition/Load	Max
Sampling Location	Exhaust	FTIR Operator	J. Grizzle/W. McKibben

Spike Gas:	Hydrogen Chloride	19.936	Measured Concentration (Direct Cal)
Tracer Gas:	SF6	4.819	Measured Concentration (Direct Cal)
	Spike Off	Tracer Off	Tracer Diff
Point 1	-0.014	-0.016	0.227
Point 2	-0.009	0.015	0.162
Point 3	-0.022	0.014	0.175
Point 4	-0.007	0.013	0.169
Point 5	-0.013	0.013	0.161
Point 6	-0.013	0.013	0.174
Point 7	-0.010	0.015	0.174
Point 8	-0.008	0.014	0.166
Point 9	-0.015	0.017	0.150
Point 10	-0.023	0.016	0.165
Point 11	-0.006	0.014	0.153
Point 12	-0.017	0.014	0.148
	Spike On	Tracer On	Spike Diff
Point 1	0.571	0.211	0.585
Point 2	0.649	0.177	0.658
Point 3	0.638	0.189	0.660
Point 4	0.644	0.183	0.651
Point 5	0.731	0.174	0.744
Point 6	0.650	0.187	0.663
Point 7	0.755	0.189	0.765
Point 8	0.704	0.180	0.712
Point 9	0.657	0.167	0.672
Point 10	0.710	0.181	0.733
Point 11	0.708	0.167	0.714
Point 12	0.724	0.162	0.741
Expected Spike Concentration	0.6854		
Avg Spike Off	-0.0131	0.012	
Diluted Spike Off	-0.0126		Corrected for Dilution by Spike
Avg Spike On	0.6784	0.181	
Dilution Factor		0.0350	28.6 Dilution Ratio
Measured Spike	0.691	0.169	
Bias (Eq. 301-4)	0.007		Limit
Relative Bias (Eq. 301-7)	1.0%		±10% All Sources, ±30% Correction Factor
Correction Factor (Eq. 301-8)	0.99		Source Specific Bias Correction Factor
Spike Recovery	99.0%		70-130%

Criteria	Acceptable Limit	Measured Value	Pass/Fail
Dilution Ratio	>10	28.56	PASS
Spike Recovery	70-130%	99.0%	PASS

Matrix Spiking

Test Information			
Project Number	499970	Date	10/18/2022
Client	Georgia Power	Facility	McDonough Plant
Unit Identification	Unit 4B	Test Condition/Load	Max
Sampling Location	Exhaust	FTIR Operator	J. Grizzle/W. McKibben

Spike Gas:	Hydrogen Fluoride	21.559	Measured Concentration (Direct Cal)
Tracer Gas:	SF6	5.034	Measured Concentration (Direct Cal)
	Spike Off	Tracer Off	Tracer Diff
Point 1	0.556	0.009	0.196
Point 2	0.622	0.010	0.173
Point 3	0.614	0.012	0.213
Point 4	0.702	0.014	0.194
Point 5	0.691	0.016	0.195
Point 6	0.617	0.014	0.195
Point 7	0.635	0.012	0.198
Point 8	0.632	0.014	0.172
Point 9	0.601	0.013	0.229
Point 10	0.622	0.014	0.207
Point 11	0.576	0.016	0.169
Point 12	0.685	0.015	0.180
	Spike On	Tracer On	Spike Diff
Point 1	1.337	0.205	0.781
Point 2	1.260	0.183	0.638
Point 3	1.302	0.225	0.688
Point 4	1.272	0.208	0.570
Point 5	1.250	0.211	0.559
Point 6	1.334	0.209	0.717
Point 7	1.348	0.210	0.713
Point 8	1.597	0.187	0.965
Point 9	1.460	0.242	0.859
Point 10	1.314	0.221	0.692
Point 11	1.369	0.184	0.793
Point 12	1.483	0.194	0.798
Expected Spike Concentration	1.4331		
Avg Spike Off	0.6294	0.013	
Diluted Spike Off	0.6052		Corrected for Dilution by Spike
Avg Spike On	1.3605	0.206	
Dilution Factor		0.0384	26.0 Dilution Ratio
Measured Spike	0.755	0.193	
Bias (Eq. 301-4)	0.073		Limit
Relative Bias (Eq. 301-7)	5.1%		±10% All Sources, ±30% Correction Factor
Correction Factor (Eq. 301-8)	0.95		Source Specific Bias Correction Factor
Spike Recovery	91.2%		70-130%

Criteria	Acceptable Limit	Measured Value	Pass/Fail
Dilution Ratio	>10	26.04	PASS
Spike Recovery	70-130%	94.9%	PASS

Gaseous QA and Logged Data

GP 2022 October 12

Initial Calibration Error Test

Date/Time: 10/12/2022 6:40:11
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Zero Ref:	0.000	0.000
Zero Cal:	0.004	-0.015
Zero Error:	0.0%	-0.1%

Mid Ref:	10.020	10.090
Mid Cal:	10.092	10.179
Mid Error:	0.3%	0.4%

High Ref:	22.000	21.700
High Cal:	22.041	21.481
High Error:	0.2%	-1.0%

Cal Result:	PASSED	PASSED
-------------	--------	--------

GP 2022 October 13

Initial Calibration Error Test

Date/Time: 10/13/2022 7:08:47
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Zero Ref:	0.000	0.000	0.000
Zero Cal:	-0.016	0.002	0.014
Zero Error:	-0.1%	0.0%	0.1%
Mid Ref:	5.515	10.020	10.090
Mid Cal:	5.658	10.105	10.188
Mid Error:	1.2%	0.4%	0.5%
High Ref:	11.600	22.000	21.700
High Cal:	11.681	21.864	21.462
High Error:	0.7%	-0.6%	-1.1%
Cal Result:	PASSED	PASSED	PASSED

GP 2022 October 14

Initial Calibration Error Test

Date/Time: 10/14/2022 6:47:21
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Zero Ref:	0.000	0.000
Zero Cal:	0.008	-0.003
Zero Error:	0.0%	0.0%

Mid Ref:	10.020	10.090
Mid Cal:	10.046	10.202
Mid Error:	0.1%	0.5%

High Ref:	22.000	21.700
High Cal:	22.044	21.571
High Error:	0.2%	-0.6%

Cal Result:	PASSED	PASSED
-------------	--------	--------

GP 2022 October 17

Initial Calibration Error Test

Date/Time: 10/17/2022 7:03:03
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Zero Ref:	0.000	0.000	0.000
Zero Cal:	-0.074	0.066	0.089
Zero Error:	-0.6%	0.3%	0.4%
Mid Ref:	5.515	10.020	10.090
Mid Cal:	5.585	10.102	10.185
Mid Error:	0.6%	0.4%	0.4%
High Ref:	11.600	22.000	21.700
High Cal:	11.611	21.969	21.473
High Error:	0.1%	-0.1%	-1.0%
Cal Result:	PASSED	PASSED	PASSED

GP 2022 October 18

Initial Calibration Error Test

Date/Time: 10/18/2022 6:38:08
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Zero Ref:	0.000	0.000
Zero Cal:	0.025	0.032
Zero Error:	0.1%	0.1%

Mid Ref:	10.020	10.090
Mid Cal:	9.915	10.094
Mid Error:	-0.5%	0.0%

High Ref:	22.000	21.700
High Cal:	22.003	21.467
High Error:	0.0%	-1.1%

Cal Result:	PASSED	PASSED
-------------	--------	--------

GP 2022 October 19

Initial Calibration Error Test

Date/Time: 10/19/2022 6:29:14
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Zero Ref:	0.000	0.000
Zero Cal:	0.103	0.026
Zero Error:	0.5%	0.1%

Mid Ref:	10.020	10.090
Mid Cal:	10.029	10.129
Mid Error:	0.0%	0.2%

High Ref:	22.000	21.700
High Cal:	22.038	21.467
High Error:	0.2%	-1.1%

Cal Result:	PASSED	PASSED
-------------	--------	--------

GP 2022 October 20

Initial Calibration Error Test

Date/Time: 10/20/2022 6:50:30
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Zero ID:	Mid ID:	High ID:
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

Calibration Error Results

Channel:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Zero Ref:	0.000	0.000
Zero Cal:	0.069	0.040
Zero Error:	0.3%	0.2%

Mid Ref:	10.020	10.090
Mid Cal:	9.824	10.108
Mid Error:	-0.9%	0.1%

High Ref:	22.000	21.700
High Cal:	21.883	21.478
High Error:	-0.5%	-1.0%

Cal Result:	PASSED	PASSED
-------------	--------	--------

GP 2022 October 12

Initial System Bias Check

Date/Time: 10/12/2022 6:46:17
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E
Low Cal:	0.004	-0.015
Low Sys:	0.067	0.020
Low Bias:	0.3%	0.2%
Upscale Cal:	10.092	10.179
Upscale Sys:	9.928	10.047
Upscale Bias	-0.7%	-0.6%
Bias Result:	PASSED	PASSED

GP 2022 October 12 Run 1
Run 1 Final Bias & Drift Check
Date/Time: 10/12/2022 11:14:20
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.004	-0.015
Low Sys:	0.125	0.052
Low Bias:	0.6%	0.3%
Upscale Cal:	10.092	10.179
Upscale Sys:	9.921	10.027
Upscale Bias	-0.8%	-0.7%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.3%	0.1%
Mid Drift:	0.0%	-0.1%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 1 Bias Correction Calculations:

	O2	CO2
Low init:	0.067	0.020
Low final:	0.125	0.052
Mid Init:	9.928	10.047
Mid Final:	9.921	10.027
Run Avg:	12.965	4.517
Co:	0.096	0.036
Cm:	9.925	10.037
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.119	4.521

GP 2022 October 12
Run 2 Final Bias & Drift Check
Date/Time:
Result:

Run 2
10/12/2022 16:16:40
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.004	-0.015
Low Sys:	0.029	0.009
Low Bias:	0.1%	0.1%
Upscale Cal:	10.092	10.179
Upscale Sys:	9.908	10.032
Upscale Bias	-0.8%	-0.7%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.4%	-0.2%
Mid Drift:	-0.1%	0.0%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 2 Bias Correction Calculations:

	O2	CO2
Low init:	0.125	0.052
Low final:	0.029	0.009
Mid Init:	9.921	10.027
Mid Final:	9.908	10.032
Run Avg:	12.983	4.516
Co:	0.077	0.031
Cm:	9.914	10.030
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.145	4.526

GP 2022 October 13

Initial System Bias Check

Date/Time: 10/13/2022 7:25:26
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.446	0.046	-0.006
Low Bias:	4.0%	0.2%	-0.1%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.962	9.862	9.991
Upscale Bias	2.6%	-1.1%	-0.9%
Bias Result:	PASSED	PASSED	PASSED

GP 2022 October 13 Run 1
 Run 1 Final Bias & Drift Check
 Date/Time: 10/13/2022 9:41:03
 Result: PASS

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E

Low Cal:	-0.016	0.002	0.014
Low Sys:	0.247	0.093	0.016
Low Bias:	2.3%	0.4%	0.0%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.775	9.842	10.002
Upscale Bias	1.0%	-1.2%	-0.9%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	-1.7%	0.2%	0.1%
Mid Drift:	-1.6%	-0.1%	0.1%
Drift Result:	PASSED	PASSED	PASSED

Cal Result:	OK	OK	OK
-------------	----	----	----

Test Run 1 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.446	0.046	-0.006
Low final:	0.247	0.093	0.016
Mid Init:	5.962	9.862	9.991
Mid Final:	5.775	9.842	10.002
Run Avg:	0.043	12.831	4.512
Co:	0.346	0.069	0.005
Cm:	5.868	9.852	9.997
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.303	13.071	4.551

GP 2022 October 13 Run 2
Run 2 Final Bias & Drift Check
Date/Time: 10/13/2022 10:56:29
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.256	0.097	0.029
Low Bias:	2.4%	0.4%	0.1%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.839	9.826	9.987
Upscale Bias	1.6%	-1.3%	-0.9%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

	CO	O2	CO2
Low Drift:	0.1%	0.0%	0.1%
Mid Drift:	0.6%	-0.1%	-0.1%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 2 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.247	0.093	0.016
Low final:	0.256	0.097	0.029
Mid Init:	5.775	9.842	10.002
Mid Final:	5.839	9.826	9.987
Run Avg:	0.205	12.842	4.507
Co:	0.251	0.095	0.022
Cm:	5.807	9.834	9.994
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.046	13.114	4.538

GP 2022 October 13 Run 3
 Run 3 Final Bias & Drift Check
 Date/Time: 10/13/2022 12:15:56
 Result: PASS

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.330	0.060	0.004
Low Bias:	3.0%	0.3%	0.0%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.906	9.840	9.995
Upscale Bias	2.1%	-1.2%	-0.9%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.6%	-0.2%	-0.1%
Mid Drift:	0.6%	0.1%	0.0%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 3 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.256	0.097	0.029
Low final:	0.330	0.060	0.004
Mid Init:	5.839	9.826	9.987
Mid Final:	5.906	9.840	9.995
Run Avg:	0.149	12.849	4.507
Co:	0.293	0.078	0.017
Cm:	5.872	9.833	9.991
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.142	13.118	4.542

GP 2022 October 13 Run 4
 Run 4 Final Bias & Drift Check
 Date/Time: 10/13/2022 13:29:45
 Result: PASS

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.251	0.081	0.018
Low Bias:	2.3%	0.4%	0.0%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.861	9.870	9.983
Upscale Bias	1.7%	-1.1%	-0.9%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.7%	0.1%	0.1%
Mid Drift:	-0.4%	0.1%	-0.1%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 4 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.330	0.060	0.004
Low final:	0.251	0.081	0.018
Mid Init:	5.906	9.840	9.995
Mid Final:	5.861	9.870	9.983
Run Avg:	0.124	12.879	4.501
Co:	0.290	0.070	0.011
Cm:	5.883	9.855	9.989
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.163	13.117	4.540

GP 2022 October 13 Run 5
Run 5 Final Bias & Drift Check
Date/Time: 10/13/2022 14:42:16
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.277	0.071	0.017
Low Bias:	2.5%	0.3%	0.0%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.856	9.834	9.937
Upscale Bias	1.7%	-1.2%	-1.2%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.2%	0.0%	0.0%
Mid Drift:	0.0%	-0.2%	-0.2%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 5 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.251	0.081	0.018
Low final:	0.277	0.071	0.017
Mid Init:	5.861	9.870	9.983
Mid Final:	5.856	9.834	9.937
Run Avg:	0.143	12.865	4.492
Co:	0.264	0.076	0.018
Cm:	5.858	9.852	9.960
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.119	13.109	4.541

GP 2022 October 13 Run 6
Run 6 Final Bias & Drift Check
Date/Time: 10/13/2022 15:54:05
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.268	0.077	0.007
Low Bias:	2.5%	0.3%	0.0%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.835	9.841	9.939
Upscale Bias	1.5%	-1.2%	-1.1%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

	CO	O2	CO2
Low Drift:	-0.1%	0.0%	0.0%
Mid Drift:	-0.2%	0.0%	0.0%
Drift Result:	PASSED	PASSED	PASSED

Cal Result: OK OK OK

Test Run 6 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.277	0.071	0.017
Low final:	0.268	0.077	0.007
Mid Init:	5.856	9.834	9.937
Mid Final:	5.835	9.841	9.939
Run Avg:	0.157	12.867	4.489
Co:	0.273	0.074	0.012
Cm:	5.845	9.837	9.938
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.114	13.129	4.551

GP 2022 October 13
Run 7 Final Bias & Drift Check
Date/Time:
Result:

Run 7
10/13/2022 17:07:13
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.301	0.088	0.041
Low Bias:	2.7%	0.4%	0.1%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.862	9.840	9.978
Upscale Bias	1.8%	-1.2%	-1.0%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.3%	0.0%	0.2%
Mid Drift:	0.2%	0.0%	0.2%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 7 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.268	0.077	0.007
Low final:	0.301	0.088	0.041
Mid Init:	5.835	9.841	9.939
Mid Final:	5.862	9.840	9.978
Run Avg:	0.150	12.865	4.485
Co:	0.285	0.083	0.024
Cm:	5.849	9.840	9.958
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.133	13.126	4.531

GP 2022 October 13 Run 8
 Run 8 Final Bias & Drift Check
 Date/Time: 10/13/2022 17:43:19
 Result: PASS

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.320	0.075	0.016
Low Bias:	2.9%	0.3%	0.0%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.823	9.868	10.011
Upscale Bias	1.4%	-1.1%	-0.8%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.2%	-0.1%	-0.1%
Mid Drift:	-0.3%	0.1%	0.2%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 8 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.301	0.088	0.041
Low final:	0.320	0.075	0.016
Mid Init:	5.862	9.840	9.978
Mid Final:	5.823	9.868	10.011
Run Avg:	0.152	12.868	4.486
Co:	0.310	0.082	0.029
Cm:	5.843	9.854	9.994
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.158	13.110	4.512

GP 2022 October 13 Run 9
Run 9 Final Bias & Drift Check
Date/Time: 10/13/2022 18:16:59
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.016	0.002	0.014
Low Sys:	0.272	0.092	0.026
Low Bias:	2.5%	0.4%	0.1%
Upscale Cal:	5.658	10.105	10.188
Upscale Sys:	5.893	9.852	9.962
Upscale Bias	2.0%	-1.2%	-1.0%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.4%	0.1%	0.0%
Mid Drift:	0.6%	-0.1%	-0.2%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 9 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.320	0.075	0.016
Low final:	0.272	0.092	0.026
Mid Init:	5.823	9.868	10.011
Mid Final:	5.893	9.852	9.962
Run Avg:	0.133	12.923	4.467
Co:	0.296	0.083	0.021
Cm:	5.858	9.860	9.987
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.162	13.159	4.501

GP 2022 October 14

Initial System Bias Check

Date/Time: 10/14/2022 6:55:02
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E
Low Cal:	0.008	-0.003
Low Sys:	0.129	0.015
Low Bias:	0.5%	0.1%
Upscale Cal:	10.046	10.202
Upscale Sys:	9.903	10.022
Upscale Bias	-0.7%	-0.8%
Bias Result:	PASSED	PASSED

GP 2022 October 14
Run 1 Final Bias & Drift Check
Date/Time:
Result:

Run 1
10/14/2022 10:48:07
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.008	-0.003
Low Sys:	0.144	0.046
Low Bias:	0.6%	0.2%
Upscale Cal:	10.046	10.202
Upscale Sys:	10.196	10.128
Upscale Bias	0.7%	-0.3%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.1%	0.1%
Mid Drift:	1.3%	0.5%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 1 Bias Correction Calculations:

	O2	CO2
Low init:	0.129	0.015
Low final:	0.144	0.046
Mid Init:	9.903	10.022
Mid Final:	10.196	10.128
Run Avg:	13.002	4.547
Co:	0.137	0.030
Cm:	10.050	10.075
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.005	4.537

GP 2022 October 14
Run 2 Final Bias & Drift Check
Date/Time: 10/14/2022 14:53:53
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.008	-0.003
Low Sys:	0.102	0.025
Low Bias:	0.4%	0.1%
Upscale Cal:	10.046	10.202
Upscale Sys:	9.988	10.056
Upscale Bias	-0.3%	-0.7%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.2%	-0.1%
Mid Drift:	-0.9%	-0.3%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 2 Bias Correction Calculations:

	O2	CO2
Low init:	0.144	0.046
Low final:	0.102	0.025
Mid Init:	10.196	10.128
Mid Final:	9.988	10.056
Run Avg:	13.125	4.525
Co:	0.123	0.035
Cm:	10.092	10.092
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.068	4.505

GP 2022 October 17

Initial System Bias Check

Date/Time: 10/17/2022 7:13:47
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	0.100	0.192	0.083
Low Bias:	1.5%	0.6%	0.0%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.615	9.995	10.046
Upscale Bias	0.3%	-0.5%	-0.6%
Bias Result:	PASSED	PASSED	PASSED

GP 2022 October 17 Run 1
 Run 1 Final Bias & Drift Check
 Date/Time: 10/17/2022 9:31:11
 Result: PASS

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E

Low Cal:	-0.074	0.066	0.089
Low Sys:	0.023	0.172	0.076
Low Bias:	0.8%	0.5%	-0.1%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.594	9.922	10.013
Upscale Bias	0.1%	-0.8%	-0.8%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.7%	-0.1%	0.0%
Mid Drift:	-0.2%	-0.3%	-0.2%
Drift Result:	PASSED	PASSED	PASSED

Cal Result:	OK	OK	OK
-------------	----	----	----

Test Run 1 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.100	0.192	0.083
Low final:	0.023	0.172	0.076
Mid Init:	5.615	9.995	10.046
Mid Final:	5.594	9.922	10.013
Run Avg:	-0.133	12.889	4.537
Co:	0.061	0.182	0.079
Cm:	5.605	9.959	10.030
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.194	13.023	4.521

GP 2022 October 17
Run 2 Final Bias & Drift Check
Date/Time:
Result:

Run 2
10/17/2022 10:43:29
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	-0.024	0.181	0.090
Low Bias:	0.4%	0.5%	0.0%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.595	9.931	10.029
Upscale Bias	0.1%	-0.8%	-0.7%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.4%	0.0%	0.1%
Mid Drift:	0.0%	0.0%	0.1%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 2 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.023	0.172	0.076
Low final:	-0.024	0.181	0.090
Mid Init:	5.594	9.922	10.013
Mid Final:	5.595	9.931	10.029
Run Avg:	-0.147	12.884	4.530
Co:	0.000	0.176	0.083
Cm:	5.594	9.926	10.021
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.144	13.060	4.515

GP 2022 October 17 Run 3
Run 3 Final Bias & Drift Check
Date/Time: 10/17/2022 11:51:30
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	-0.026	0.180	0.092
Low Bias:	0.4%	0.5%	0.0%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.629	9.914	9.987
Upscale Bias	0.4%	-0.9%	-0.9%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.0%	0.0%	0.0%
Mid Drift:	0.3%	-0.1%	-0.2%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 3 Bias Correction Calculations:

	CO	O2	CO2
Low init:	-0.024	0.181	0.090
Low final:	-0.026	0.180	0.092
Mid Init:	5.595	9.931	10.029
Mid Final:	5.629	9.914	9.987
Run Avg:	-0.181	12.885	4.527
Co:	-0.025	0.180	0.091
Cm:	5.612	9.922	10.008
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.153	13.067	4.513

GP 2022 October 17 Run 4
Run 4 Final Bias & Drift Check
Date/Time: 10/17/2022 13:00:50
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	-0.037	0.186	0.092
Low Bias:	0.3%	0.5%	0.0%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.549	9.899	9.956
Upscale Bias	-0.3%	-0.9%	-1.1%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

	CO	O2	CO2
Low Drift:	-0.1%	0.0%	0.0%
Mid Drift:	-0.7%	-0.1%	-0.1%
Drift Result:	PASSED	PASSED	PASSED

Cal Result: OK OK OK

Test Run 4 Bias Correction Calculations:

	CO	O2	CO2
Low init:	-0.026	0.180	0.092
Low final:	-0.037	0.186	0.092
Mid Init:	5.629	9.914	9.987
Mid Final:	5.549	9.899	9.956
Run Avg:	-0.188	12.881	4.522
Co:	-0.032	0.183	0.092
Cm:	5.589	9.906	9.972
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.153	13.086	4.524

GP 2022 October 17
Run 5 Final Bias & Drift Check
Date/Time:
Result:

Run 5
10/17/2022 14:15:20
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	-0.030	0.150	0.076
Low Bias:	0.4%	0.4%	-0.1%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.604	9.902	9.971
Upscale Bias	0.2%	-0.9%	-1.0%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.1%	-0.2%	-0.1%
Mid Drift:	0.5%	0.0%	0.1%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 5 Bias Correction Calculations:

	CO	O2	CO2
Low init:	-0.037	0.186	0.092
Low final:	-0.030	0.150	0.076
Mid Init:	5.549	9.899	9.956
Mid Final:	5.604	9.902	9.971
Run Avg:	-0.192	12.868	4.513
Co:	-0.034	0.168	0.084
Cm:	5.577	9.900	9.964
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.155	13.075	4.523

GP 2022 October 17 Run 6
 Run 6 Final Bias & Drift Check
 Date/Time: 10/17/2022 15:29:57
 Result: PASS

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	0.024	0.167	0.086
Low Bias:	0.8%	0.5%	0.0%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.674	9.893	9.965
Upscale Bias	0.8%	-0.9%	-1.0%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.5%	0.1%	0.0%
Mid Drift:	0.6%	0.0%	0.0%
Drift Result:	PASSED	PASSED	PASSED
Cal Result:	OK	OK	OK

Test Run 6 Bias Correction Calculations:

	CO	O2	CO2
Low init:	-0.030	0.150	0.076
Low final:	0.024	0.167	0.086
Mid Init:	5.604	9.902	9.971
Mid Final:	5.674	9.893	9.965
Run Avg:	-0.196	12.862	4.504
Co:	-0.003	0.159	0.081
Cm:	5.639	9.897	9.968
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.189	13.070	4.514

GP 2022 October 17 Run 7
Run 7 Final Bias & Drift Check
Date/Time: 10/17/2022 16:43:30
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
CO	ALM-050814	CC255453	CC463842
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	CO	O2	CO2
Units:	ppm	%	%
Span:	11.600	22.000	21.700
Range:	100	25	25
Method:	EPA 7E	EPA 7E	EPA 7E
Low Cal:	-0.074	0.066	0.089
Low Sys:	0.009	0.172	0.093
Low Bias:	0.7%	0.5%	0.0%
Upscale Cal:	5.585	10.102	10.185
Upscale Sys:	5.578	9.897	9.954
Upscale Bias	-0.1%	-0.9%	-1.1%
Bias Result:	PASSED	PASSED	PASSED

System Bias Drift Results

	CO	O2	CO2
Low Drift:	-0.1%	0.0%	0.0%
Mid Drift:	-0.8%	0.0%	-0.1%
Drift Result:	PASSED	PASSED	PASSED

Cal Result: OK OK OK

Test Run 7 Bias Correction Calculations:

	CO	O2	CO2
Low init:	0.024	0.167	0.086
Low final:	0.009	0.172	0.093
Mid Init:	5.674	9.893	9.965
Mid Final:	5.578	9.897	9.954
Run Avg:	-0.201	12.863	4.503
Co:	0.016	0.170	0.089
Cm:	5.626	9.895	9.959
Coa:	0.000	0.000	0.000
Cma:	5.515	10.020	10.090
Corrected:	-0.214	13.077	4.512

GP 2022 October 18

Initial System Bias Check

Date/Time: 10/18/2022 6:44:10
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E
Low Cal:	0.025	0.032
Low Sys:	0.136	0.044
Low Bias:	0.5%	0.1%
Upscale Cal:	9.915	10.094
Upscale Sys:	9.976	9.952
Upscale Bias	0.3%	-0.7%
Bias Result:	PASSED	PASSED

GP 2022 October 18 Run 1
Run 1 Final Bias & Drift Check
Date/Time: 10/18/2022 11:21:25
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.025	0.032
Low Sys:	0.187	0.061
Low Bias:	0.7%	0.1%

Upscale Cal:	9.915	10.094
Upscale Sys:	10.081	9.973
Upscale Bias	0.8%	-0.6%

Bias Result:	PASSED	PASSED
--------------	--------	--------

System Bias Drift Results

Low Drift:	0.2%	0.1%
Mid Drift:	0.5%	0.1%
Drift Result:	PASSED	PASSED

Cal Result:	OK	OK
-------------	----	----

Test Run 1 Bias Correction Calculations:

	O2	CO2
Low init:	0.136	0.044
Low final:	0.187	0.061
Mid Init:	9.976	9.952
Mid Final:	10.081	9.973
Run Avg:	13.069	4.487
Co:	0.161	0.053
Cm:	10.028	9.963
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.108	4.515

GP 2022 October 18
Run 2 Final Bias & Drift Check
Date/Time:
Result:

Run 2
10/18/2022 15:20:17
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.025	0.032
Low Sys:	0.204	0.044
Low Bias:	0.8%	0.1%
Upscale Cal:	9.915	10.094
Upscale Sys:	9.979	9.951
Upscale Bias	0.3%	-0.7%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.1%	-0.1%
Mid Drift:	-0.5%	-0.1%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 2 Bias Correction Calculations:

	O2	CO2
Low init:	0.187	0.061
Low final:	0.204	0.044
Mid Init:	10.081	9.973
Mid Final:	9.979	9.951
Run Avg:	13.076	4.494
Co:	0.195	0.053
Cm:	10.030	9.962
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.123	4.523

GP 2022 October 19

Initial System Bias Check

Date/Time: 10/19/2022 6:34:55
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E
Low Cal:	0.103	0.026
Low Sys:	0.209	0.043
Low Bias:	0.5%	0.1%
Upscale Cal:	10.029	10.129
Upscale Sys:	10.014	9.944
Upscale Bias	-0.1%	-0.9%
Bias Result:	PASSED	PASSED

GP 2022 October 19
Run 1 Final Bias & Drift Check
Date/Time: 10/19/2022 10:52:57
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.103	0.026
Low Sys:	0.201	0.052
Low Bias:	0.4%	0.1%

Upscale Cal:	10.029	10.129
Upscale Sys:	9.938	9.985
Upscale Bias	-0.4%	-0.7%

Bias Result:	PASSED	PASSED
--------------	--------	--------

System Bias Drift Results

Low Drift:	0.0%	0.0%
Mid Drift:	-0.3%	0.2%
Drift Result:	PASSED	PASSED

Cal Result:	OK	OK
-------------	----	----

Test Run 1 Bias Correction Calculations:

	O2	CO2
Low init:	0.209	0.043
Low final:	0.201	0.052
Mid Init:	10.014	9.944
Mid Final:	9.938	9.985
Run Avg:	13.064	4.491
Co:	0.205	0.047
Cm:	9.976	9.964
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.186	4.522

GP 2022 October 19
Run 2 Final Bias & Drift Check
Date/Time: 10/19/2022 14:30:29
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.103	0.026
Low Sys:	0.186	0.063
Low Bias:	0.4%	0.2%
Upscale Cal:	10.029	10.129
Upscale Sys:	9.990	9.975
Upscale Bias	-0.2%	-0.7%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.1%	0.1%
Mid Drift:	0.2%	0.0%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 2 Bias Correction Calculations:

	O2	CO2
Low init:	0.201	0.052
Low final:	0.186	0.063
Mid Init:	9.938	9.985
Mid Final:	9.990	9.975
Run Avg:	13.003	4.488
Co:	0.193	0.057
Cm:	9.964	9.980
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	13.137	4.505

GP 2022 October 20

Initial System Bias Check

Date/Time: 10/20/2022 7:31:15
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E
Low Cal:	0.069	0.040
Low Sys:	0.206	0.063
Low Bias:	0.6%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	9.965	9.978
Upscale Bias	0.6%	-0.6%
Bias Result:	PASSED	PASSED

GP 2022 October 20 Run 1
Run 1 Final Bias & Drift Check
Date/Time: 10/20/2022 8:06:13
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.173	0.066
Low Bias:	0.5%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	9.919	9.980
Upscale Bias	0.4%	-0.6%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	-0.2%	0.0%
Mid Drift:	-0.2%	0.0%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 1 Bias Correction Calculations:

	O2	CO2
Low init:	0.206	0.063
Low final:	0.173	0.066
Mid Init:	9.965	9.978
Mid Final:	9.919	9.980
Run Avg:	11.730	5.152
Co:	0.189	0.065
Cm:	9.942	9.979
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.857	5.177

GP 2022 October 20 Run 2
Run 2 Final Bias & Drift Check
Date/Time: 10/20/2022 8:38:03
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.169	0.071
Low Bias:	0.5%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	9.923	9.976
Upscale Bias	0.4%	-0.6%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.0%	0.0%
Mid Drift:	0.0%	0.0%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 2 Bias Correction Calculations:

	O2	CO2
Low init:	0.173	0.066
Low final:	0.169	0.071
Mid Init:	9.919	9.980
Mid Final:	9.923	9.976
Run Avg:	11.714	5.160
Co:	0.171	0.069
Cm:	9.921	9.978
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.863	5.184

GP 2022 October 20 Run 3
Run 3 Final Bias & Drift Check
Date/Time: 10/20/2022 9:11:02
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.170	0.060
Low Bias:	0.5%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	9.921	9.995
Upscale Bias	0.4%	-0.5%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.0%	0.0%
Mid Drift:	0.0%	0.1%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 3 Bias Correction Calculations:

	O2	CO2
Low init:	0.169	0.071
Low final:	0.170	0.060
Mid Init:	9.923	9.976
Mid Final:	9.921	9.995
Run Avg:	11.751	5.140
Co:	0.169	0.066
Cm:	9.922	9.985
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.899	5.161

GP 2022 October 20 Run 4
Run 4 Final Bias & Drift Check
Date/Time: 10/20/2022 9:44:12
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.156	0.056
Low Bias:	0.4%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	10.105	10.006
Upscale Bias	1.3%	-0.5%

Bias Result:	PASSED	PASSED
	PASSED	

System Bias Drift Results

Low Drift:	-0.1%	0.0%
Mid Drift:	0.8%	0.1%
Drift Result:	PASSED	PASSED

Cal Result:	OK	OK
-------------	----	----

Test Run 4 Bias Correction Calculations:

	O2	CO2
Low init:	0.170	0.060
Low final:	0.156	0.056
Mid Init:	9.921	9.995
Mid Final:	10.105	10.006
Run Avg:	11.775	5.136
Co:	0.163	0.058
Cm:	10.013	10.000
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.812	5.153

GP 2022 October 20 Run 5
Run 5 Final Bias & Drift Check
Date/Time: 10/20/2022 10:17:51
Result: PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.167	0.061
Low Bias:	0.4%	0.1%

Upscale Cal:	9.824	10.108
Upscale Sys:	10.093	10.019
Upscale Bias	1.2%	-0.4%

Bias Result:	PASSED	PASSED
--------------	--------	--------

System Bias Drift Results

Low Drift:	0.0%	0.0%
Mid Drift:	-0.1%	0.1%
Drift Result:	PASSED	PASSED

Cal Result:	OK	OK
-------------	----	----

Test Run 5 Bias Correction Calculations:

	O2	CO2
Low init:	0.156	0.056
Low final:	0.167	0.061
Mid Init:	10.105	10.006
Mid Final:	10.093	10.019
Run Avg:	11.901	5.159
Co:	0.161	0.059
Cm:	10.099	10.013
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.837	5.170

GP 2022 October 20
Run 6 Final Bias & Drift Check
Date/Time:
Result:

Run 6
10/20/2022 10:49:56
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.168	0.067
Low Bias:	0.5%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	10.081	9.999
Upscale Bias	1.2%	-0.5%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.0%	0.0%
Mid Drift:	-0.1%	-0.1%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 6 Bias Correction Calculations:

	O2	CO2
Low init:	0.167	0.061
Low final:	0.168	0.067
Mid Init:	10.093	10.019
Mid Final:	10.081	9.999
Run Avg:	11.917	5.148
Co:	0.167	0.064
Cm:	10.087	10.009
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.869	5.158

GP 2022 October 20
Run 7 Final Bias & Drift Check
Date/Time:
Result:

Run 7
10/20/2022 11:23:05
PASS

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Reference Cylinder IDs

	Low ID	Upscale ID	Span ID
O2	ALM-050814	ALM038221	CC719835
CO2	ALM-050814	ALM038221	CC719835

System Bias Check Results

Analyte:	O2	CO2
Units:	%	%
Span:	22.000	21.700
Range:	25	25
Method:	EPA 7E	EPA 7E

Low Cal:	0.069	0.040
Low Sys:	0.162	0.058
Low Bias:	0.4%	0.1%
Upscale Cal:	9.824	10.108
Upscale Sys:	10.082	10.002
Upscale Bias	1.2%	-0.5%
Bias Result:	PASSED	PASSED

System Bias Drift Results

Low Drift:	0.0%	0.0%
Mid Drift:	0.0%	0.0%
Drift Result:	PASSED	PASSED

Cal Result: OK OK

Test Run 7 Bias Correction Calculations:

	O2	CO2
Low init:	0.168	0.067
Low final:	0.162	0.058
Mid Init:	10.081	9.999
Mid Final:	10.082	10.002
Run Avg:	11.927	5.139
Co:	0.165	0.063
Cm:	10.082	10.000
Coa:	0.000	0.000
Cma:	10.020	10.090
Corrected:	11.885	5.154

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2	
		%	%	
07:35:00	1min avg:	12.978	4.520	
07:36:00	1min avg:	12.979	4.518	
07:37:00	1min avg:	12.977	4.519	Strat Pt 1
07:38:00	1min avg:	12.975	4.519	
07:39:00	1min avg:	12.974	4.518	
07:40:00	1min avg:	12.977	4.520	Strat Pt 2
07:41:00	1min avg:	12.971	4.519	
07:42:00	1min avg:	12.973	4.523	
07:43:00	1min avg:	12.971	4.524	Strat Pt 3
07:44:00	1min avg:	12.976	4.522	
07:45:00	1min avg:	12.976	4.520	
07:46:00	1min avg:	12.982	4.519	Strat Pt 4
07:47:00	1min avg:	12.983	4.519	
07:48:00	1min avg:	12.970	4.523	
07:49:00	1min avg:	12.979	4.520	Strat Pt 5
07:50:00	1min avg:	12.982	4.521	
07:51:00	1min avg:	12.978	4.522	
07:52:00	1min avg:	12.975	4.523	Strat Pt 6
07:53:00	1min avg:	12.967	4.525	
07:54:00	1min avg:	12.976	4.520	
07:55:00	1min avg:	12.972	4.518	
07:56:00	1min avg:	12.974	4.519	
07:57:00	1min avg:	12.972	4.520	
07:58:00	1min avg:	12.967	4.520	
07:59:00	1min avg:	12.970	4.520	
08:00:00	1min avg:	12.971	4.520	
08:01:00	1min avg:	12.972	4.518	
08:02:00	1min avg:	12.974	4.518	Strat Pt 7
08:03:00	1min avg:	12.970	4.520	
08:04:00	1min avg:	12.966	4.519	
08:05:00	1min avg:	12.966	4.522	Strat Pt 8
08:06:00	1min avg:	12.964	4.522	
08:07:00	1min avg:	12.967	4.520	
08:08:00	1min avg:	12.973	4.516	Strat Pt 9
08:09:00	1min avg:	12.968	4.520	

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2	
08:10:00	1min avg:	12.973	4.519	
08:11:00	1min avg:	12.975	4.519	Strat Pt 10
08:12:00	1min avg:	12.976	4.520	
08:13:00	1min avg:	12.974	4.519	
08:14:00	1min avg:	12.977	4.520	Strat Pt 11
08:15:00	1min avg:	12.980	4.520	
08:16:00	1min avg:	12.970	4.521	
08:17:00	1min avg:	12.976	4.521	Strat Pt 12
08:18:00	1min avg:	12.976	4.519	
08:19:00	1min avg:	12.975	4.521	
08:20:00	1min avg:	12.979	4.518	
08:21:00	1min avg:	12.986	4.516	
08:22:00	1min avg:	12.971	4.522	
08:23:00	1min avg:	12.973	4.522	
08:24:00	1min avg:	12.973	4.520	
08:25:00	1min avg:	12.970	4.521	
08:26:00	1min avg:	12.971	4.519	
08:27:00	1min avg:	12.978	4.520	
08:28:00	1min avg:	12.978	4.519	
08:29:00	1min avg:	12.975	4.521	
08:30:00	1min avg:	12.973	4.520	
08:31:00	1min avg:	12.970	4.521	
08:32:00	1min avg:	12.972	4.518	
08:33:00	1min avg:	12.970	4.520	
08:34:00	1min avg:	12.970	4.521	
08:35:00	1min avg:	12.971	4.518	
08:36:00	1min avg:	12.972	4.517	
08:37:00	1min avg:	12.973	4.518	
08:38:00	1min avg:	12.978	4.520	
08:39:00	1min avg:	12.977	4.519	
08:40:00	1min avg:	12.975	4.519	
08:41:00	1min avg:	12.973	4.519	
08:42:00	1min avg:	12.968	4.517	
08:43:00	1min avg:	12.965	4.520	
08:44:00	1min avg:	12.963	4.518	

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
08:45:00	1min avg:	12.966	4.519
08:46:00	1min avg:	12.971	4.515
08:47:00	1min avg:	12.969	4.514
08:48:00	1min avg:	12.970	4.516
08:49:00	1min avg:	12.966	4.516
08:50:00	1min avg:	12.965	4.516
08:51:00	1min avg:	12.965	4.516
08:52:00	1min avg:	12.962	4.518
08:53:00	1min avg:	12.966	4.516
08:54:00	1min avg:	12.967	4.515
08:55:00	1min avg:	12.965	4.519
08:56:00	1min avg:	12.968	4.516
08:57:00	1min avg:	12.967	4.517
08:58:00	1min avg:	12.969	4.517
08:59:00	1min avg:	12.972	4.516
09:00:00	1min avg:	12.965	4.518
09:01:00	1min avg:	12.962	4.520
09:02:00	1min avg:	12.964	4.519
09:03:00	1min avg:	12.965	4.516
09:04:00	1min avg:	12.962	4.520
09:05:00	1min avg:	12.960	4.519
09:06:00	1min avg:	12.967	4.516
09:07:00	1min avg:	12.959	4.519
09:08:00	1min avg:	12.969	4.514
09:09:00	1min avg:	12.971	4.516
09:10:00	1min avg:	12.964	4.517
09:11:00	1min avg:	12.968	4.516
09:12:00	1min avg:	12.956	4.520
09:13:00	1min avg:	12.957	4.519
09:14:00	1min avg:	12.965	4.517
09:15:00	1min avg:	12.971	4.511
09:16:00	1min avg:	12.966	4.517
09:17:00	1min avg:	12.966	4.519
09:18:00	1min avg:	12.964	4.518
09:19:00	1min avg:	12.966	4.514

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
09:20:00	1min avg:	12.963	4.519
09:21:00	1min avg:	12.969	4.519
09:22:00	1min avg:	12.965	4.516
09:23:00	1min avg:	12.967	4.517
09:24:00	1min avg:	12.967	4.516
09:25:00	1min avg:	12.968	4.517
09:26:00	1min avg:	12.967	4.518
09:27:00	1min avg:	12.964	4.518
09:28:00	1min avg:	12.971	4.513
09:29:00	1min avg:	12.961	4.519
09:30:00	1min avg:	12.964	4.516
09:31:00	1min avg:	12.963	4.520
09:32:00	1min avg:	12.960	4.517
09:33:00	1min avg:	12.971	4.517
09:34:00	1min avg:	12.964	4.517
09:35:00	1min avg:	12.966	4.517
09:36:00	1min avg:	12.965	4.519
09:37:00	1min avg:	12.975	4.515
09:38:00	1min avg:	12.962	4.517
09:39:00	1min avg:	12.967	4.516
09:40:00	1min avg:	12.960	4.520
09:41:00	1min avg:	12.963	4.518
09:42:00	1min avg:	12.965	4.513
09:43:00	1min avg:	12.960	4.517
09:44:00	1min avg:	12.970	4.514
09:45:00	1min avg:	12.967	4.514
09:46:00	1min avg:	12.959	4.517
09:47:00	1min avg:	12.962	4.516
09:48:00	1min avg:	12.968	4.514
09:49:00	1min avg:	12.969	4.513
09:50:00	1min avg:	12.961	4.517
09:51:00	1min avg:	12.963	4.514
09:52:00	1min avg:	12.971	4.515
09:53:00	1min avg:	12.967	4.516
09:54:00	1min avg:	12.968	4.513

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
09:55:00	1min avg:	12.961	4.518
09:56:00	1min avg:	12.963	4.516
09:57:00	1min avg:	12.963	4.517
09:58:00	1min avg:	12.961	4.517
09:59:00	1min avg:	12.959	4.520
10:00:00	1min avg:	12.969	4.514
10:01:00	1min avg:	12.949	4.522
10:02:00	1min avg:	12.969	4.515
10:03:00	1min avg:	12.967	4.513
10:04:00	1min avg:	12.965	4.518
10:05:00	1min avg:	12.949	4.527
10:06:00	1min avg:	12.980	4.511
10:07:00	1min avg:	12.949	4.525
10:08:00	1min avg:	12.962	4.517
10:09:00	1min avg:	12.970	4.518
10:10:00	1min avg:	12.960	4.517
10:11:00	1min avg:	12.952	4.522
10:12:00	1min avg:	12.960	4.520
10:13:00	1min avg:	12.973	4.511
10:14:00	1min avg:	12.954	4.517
10:15:00	1min avg:	12.959	4.518
10:16:00	1min avg:	12.935	4.518
10:17:00	1min avg:	12.941	4.508
10:18:00	1min avg:	12.941	4.513
10:19:00	1min avg:	12.944	4.518
10:20:00	1min avg:	12.945	4.516
10:21:00	1min avg:	12.956	4.511
10:22:00	1min avg:	12.948	4.515
10:23:00	1min avg:	12.953	4.513
10:24:00	1min avg:	12.958	4.511
10:25:00	1min avg:	12.949	4.516
10:26:00	1min avg:	12.948	4.512
10:27:00	1min avg:	12.969	4.503
10:28:00	1min avg:	12.948	4.518
10:29:00	1min avg:	12.952	4.516

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
10:30:00	1min avg:	12.965	4.509
10:31:00	1min avg:	12.951	4.516
10:32:00	1min avg:	12.949	4.518
10:33:00	1min avg:	12.954	4.517
10:34:00	1min avg:	12.962	4.514
10:35:00	1min avg:	12.962	4.515
10:36:00	1min avg:	12.954	4.517
10:37:00	1min avg:	12.957	4.516
10:38:00	1min avg:	12.954	4.515
10:39:00	1min avg:	12.959	4.519
10:40:00	1min avg:	12.957	4.514
10:41:00	1min avg:	12.956	4.515
10:42:00	1min avg:	12.943	4.518
10:43:00	1min avg:	12.955	4.515
10:44:00	1min avg:	12.958	4.516
10:45:00	1min avg:	12.959	4.515
10:46:00	1min avg:	12.961	4.514
10:47:00	1min avg:	12.960	4.514
10:48:00	1min avg:	12.963	4.514
10:49:00	1min avg:	12.958	4.517
10:50:00	1min avg:	12.952	4.518
10:51:00	1min avg:	12.960	4.519
10:52:00	1min avg:	12.954	4.517
10:53:00	1min avg:	12.958	4.518
10:54:00	1min avg:	12.956	4.516
10:55:00	1min avg:	12.959	4.515
10:56:00	1min avg:	12.951	4.517
10:57:00	1min avg:	12.960	4.513
10:58:00	1min avg:	12.959	4.514
10:59:00	1min avg:	12.956	4.516
11:00:00	1min avg:	12.955	4.516
11:01:00	1min avg:	12.961	4.514
11:02:00	1min avg:	12.957	4.517
11:03:00	1min avg:	12.962	4.517
11:04:00	1min avg:	12.958	4.514

GP 2022 October 12

Test Run 1

Start: 10/12/2022 7:34:00
End: 10/12/2022 11:09:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
11:05:00	1min avg:	12.957	4.518
11:06:00	1min avg:	12.954	4.515
11:07:00	1min avg:	12.965	4.515
11:08:00	1min avg:	12.957	4.516
11:09:00	1min avg:	12.953	4.517
11:09:00	Test Avgs:	12.965	4.517

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
11:59:00	1min avg:	12.916	4.516
12:00:00	1min avg:	12.906	4.519
12:01:00	1min avg:	12.921	4.514
12:02:00	1min avg:	12.907	4.520
12:03:00	1min avg:	12.915	4.516
12:04:00	1min avg:	12.908	4.519
12:05:00	1min avg:	12.921	4.515
12:06:00	1min avg:	12.913	4.515
12:07:00	1min avg:	12.906	4.518
12:08:00	1min avg:	12.916	4.514
12:09:00	1min avg:	12.914	4.515
12:10:00	1min avg:	12.908	4.515
12:11:00	1min avg:	12.906	4.515
12:12:00	1min avg:	12.904	4.514
12:13:00	1min avg:	12.905	4.515
12:14:00	1min avg:	12.913	4.510
12:15:00	1min avg:	12.903	4.513
12:16:00	1min avg:	12.903	4.513
12:17:00	1min avg:	12.902	4.514
12:18:00	1min avg:	12.892	4.517
12:19:00	1min avg:	12.918	4.506
12:20:00	1min avg:	12.898	4.514
12:21:00	1min avg:	12.899	4.516
12:22:00	1min avg:	12.906	4.514
12:23:00	1min avg:	12.902	4.513
12:24:00	1min avg:	12.901	4.514
12:25:00	1min avg:	12.915	4.507
12:26:00	1min avg:	12.906	4.512
12:27:00	1min avg:	12.909	4.514
12:28:00	1min avg:	12.907	4.514
12:29:00	1min avg:	12.909	4.512
12:30:00	1min avg:	12.900	4.512
12:31:00	1min avg:	12.900	4.515
12:32:00	1min avg:	12.903	4.512
12:33:00	1min avg:	12.909	4.510

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
12:34:00	1min avg:	12.901	4.515
12:35:00	1min avg:	12.904	4.511
12:36:00	1min avg:	12.898	4.515
12:37:00	1min avg:	12.901	4.516
12:38:00	1min avg:	12.901	4.510
12:39:00	1min avg:	12.909	4.510
12:40:00	1min avg:	12.907	4.511
12:41:00	1min avg:	12.908	4.511
12:42:00	1min avg:	12.897	4.515
12:43:00	1min avg:	12.902	4.512
12:44:00	1min avg:	12.898	4.511
12:45:00	1min avg:	12.895	4.513
12:46:00	1min avg:	12.904	4.506
12:47:00	1min avg:	12.898	4.511
12:48:00	1min avg:	12.889	4.513
12:49:00	1min avg:	12.901	4.510
12:50:00	1min avg:	12.901	4.509
12:51:00	1min avg:	12.908	4.508
12:52:00	1min avg:	12.897	4.508
12:53:00	1min avg:	12.903	4.507
12:54:00	1min avg:	12.891	4.512
12:55:00	1min avg:	12.904	4.503
12:56:00	1min avg:	12.883	4.518
12:57:00	1min avg:	12.910	4.504
12:58:00	1min avg:	12.888	4.511
12:59:00	1min avg:	12.887	4.512
13:00:00	1min avg:	12.913	4.499
13:01:00	1min avg:	12.881	4.511
13:02:00	1min avg:	12.897	4.508
13:03:00	1min avg:	12.893	4.508
13:04:00	1min avg:	12.880	4.514
13:05:00	1min avg:	12.890	4.509
13:06:00	1min avg:	12.901	4.505
13:07:00	1min avg:	12.892	4.510
13:08:00	1min avg:	12.892	4.509

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
		%	%
13:09:00	1min avg:	12.893	4.511
13:10:00	1min avg:	12.892	4.510
13:11:00	1min avg:	12.894	4.510
13:12:00	1min avg:	12.901	4.509
13:13:00	1min avg:	12.899	4.509
13:14:00	1min avg:	12.901	4.508
13:15:00	1min avg:	12.898	4.509
13:16:00	1min avg:	12.905	4.506
13:17:00	1min avg:	12.896	4.514
13:18:00	1min avg:	12.902	4.511
13:19:00	1min avg:	12.903	4.512
13:20:00	1min avg:	12.903	4.506
13:21:00	1min avg:	12.904	4.510
13:22:00	1min avg:	12.903	4.512
13:23:00	1min avg:	12.898	4.516
13:24:00	1min avg:	12.898	4.510
13:25:00	1min avg:	12.898	4.510
13:26:00	1min avg:	12.894	4.515
13:27:00	1min avg:	12.903	4.512
13:28:00	1min avg:	12.898	4.513
13:29:00	1min avg:	12.896	4.511
13:30:00	1min avg:	12.897	4.512
13:31:00	1min avg:	12.903	4.510
13:32:00	1min avg:	12.900	4.511
13:33:00	1min avg:	12.898	4.510
13:34:00	1min avg:	12.896	4.507
13:35:00	1min avg:	12.899	4.510
13:36:00	1min avg:	12.892	4.512
13:37:00	1min avg:	12.888	4.515
13:38:00	1min avg:	12.896	4.510
13:39:00	1min avg:	12.902	4.505
13:40:00	1min avg:	12.895	4.509
13:41:00	1min avg:	12.893	4.511
13:42:00	1min avg:	12.890	4.509
13:43:00	1min avg:	12.892	4.507

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
13:44:00	1min avg:	12.882	4.510
13:45:00	1min avg:	12.892	4.509
13:46:00	1min avg:	12.888	4.508
13:47:00	1min avg:	12.892	4.510
13:48:00	1min avg:	12.884	4.510
13:49:00	1min avg:	12.884	4.509
13:50:00	1min avg:	12.892	4.507
13:51:00	1min avg:	12.887	4.507
13:52:00	1min avg:	12.888	4.509
13:53:00	1min avg:	12.890	4.510
13:54:00	1min avg:	12.883	4.511
13:55:00	1min avg:	12.887	4.509
13:56:00	1min avg:	12.878	4.512
13:57:00	1min avg:	12.884	4.513
13:58:00	1min avg:	12.881	4.514
13:59:00	1min avg:	12.896	4.505
14:00:00	1min avg:	12.880	4.515
14:01:00	1min avg:	12.901	4.505
14:02:00	1min avg:	13.061	4.520
14:03:00	1min avg:	13.110	4.522
14:04:00	1min avg:	13.119	4.518
14:05:00	1min avg:	13.097	4.526
14:06:00	1min avg:	13.116	4.520
14:07:00	1min avg:	13.103	4.523
14:08:00	1min avg:	13.108	4.519
14:09:00	1min avg:	13.113	4.520
14:10:00	1min avg:	13.100	4.522
14:11:00	1min avg:	13.102	4.522
14:12:00	1min avg:	13.096	4.522
14:13:00	1min avg:	13.108	4.518
14:14:00	1min avg:	13.102	4.518
14:15:00	1min avg:	13.098	4.522
14:16:00	1min avg:	13.098	4.522
14:17:00	1min avg:	13.101	4.521
14:18:00	1min avg:	13.101	4.520

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
14:19:00	1min avg:	13.105	4.518
14:20:00	1min avg:	13.103	4.518
14:21:00	1min avg:	13.099	4.522
14:22:00	1min avg:	13.104	4.521
14:23:00	1min avg:	13.101	4.523
14:24:00	1min avg:	13.108	4.517
14:25:00	1min avg:	13.101	4.519
14:26:00	1min avg:	13.098	4.517
14:27:00	1min avg:	13.101	4.522
14:28:00	1min avg:	13.100	4.521
14:29:00	1min avg:	13.102	4.520
14:30:00	1min avg:	13.106	4.523
14:31:00	1min avg:	13.100	4.523
14:32:00	1min avg:	13.102	4.524
14:33:00	1min avg:	13.106	4.523
14:34:00	1min avg:	13.102	4.522
14:35:00	1min avg:	13.102	4.523
14:36:00	1min avg:	13.104	4.522
14:37:00	1min avg:	13.101	4.524
14:38:00	1min avg:	13.102	4.523
14:39:00	1min avg:	13.105	4.523
14:40:00	1min avg:	13.101	4.521
14:41:00	1min avg:	13.100	4.522
14:42:00	1min avg:	13.099	4.523
14:43:00	1min avg:	13.102	4.521
14:44:00	1min avg:	13.104	4.522
14:45:00	1min avg:	13.100	4.520
14:46:00	1min avg:	13.098	4.521
14:47:00	1min avg:	13.101	4.520
14:48:00	1min avg:	13.096	4.522
14:49:00	1min avg:	13.099	4.522
14:50:00	1min avg:	13.101	4.520
14:51:00	1min avg:	13.099	4.520
14:52:00	1min avg:	13.095	4.524
14:53:00	1min avg:	13.089	4.524

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
14:54:00	1min avg:	13.094	4.521
14:55:00	1min avg:	13.099	4.519
14:56:00	1min avg:	13.093	4.522
14:57:00	1min avg:	13.091	4.524
14:58:00	1min avg:	13.091	4.523
14:59:00	1min avg:	13.091	4.522
15:00:00	1min avg:	13.088	4.525
15:01:00	1min avg:	13.089	4.525
15:02:00	1min avg:	13.085	4.524
15:03:00	1min avg:	13.089	4.523
15:04:00	1min avg:	13.088	4.522
15:05:00	1min avg:	13.082	4.526
15:06:00	1min avg:	13.085	4.524
15:07:00	1min avg:	13.085	4.527
15:08:00	1min avg:	13.085	4.529
15:09:00	1min avg:	13.083	4.530
15:10:00	1min avg:	13.093	4.525
15:11:00	1min avg:	13.089	4.524
15:12:00	1min avg:	13.089	4.526
15:13:00	1min avg:	13.084	4.526
15:14:00	1min avg:	13.081	4.525
15:15:00	1min avg:	13.078	4.528
15:16:00	1min avg:	13.081	4.528
15:17:00	1min avg:	13.084	4.528
15:18:00	1min avg:	13.082	4.527
15:19:00	1min avg:	13.085	4.527
15:20:00	1min avg:	13.086	4.526
15:21:00	1min avg:	13.065	4.525
15:22:00	1min avg:	13.079	4.529
15:23:00	1min avg:	13.085	4.525
15:24:00	1min avg:	13.083	4.523
15:25:00	1min avg:	13.086	4.524
15:26:00	1min avg:	13.091	4.522
15:27:00	1min avg:	13.081	4.525
15:28:00	1min avg:	13.083	4.525

GP 2022 October 12

Test Run 2

Start: 10/12/2022 11:58:00
End: 10/12/2022 15:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
		%	%
15:29:00	1min avg:	13.086	4.524
15:30:00	1min avg:	13.091	4.525
15:31:00	1min avg:	13.091	4.526
15:32:00	1min avg:	13.091	4.530
15:33:00	1min avg:	13.080	4.530
15:33:00	Test Avgs:	12.983	4.516

GP 2022 October 13

Test Run 1

Start: 10/13/2022 8:09:00
End: 10/13/2022 9:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
08:10:00	1min avg:	0.083	12.835	4.506
08:11:00	1min avg:	0.084	12.833	4.510
08:12:00	1min avg:	0.071	12.826	4.512
08:13:00	1min avg:	0.043	12.830	4.512
08:14:00	1min avg:	0.093	12.831	4.511
08:15:00	1min avg:	0.091	12.833	4.511
08:16:00	1min avg:	0.056	12.839	4.510
08:17:00	1min avg:	0.050	12.838	4.510
08:18:00	1min avg:	0.053	12.832	4.512
08:19:00	1min avg:	0.033	12.834	4.513
08:20:00	1min avg:	0.069	12.837	4.512
08:21:00	1min avg:	0.052	12.835	4.510
08:22:00	1min avg:	0.065	12.834	4.510
08:23:00	1min avg:	0.040	12.836	4.512
08:24:00	1min avg:	0.041	12.833	4.512
08:25:00	1min avg:	0.254	12.778	4.509
08:26:00	1min avg:	0.062	12.804	4.510
08:27:00	1min avg:	0.067	12.816	4.511
08:28:00	1min avg:	0.048	12.822	4.509
08:29:00	1min avg:	0.048	12.822	4.510
08:30:00	1min avg:	0.036	12.828	4.509
08:31:00	1min avg:	0.019	12.825	4.511
08:32:00	1min avg:	0.026	12.815	4.516
08:33:00	1min avg:	0.061	12.834	4.509
08:34:00	1min avg:	0.003	12.828	4.508
08:35:00	1min avg:	0.051	12.832	4.512
08:36:00	1min avg:	0.019	12.835	4.511
08:37:00	1min avg:	0.043	12.842	4.504
08:38:00	1min avg:	0.081	12.833	4.507
08:39:00	1min avg:	0.063	12.830	4.511
08:40:00	1min avg:	0.043	12.822	4.509
08:41:00	1min avg:	0.056	12.830	4.509
08:42:00	1min avg:	0.055	12.839	4.509
08:43:00	1min avg:	0.018	12.832	4.507
08:44:00	1min avg:	0.039	12.835	4.508

GP 2022 October 13

Test Run 1

Start: 10/13/2022 8:09:00
End: 10/13/2022 9:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
08:45:00	1min avg:	0.028	12.829	4.512
08:46:00	1min avg:	0.035	12.831	4.512
08:47:00	1min avg:	0.023	12.835	4.508
08:48:00	1min avg:	0.051	12.833	4.510
08:49:00	1min avg:	0.061	12.836	4.510
08:50:00	1min avg:	0.037	12.839	4.510
08:51:00	1min avg:	0.047	12.834	4.512
08:52:00	1min avg:	0.040	12.835	4.513
08:53:00	1min avg:	0.032	12.835	4.514
08:54:00	1min avg:	0.016	12.834	4.513
08:55:00	1min avg:	0.025	12.830	4.512
08:56:00	1min avg:	0.036	12.836	4.513
08:57:00	1min avg:	0.031	12.843	4.512
08:58:00	1min avg:	0.034	12.841	4.510
08:59:00	1min avg:	0.041	12.837	4.512
09:00:00	1min avg:	0.026	12.834	4.511
09:01:00	1min avg:	0.036	12.834	4.512
09:02:00	1min avg:	0.037	12.832	4.516
09:03:00	1min avg:	0.034	12.828	4.515
09:04:00	1min avg:	0.016	12.830	4.514
09:05:00	1min avg:	0.039	12.836	4.513
09:06:00	1min avg:	0.037	12.837	4.516
09:07:00	1min avg:	0.008	12.819	4.513
09:08:00	1min avg:	0.123	12.778	4.512
09:09:00	1min avg:	0.042	12.804	4.511
09:10:00	1min avg:	0.056	12.817	4.511
09:11:00	1min avg:	0.055	12.816	4.514
09:12:00	1min avg:	0.066	12.817	4.513
09:13:00	1min avg:	0.029	12.828	4.516
09:14:00	1min avg:	0.040	12.828	4.516
09:15:00	1min avg:	0.037	12.824	4.517
09:16:00	1min avg:	0.030	12.836	4.514
09:17:00	1min avg:	0.041	12.830	4.519
09:18:00	1min avg:	0.050	12.836	4.514
09:19:00	1min avg:	0.022	12.828	4.516

GP 2022 October 13

Test Run 1

Start: 10/13/2022 8:09:00
End: 10/13/2022 9:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
09:20:00	1min avg:	0.008	12.834	4.515
09:21:00	1min avg:	0.021	12.833	4.517
09:22:00	1min avg:	0.006	12.834	4.517
09:23:00	1min avg:	0.017	12.842	4.512
09:24:00	1min avg:	0.041	12.840	4.512
09:25:00	1min avg:	0.004	12.841	4.516
09:26:00	1min avg:	0.015	12.828	4.518
09:27:00	1min avg:	0.011	12.843	4.512
09:28:00	1min avg:	0.026	12.841	4.513
09:29:00	1min avg:	0.019	12.840	4.517
09:30:00	1min avg:	0.007	12.841	4.513
09:31:00	1min avg:	0.017	12.835	4.519
09:32:00	1min avg:	0.026	12.844	4.513
09:33:00	1min avg:	0.024	12.842	4.515
09:33:00	Test Avgs:	0.043	12.831	4.512

GP 2022 October 13

Test Run 2

Start: 10/13/2022 9:48:00
End: 10/13/2022 10:48:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
09:49:00	1min avg:	0.331	12.822	4.510
09:50:00	1min avg:	0.360	12.826	4.509
09:51:00	1min avg:	0.365	12.814	4.513
09:52:00	1min avg:	0.365	12.824	4.508
09:53:00	1min avg:	0.340	12.834	4.501
09:54:00	1min avg:	0.314	12.829	4.506
09:55:00	1min avg:	0.311	12.838	4.503
09:56:00	1min avg:	0.294	12.833	4.508
09:57:00	1min avg:	0.306	12.836	4.506
09:58:00	1min avg:	0.299	12.829	4.511
09:59:00	1min avg:	0.261	12.832	4.511
10:00:00	1min avg:	0.263	12.839	4.509
10:01:00	1min avg:	0.251	12.836	4.509
10:02:00	1min avg:	0.256	12.833	4.509
10:03:00	1min avg:	0.232	12.832	4.511
10:04:00	1min avg:	0.257	12.832	4.511
10:05:00	1min avg:	0.235	12.841	4.508
10:06:00	1min avg:	0.223	12.841	4.508
10:07:00	1min avg:	0.220	12.842	4.508
10:08:00	1min avg:	0.201	12.838	4.510
10:09:00	1min avg:	0.220	12.838	4.510
10:10:00	1min avg:	0.177	12.837	4.509
10:11:00	1min avg:	0.170	12.840	4.508
10:12:00	1min avg:	0.179	12.836	4.512
10:13:00	1min avg:	0.186	12.845	4.507
10:14:00	1min avg:	0.159	12.841	4.507
10:15:00	1min avg:	0.179	12.838	4.511
10:16:00	1min avg:	0.193	12.835	4.511
10:17:00	1min avg:	0.203	12.837	4.509
10:18:00	1min avg:	0.185	12.840	4.509
10:19:00	1min avg:	0.198	12.839	4.508
10:20:00	1min avg:	0.169	12.839	4.507
10:21:00	1min avg:	0.188	12.839	4.509
10:22:00	1min avg:	0.173	12.839	4.504
10:23:00	1min avg:	0.171	12.839	4.506

GP 2022 October 13

Test Run 2

Start: 10/13/2022 9:48:00
End: 10/13/2022 10:48:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
10:24:00	1min avg:	0.169	12.839	4.508
10:25:00	1min avg:	0.172	12.842	4.507
10:26:00	1min avg:	0.169	12.843	4.507
10:27:00	1min avg:	0.157	12.845	4.506
10:28:00	1min avg:	0.159	12.841	4.508
10:29:00	1min avg:	0.181	12.845	4.507
10:30:00	1min avg:	0.154	12.850	4.506
10:31:00	1min avg:	0.173	12.851	4.503
10:32:00	1min avg:	0.158	12.849	4.508
10:33:00	1min avg:	0.150	12.849	4.508
10:34:00	1min avg:	0.172	12.849	4.505
10:35:00	1min avg:	0.134	12.850	4.507
10:36:00	1min avg:	0.173	12.858	4.501
10:37:00	1min avg:	0.131	12.857	4.504
10:38:00	1min avg:	0.143	12.858	4.505
10:39:00	1min avg:	0.160	12.856	4.504
10:40:00	1min avg:	0.170	12.855	4.502
10:41:00	1min avg:	0.147	12.854	4.503
10:42:00	1min avg:	0.143	12.853	4.506
10:43:00	1min avg:	0.135	12.851	4.505
10:44:00	1min avg:	0.136	12.852	4.506
10:45:00	1min avg:	0.145	12.857	4.505
10:46:00	1min avg:	0.157	12.861	4.500
10:47:00	1min avg:	0.151	12.858	4.502
10:48:00	1min avg:	0.153	12.855	4.505
10:48:00	Test Avgs:	0.205	12.842	4.507

GP 2022 October 13

Test Run 3

Start: 10/13/2022 11:00:00
End: 10/13/2022 12:00:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
11:01:00	1min avg:	0.116	12.841	4.494
11:02:00	1min avg:	0.130	12.847	4.499
11:03:00	1min avg:	0.124	12.848	4.504
11:04:00	1min avg:	0.119	12.845	4.501
11:05:00	1min avg:	0.138	12.847	4.503
11:06:00	1min avg:	0.142	12.848	4.504
11:07:00	1min avg:	0.147	12.848	4.505
11:08:00	1min avg:	0.144	12.845	4.505
11:09:00	1min avg:	0.133	12.851	4.502
11:10:00	1min avg:	0.152	12.846	4.507
11:11:00	1min avg:	0.156	12.845	4.507
11:12:00	1min avg:	0.137	12.849	4.505
11:13:00	1min avg:	0.146	12.853	4.504
11:14:00	1min avg:	0.158	12.855	4.504
11:15:00	1min avg:	0.164	12.859	4.502
11:16:00	1min avg:	0.145	12.855	4.505
11:17:00	1min avg:	0.144	12.846	4.507
11:18:00	1min avg:	0.155	12.846	4.508
11:19:00	1min avg:	0.169	12.848	4.511
11:20:00	1min avg:	0.128	12.846	4.508
11:21:00	1min avg:	0.144	12.852	4.506
11:22:00	1min avg:	0.161	12.853	4.503
11:23:00	1min avg:	0.166	12.852	4.506
11:24:00	1min avg:	0.164	12.849	4.508
11:25:00	1min avg:	0.161	12.849	4.507
11:26:00	1min avg:	0.172	12.850	4.511
11:27:00	1min avg:	0.158	12.852	4.507
11:28:00	1min avg:	0.137	12.847	4.511
11:29:00	1min avg:	0.163	12.852	4.508
11:30:00	1min avg:	0.152	12.846	4.510
11:31:00	1min avg:	0.155	12.851	4.507
11:32:00	1min avg:	0.153	12.852	4.506
11:33:00	1min avg:	0.160	12.852	4.506
11:34:00	1min avg:	0.152	12.850	4.510
11:35:00	1min avg:	0.154	12.842	4.513

GP 2022 October 13

Test Run 3

Start: 10/13/2022 11:00:00
End: 10/13/2022 12:00:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
11:36:00	1min avg:	0.175	12.845	4.511
11:37:00	1min avg:	0.153	12.848	4.509
11:38:00	1min avg:	0.147	12.849	4.514
11:39:00	1min avg:	0.156	12.841	4.512
11:40:00	1min avg:	0.143	12.848	4.512
11:41:00	1min avg:	0.166	12.852	4.510
11:42:00	1min avg:	0.162	12.855	4.508
11:43:00	1min avg:	0.158	12.858	4.505
11:44:00	1min avg:	0.160	12.859	4.506
11:45:00	1min avg:	0.116	12.854	4.507
11:46:00	1min avg:	0.146	12.852	4.505
11:47:00	1min avg:	0.173	12.853	4.505
11:48:00	1min avg:	0.166	12.846	4.511
11:49:00	1min avg:	0.149	12.845	4.509
11:50:00	1min avg:	0.156	12.841	4.511
11:51:00	1min avg:	0.138	12.843	4.512
11:52:00	1min avg:	0.147	12.845	4.511
11:53:00	1min avg:	0.165	12.849	4.509
11:54:00	1min avg:	0.162	12.849	4.506
11:55:00	1min avg:	0.157	12.850	4.508
11:56:00	1min avg:	0.138	12.845	4.505
11:57:00	1min avg:	0.127	12.851	4.506
11:58:00	1min avg:	0.142	12.847	4.505
11:59:00	1min avg:	0.125	12.843	4.507
12:00:00	1min avg:	0.133	12.841	4.508
12:00:00	Test Avgs:	0.149	12.849	4.507

GP 2022 October 13

Test Run 4

Start: 10/13/2022 12:21:00
End: 10/13/2022 13:21:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
12:22:00	1min avg:	0.088	12.858	4.504
12:23:00	1min avg:	0.103	12.855	4.504
12:24:00	1min avg:	0.106	12.871	4.499
12:25:00	1min avg:	0.125	12.875	4.499
12:26:00	1min avg:	0.112	12.873	4.504
12:27:00	1min avg:	0.120	12.882	4.501
12:28:00	1min avg:	0.133	12.878	4.499
12:29:00	1min avg:	0.115	12.869	4.504
12:30:00	1min avg:	0.127	12.866	4.507
12:31:00	1min avg:	0.109	12.878	4.501
12:32:00	1min avg:	0.092	12.877	4.499
12:33:00	1min avg:	0.104	12.877	4.501
12:34:00	1min avg:	0.127	12.874	4.504
12:35:00	1min avg:	0.099	12.880	4.500
12:36:00	1min avg:	0.107	12.888	4.496
12:37:00	1min avg:	0.122	12.880	4.503
12:38:00	1min avg:	0.102	12.882	4.498
12:39:00	1min avg:	0.099	12.891	4.498
12:40:00	1min avg:	0.097	12.887	4.499
12:41:00	1min avg:	0.109	12.878	4.506
12:42:00	1min avg:	0.105	12.874	4.506
12:43:00	1min avg:	0.123	12.883	4.504
12:44:00	1min avg:	0.124	12.888	4.495
12:45:00	1min avg:	0.127	12.882	4.503
12:46:00	1min avg:	0.110	12.881	4.506
12:47:00	1min avg:	0.105	12.889	4.501
12:48:00	1min avg:	0.145	12.893	4.499
12:49:00	1min avg:	0.111	12.885	4.503
12:50:00	1min avg:	0.145	12.882	4.505
12:51:00	1min avg:	0.149	12.881	4.505
12:52:00	1min avg:	0.142	12.886	4.500
12:53:00	1min avg:	0.134	12.885	4.501
12:54:00	1min avg:	0.111	12.884	4.500
12:55:00	1min avg:	0.106	12.883	4.501
12:56:00	1min avg:	0.089	12.877	4.502

GP 2022 October 13

Test Run 4

Start: 10/13/2022 12:21:00
End: 10/13/2022 13:21:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
12:57:00	1min avg:	0.106	12.881	4.501
12:58:00	1min avg:	0.149	12.886	4.498
12:59:00	1min avg:	0.128	12.878	4.501
13:00:00	1min avg:	0.139	12.878	4.503
13:01:00	1min avg:	0.144	12.875	4.504
13:02:00	1min avg:	0.167	12.887	4.498
13:03:00	1min avg:	0.123	12.879	4.500
13:04:00	1min avg:	0.171	12.873	4.503
13:05:00	1min avg:	0.154	12.881	4.499
13:06:00	1min avg:	0.174	12.877	4.499
13:07:00	1min avg:	0.170	12.880	4.502
13:08:00	1min avg:	0.121	12.879	4.497
13:09:00	1min avg:	0.111	12.880	4.499
13:10:00	1min avg:	0.172	12.877	4.499
13:11:00	1min avg:	0.137	12.873	4.500
13:12:00	1min avg:	0.144	12.872	4.502
13:13:00	1min avg:	0.143	12.892	4.494
13:14:00	1min avg:	0.124	12.864	4.506
13:15:00	1min avg:	0.108	12.884	4.496
13:16:00	1min avg:	0.113	12.872	4.506
13:17:00	1min avg:	0.115	12.886	4.496
13:18:00	1min avg:	0.144	12.880	4.499
13:19:00	1min avg:	0.119	12.886	4.496
13:20:00	1min avg:	0.148	12.882	4.497
13:21:00	1min avg:	0.122	12.877	4.503
13:21:00	Test Avgs:	0.124	12.879	4.501

GP 2022 October 13

Test Run 5

Start: 10/13/2022 13:33:00
End: 10/13/2022 14:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
13:33:59	1min avg:	0.131	12.851	4.486
13:34:59	1min avg:	0.110	12.855	4.487
13:35:59	1min avg:	0.134	12.862	4.488
13:36:59	1min avg:	0.101	12.857	4.495
13:37:59	1min avg:	0.128	12.854	4.498
13:38:59	1min avg:	0.115	12.865	4.497
13:39:59	1min avg:	0.116	12.873	4.492
13:40:59	1min avg:	0.137	12.871	4.495
13:41:59	1min avg:	0.079	12.871	4.494
13:42:59	1min avg:	0.122	12.864	4.495
13:43:59	1min avg:	0.118	12.869	4.493
13:44:59	1min avg:	0.120	12.866	4.496
13:45:59	1min avg:	0.132	12.862	4.498
13:46:59	1min avg:	0.131	12.880	4.492
13:47:59	1min avg:	0.088	12.874	4.492
13:48:59	1min avg:	0.145	12.871	4.493
13:49:59	1min avg:	0.136	12.856	4.504
13:50:59	1min avg:	0.120	12.869	4.497
13:51:59	1min avg:	0.121	12.879	4.492
13:52:59	1min avg:	0.131	12.875	4.493
13:53:59	1min avg:	0.131	12.874	4.490
13:54:59	1min avg:	0.143	12.872	4.493
13:55:59	1min avg:	0.121	12.866	4.496
13:56:59	1min avg:	0.133	12.861	4.499
13:57:59	1min avg:	0.134	12.865	4.494
13:58:59	1min avg:	0.160	12.872	4.490
13:59:59	1min avg:	0.165	12.867	4.495
14:00:59	1min avg:	0.134	12.872	4.489
14:01:59	1min avg:	0.164	12.859	4.496
14:02:59	1min avg:	0.149	12.867	4.490
14:03:59	1min avg:	0.149	12.867	4.492
14:04:59	1min avg:	0.151	12.862	4.490
14:05:59	1min avg:	0.131	12.862	4.493
14:06:59	1min avg:	0.144	12.868	4.491
14:07:59	1min avg:	0.154	12.870	4.491

GP 2022 October 13

Test Run 5

Start: 10/13/2022 13:33:00
End: 10/13/2022 14:33:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
14:08:59	1min avg:	0.134	12.866	4.489
14:09:59	1min avg:	0.139	12.861	4.494
14:10:59	1min avg:	0.157	12.858	4.495
14:11:59	1min avg:	0.146	12.865	4.491
14:12:59	1min avg:	0.174	12.865	4.489
14:13:59	1min avg:	0.141	12.869	4.486
14:14:59	1min avg:	0.157	12.863	4.490
14:15:59	1min avg:	0.146	12.849	4.498
14:16:59	1min avg:	0.181	12.875	4.486
14:17:59	1min avg:	0.174	12.859	4.495
14:18:59	1min avg:	0.154	12.876	4.485
14:19:59	1min avg:	0.169	12.858	4.495
14:20:59	1min avg:	0.157	12.860	4.495
14:21:59	1min avg:	0.173	12.864	4.491
14:22:59	1min avg:	0.160	12.862	4.490
14:23:59	1min avg:	0.158	12.862	4.492
14:24:59	1min avg:	0.165	12.860	4.494
14:25:59	1min avg:	0.166	12.869	4.488
14:26:59	1min avg:	0.163	12.867	4.492
14:27:59	1min avg:	0.145	12.859	4.493
14:28:59	1min avg:	0.153	12.861	4.493
14:29:59	1min avg:	0.184	12.875	4.489
14:30:59	1min avg:	0.174	12.860	4.494
14:31:59	1min avg:	0.188	12.863	4.492
14:32:59	1min avg:	0.169	12.871	4.488
14:33:00	Test Avgs:	0.143	12.865	4.492

GP 2022 October 13

Test Run 6

Start: 10/13/2022 14:46:00
End: 10/13/2022 15:46:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
14:46:59	1min avg:	0.142	12.846	4.484
14:47:59	1min avg:	0.138	12.847	4.487
14:48:59	1min avg:	0.159	12.854	4.486
14:49:59	1min avg:	0.146	12.862	4.483
14:50:59	1min avg:	0.153	12.865	4.485
14:51:59	1min avg:	0.142	12.865	4.489
14:52:59	1min avg:	0.155	12.862	4.489
14:53:59	1min avg:	0.139	12.866	4.490
14:54:59	1min avg:	0.130	12.865	4.490
14:55:59	1min avg:	0.163	12.857	4.494
14:56:59	1min avg:	0.138	12.867	4.491
14:57:59	1min avg:	0.128	12.870	4.489
14:58:59	1min avg:	0.145	12.866	4.492
14:59:59	1min avg:	0.147	12.868	4.492
15:00:59	1min avg:	0.160	12.878	4.484
15:01:59	1min avg:	0.159	12.866	4.491
15:02:59	1min avg:	0.152	12.864	4.494
15:03:59	1min avg:	0.171	12.863	4.493
15:04:59	1min avg:	0.165	12.859	4.493
15:05:59	1min avg:	0.147	12.864	4.494
15:06:59	1min avg:	0.154	12.884	4.480
15:07:59	1min avg:	0.164	12.868	4.487
15:08:59	1min avg:	0.166	12.865	4.491
15:09:59	1min avg:	0.156	12.870	4.488
15:10:59	1min avg:	0.134	12.878	4.486
15:11:59	1min avg:	0.162	12.865	4.488
15:12:59	1min avg:	0.157	12.870	4.488
15:13:59	1min avg:	0.192	12.881	4.482
15:14:59	1min avg:	0.151	12.855	4.498
15:15:59	1min avg:	0.158	12.869	4.490
15:16:59	1min avg:	0.145	12.876	4.487
15:17:59	1min avg:	0.165	12.873	4.486
15:18:59	1min avg:	0.154	12.863	4.492
15:19:59	1min avg:	0.170	12.858	4.495
15:20:59	1min avg:	0.173	12.866	4.489

GP 2022 October 13

Test Run 6

Start: 10/13/2022 14:46:00
End: 10/13/2022 15:46:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
15:21:59	1min avg:	0.173	12.873	4.485
15:22:59	1min avg:	0.158	12.856	4.496
15:23:59	1min avg:	0.169	12.861	4.490
15:24:59	1min avg:	0.163	12.856	4.494
15:25:59	1min avg:	0.172	12.854	4.496
15:26:59	1min avg:	0.185	12.880	4.479
15:27:59	1min avg:	0.175	12.878	4.484
15:28:59	1min avg:	0.161	12.870	4.486
15:29:59	1min avg:	0.154	12.862	4.490
15:30:59	1min avg:	0.168	12.862	4.491
15:31:59	1min avg:	0.168	12.874	4.486
15:32:59	1min avg:	0.188	12.866	4.491
15:33:59	1min avg:	0.162	12.865	4.487
15:34:59	1min avg:	0.178	12.868	4.489
15:35:59	1min avg:	0.161	12.872	4.487
15:36:59	1min avg:	0.151	12.864	4.491
15:37:59	1min avg:	0.158	12.860	4.494
15:38:59	1min avg:	0.154	12.870	4.490
15:39:59	1min avg:	0.155	12.883	4.483
15:40:59	1min avg:	0.162	12.873	4.485
15:41:59	1min avg:	0.145	12.871	4.489
15:42:59	1min avg:	0.155	12.865	4.490
15:43:59	1min avg:	0.140	12.876	4.487
15:44:59	1min avg:	0.130	12.866	4.490
15:45:59	1min avg:	0.162	12.875	4.483
15:46:00	Test Avgs:	0.157	12.867	4.489

GP 2022 October 13

Test Run 7

Start: 10/13/2022 15:58:00
End: 10/13/2022 16:58:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
15:58:59	1min avg:	0.146	12.848	4.478
15:59:59	1min avg:	0.132	12.847	4.478
16:00:59	1min avg:	0.146	12.853	4.482
16:01:59	1min avg:	0.146	12.858	4.482
16:02:59	1min avg:	0.129	12.863	4.481
16:03:59	1min avg:	0.155	12.866	4.480
16:04:59	1min avg:	0.147	12.870	4.481
16:05:59	1min avg:	0.140	12.867	4.484
16:06:59	1min avg:	0.131	12.860	4.486
16:07:59	1min avg:	0.128	12.866	4.485
16:08:59	1min avg:	0.139	12.871	4.481
16:09:59	1min avg:	0.139	12.871	4.481
16:10:59	1min avg:	0.144	12.863	4.482
16:11:59	1min avg:	0.138	12.868	4.482
16:12:59	1min avg:	0.153	12.871	4.482
16:13:59	1min avg:	0.117	12.868	4.481
16:14:59	1min avg:	0.144	12.862	4.485
16:15:59	1min avg:	0.155	12.862	4.487
16:16:59	1min avg:	0.149	12.866	4.483
16:17:59	1min avg:	0.137	12.863	4.486
16:18:59	1min avg:	0.138	12.855	4.487
16:19:59	1min avg:	0.164	12.864	4.484
16:20:59	1min avg:	0.160	12.871	4.478
16:21:59	1min avg:	0.142	12.866	4.484
16:22:59	1min avg:	0.144	12.868	4.482
16:23:59	1min avg:	0.127	12.864	4.485
16:24:59	1min avg:	0.130	12.875	4.487
16:25:59	1min avg:	0.130	12.861	4.489
16:26:59	1min avg:	0.165	12.873	4.482
16:27:59	1min avg:	0.137	12.872	4.481
16:28:59	1min avg:	0.142	12.867	4.485
16:29:59	1min avg:	0.152	12.866	4.485
16:30:59	1min avg:	0.164	12.870	4.482
16:31:59	1min avg:	0.151	12.866	4.486
16:32:59	1min avg:	0.150	12.868	4.487

GP 2022 October 13

Test Run 7

Start: 10/13/2022 15:58:00
End: 10/13/2022 16:58:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
16:33:59	1min avg:	0.160	12.865	4.485
16:34:59	1min avg:	0.144	12.865	4.486
16:35:59	1min avg:	0.157	12.854	4.492
16:36:59	1min avg:	0.163	12.865	4.489
16:37:59	1min avg:	0.158	12.869	4.486
16:38:59	1min avg:	0.133	12.860	4.491
16:39:59	1min avg:	0.139	12.869	4.485
16:40:59	1min avg:	0.168	12.867	4.489
16:41:59	1min avg:	0.165	12.867	4.490
16:42:59	1min avg:	0.165	12.869	4.487
16:43:59	1min avg:	0.138	12.868	4.489
16:44:59	1min avg:	0.163	12.866	4.487
16:45:59	1min avg:	0.159	12.870	4.485
16:46:59	1min avg:	0.151	12.870	4.485
16:47:59	1min avg:	0.155	12.866	4.489
16:48:59	1min avg:	0.156	12.864	4.489
16:49:59	1min avg:	0.168	12.863	4.491
16:50:59	1min avg:	0.159	12.866	4.486
16:51:59	1min avg:	0.154	12.870	4.485
16:52:59	1min avg:	0.186	12.869	4.482
16:53:59	1min avg:	0.177	12.862	4.486
16:54:59	1min avg:	0.166	12.860	4.489
16:55:59	1min avg:	0.161	12.858	4.489
16:56:59	1min avg:	0.165	12.871	4.486
16:57:59	1min avg:	0.180	12.872	4.484
16:58:00	Test Avgs:	0.150	12.865	4.485

GP 2022 October 13

Test Run 8

Start: 10/13/2022 17:11:00
End: 10/13/2022 17:32:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
17:11:59	1min avg:	0.169	12.856	4.478
17:12:59	1min avg:	0.169	12.845	4.485
17:13:59	1min avg:	0.165	12.860	4.486
17:14:59	1min avg:	0.152	12.857	4.489
17:15:59	1min avg:	0.168	12.878	4.479
17:16:59	1min avg:	0.136	12.848	4.493
17:17:59	1min avg:	0.154	12.876	4.481
17:18:59	1min avg:	0.167	12.849	4.494
17:19:59	1min avg:	0.156	12.875	4.483
17:20:59	1min avg:	0.138	12.859	4.492
17:21:59	1min avg:	0.153	12.872	4.485
17:22:59	1min avg:	0.167	12.870	4.489
17:23:59	1min avg:	0.138	12.873	4.487
17:24:59	1min avg:	0.122	12.874	4.485
17:25:59	1min avg:	0.124	12.872	4.487
17:26:59	1min avg:	0.154	12.873	4.485
17:27:59	1min avg:	0.163	12.878	4.482
17:28:59	1min avg:	0.152	12.876	4.484
17:29:59	1min avg:	0.154	12.880	4.484
17:30:59	1min avg:	0.150	12.880	4.483
17:31:59	1min avg:	0.147	12.872	4.487
17:32:00	Test Avgs:	0.152	12.868	4.486

GP 2022 October 13

Test Run 9

Start: 10/13/2022 17:47:00
End: 10/13/2022 18:08:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	CO ppm	O2 %	CO2 %
17:47:59	1min avg:	0.157	12.894	4.468
17:48:59	1min avg:	0.123	12.899	4.472
17:49:59	1min avg:	0.140	12.903	4.471
17:50:59	1min avg:	0.148	12.910	4.469
17:51:59	1min avg:	0.127	12.914	4.467
17:52:59	1min avg:	0.105	12.921	4.467
17:53:59	1min avg:	0.131	12.915	4.470
17:54:59	1min avg:	0.138	12.920	4.466
17:55:59	1min avg:	0.130	12.927	4.465
17:56:59	1min avg:	0.151	12.929	4.466
17:57:59	1min avg:	0.121	12.930	4.465
17:58:59	1min avg:	0.116	12.930	4.466
17:59:59	1min avg:	0.128	12.932	4.464
18:00:59	1min avg:	0.132	12.933	4.465
18:01:59	1min avg:	0.137	12.927	4.469
18:02:59	1min avg:	0.123	12.928	4.465
18:03:59	1min avg:	0.152	12.927	4.467
18:04:59	1min avg:	0.119	12.929	4.467
18:05:59	1min avg:	0.142	12.931	4.466
18:06:59	1min avg:	0.136	12.937	4.466
18:07:59	1min avg:	0.139	12.938	4.463
18:08:00	Test Avgs:	0.133	12.923	4.467

GP 2022 October 14

Test Run 1

Start: 10/14/2022 7:18:00
End: 10/14/2022 10:44:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
		%	%
07:19:00	1min avg:	12.898	4.543
07:20:00	1min avg:	12.899	4.541
07:21:00	1min avg:	12.899	4.542
07:22:00	1min avg:	12.910	4.537
07:23:00	1min avg:	12.889	4.546
07:24:00	1min avg:	12.910	4.536
07:25:00	1min avg:	12.883	4.550
07:26:00	1min avg:	12.904	4.541
07:27:00	1min avg:	12.909	4.540
07:28:00	1min avg:	12.896	4.544
07:29:00	1min avg:	12.903	4.543
07:30:00	1min avg:	12.900	4.546
07:31:00	1min avg:	12.904	4.543
07:32:00	1min avg:	12.910	4.543
07:33:00	1min avg:	12.909	4.541
07:34:00	1min avg:	12.901	4.544
07:35:00	1min avg:	12.904	4.543
07:36:00	1min avg:	12.892	4.552
07:37:00	1min avg:	12.917	4.541
07:38:00	1min avg:	12.893	4.546
07:39:00	1min avg:	12.890	4.545
07:40:00	1min avg:	12.894	4.543
07:41:00	1min avg:	12.892	4.543
07:42:00	1min avg:	12.889	4.548
07:43:00	1min avg:	12.886	4.547
07:44:00	1min avg:	12.888	4.548
07:45:00	1min avg:	12.886	4.546
07:46:00	1min avg:	12.885	4.548
07:47:00	1min avg:	12.886	4.547
07:48:00	1min avg:	12.879	4.550
07:49:00	1min avg:	12.888	4.545
07:50:00	1min avg:	12.886	4.543
07:51:00	1min avg:	12.887	4.548
07:52:00	1min avg:	12.885	4.546
07:53:00	1min avg:	12.880	4.547

GP 2022 October 14

Test Run 1

Start: 10/14/2022 7:18:00
End: 10/14/2022 10:44:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
07:54:00	1min avg:	12.878	4.549
07:55:00	1min avg:	12.888	4.545
07:56:00	1min avg:	12.883	4.547
07:57:00	1min avg:	12.880	4.546
07:58:00	1min avg:	12.886	4.546
07:59:00	1min avg:	12.886	4.543
08:00:00	1min avg:	12.881	4.550
08:01:00	1min avg:	12.882	4.547
08:02:00	1min avg:	12.884	4.548
08:03:00	1min avg:	12.884	4.545
08:04:00	1min avg:	12.881	4.548
08:05:00	1min avg:	12.896	4.541
08:06:00	1min avg:	12.874	4.553
08:07:00	1min avg:	12.888	4.549
08:08:00	1min avg:	12.886	4.545
08:09:00	1min avg:	12.883	4.551
08:10:00	1min avg:	12.885	4.550
08:11:00	1min avg:	12.890	4.549
08:12:00	1min avg:	12.893	4.547
08:13:00	1min avg:	12.891	4.548
08:14:00	1min avg:	12.891	4.548
08:15:00	1min avg:	12.891	4.547
08:16:00	1min avg:	12.888	4.551
08:17:00	1min avg:	12.892	4.549
08:18:00	1min avg:	12.892	4.550
08:19:00	1min avg:	12.889	4.549
08:20:00	1min avg:	12.888	4.550
08:21:00	1min avg:	12.893	4.548
08:22:00	1min avg:	12.885	4.548
08:23:00	1min avg:	12.887	4.548
08:24:00	1min avg:	12.884	4.553
08:25:00	1min avg:	12.887	4.550
08:26:00	1min avg:	12.891	4.549
08:27:00	1min avg:	12.888	4.549
08:28:00	1min avg:	12.895	4.547

GP 2022 October 14

Test Run 1

Start: 10/14/2022 7:18:00
End: 10/14/2022 10:44:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
08:29:00	1min avg:	12.901	4.547
08:30:00	1min avg:	12.882	4.553
08:31:00	1min avg:	12.896	4.548
08:32:00	1min avg:	12.889	4.549
08:33:00	1min avg:	12.890	4.554
08:34:00	1min avg:	12.912	4.538
08:35:00	1min avg:	12.875	4.557
08:36:00	1min avg:	12.892	4.551
08:37:00	1min avg:	12.902	4.543
08:38:00	1min avg:	12.898	4.545
08:39:00	1min avg:	12.887	4.550
08:40:00	1min avg:	12.902	4.545
08:41:00	1min avg:	12.891	4.549
08:42:00	1min avg:	12.886	4.553
08:43:00	1min avg:	12.901	4.545
08:44:00	1min avg:	12.901	4.543
08:45:00	1min avg:	12.898	4.548
08:46:00	1min avg:	12.890	4.553
08:47:00	1min avg:	12.901	4.546
08:48:00	1min avg:	12.894	4.548
08:49:00	1min avg:	12.916	4.538
08:50:00	1min avg:	12.881	4.551
08:51:00	1min avg:	12.909	4.541
08:52:00	1min avg:	12.890	4.550
08:53:00	1min avg:	12.907	4.541
08:54:00	1min avg:	12.895	4.550
08:55:00	1min avg:	12.897	4.547
08:56:00	1min avg:	12.909	4.541
08:57:00	1min avg:	12.898	4.547
08:58:00	1min avg:	12.886	4.554
08:59:00	1min avg:	12.916	4.538
09:00:00	1min avg:	12.901	4.545
09:01:00	1min avg:	12.902	4.546
09:02:00	1min avg:	12.910	4.539
09:03:00	1min avg:	12.898	4.545

GP 2022 October 14

Test Run 1

Start: 10/14/2022 7:18:00
End: 10/14/2022 10:44:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
		%	%
09:04:00	1min avg:	12.906	4.538
09:05:00	1min avg:	12.915	4.535
09:06:00	1min avg:	12.896	4.544
09:07:00	1min avg:	12.906	4.541
09:08:00	1min avg:	12.913	4.536
09:09:00	1min avg:	12.890	4.548
09:10:00	1min avg:	12.926	4.529
09:11:00	1min avg:	12.908	4.536
09:12:00	1min avg:	12.891	4.548
09:13:00	1min avg:	12.922	4.532
09:14:00	1min avg:	12.905	4.542
09:15:00	1min avg:	12.905	4.538
09:16:00	1min avg:	12.907	4.541
09:17:00	1min avg:	12.922	4.530
09:18:00	1min avg:	12.889	4.552
09:19:00	1min avg:	12.922	4.534
09:20:00	1min avg:	12.895	4.546
09:21:00	1min avg:	12.906	4.541
09:22:00	1min avg:	12.925	4.530
09:23:00	1min avg:	12.886	4.552
09:24:00	1min avg:	12.916	4.536
09:25:00	1min avg:	12.906	4.541
09:26:00	1min avg:	12.911	4.540
09:27:00	1min avg:	12.903	4.542
09:28:00	1min avg:	12.895	4.545
09:29:00	1min avg:	12.915	4.535
09:30:00	1min avg:	12.910	4.540
09:31:00	1min avg:	12.900	4.546
09:32:00	1min avg:	12.909	4.541
09:33:00	1min avg:	12.916	4.537
09:34:00	1min avg:	12.915	4.537
09:35:00	1min avg:	12.909	4.542
09:36:00	1min avg:	12.904	4.542
09:37:00	1min avg:	12.907	4.544
09:38:00	1min avg:	12.910	4.541

GP 2022 October 14

Test Run 1

Start: 10/14/2022 7:18:00
End: 10/14/2022 10:44:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
09:39:00	1min avg:	12.913	4.539
09:40:00	1min avg:	12.911	4.540
09:41:00	1min avg:	12.911	4.541
09:42:00	1min avg:	12.901	4.548
09:43:00	1min avg:	12.906	4.545
09:44:00	1min avg:	12.920	4.535
09:45:00	1min avg:	12.899	4.545
09:46:00	1min avg:	12.930	4.528
09:47:00	1min avg:	12.890	4.551
09:48:00	1min avg:	12.922	4.532
09:49:00	1min avg:	12.963	4.542
09:50:00	1min avg:	13.289	4.557
09:51:00	1min avg:	13.289	4.562
09:52:00	1min avg:	13.314	4.546
09:53:00	1min avg:	13.274	4.567
09:54:00	1min avg:	13.297	4.552
09:55:00	1min avg:	13.289	4.555
09:56:00	1min avg:	13.293	4.554
09:57:00	1min avg:	13.283	4.557
09:58:00	1min avg:	13.283	4.558
09:59:00	1min avg:	13.310	4.544
10:00:00	1min avg:	13.273	4.564
10:01:00	1min avg:	13.287	4.557
10:02:00	1min avg:	13.304	4.549
10:03:00	1min avg:	13.286	4.556
10:04:00	1min avg:	13.281	4.558
10:05:00	1min avg:	13.281	4.558
10:06:00	1min avg:	13.288	4.554
10:07:00	1min avg:	13.292	4.550
10:08:00	1min avg:	13.296	4.549
10:09:00	1min avg:	13.266	4.562
10:10:00	1min avg:	13.289	4.548
10:11:00	1min avg:	13.280	4.555
10:12:00	1min avg:	13.280	4.556
10:13:00	1min avg:	13.289	4.547

GP 2022 October 14

Test Run 1

Start: 10/14/2022 7:18:00
End: 10/14/2022 10:44:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
10:14:00	1min avg:	13.273	4.557
10:15:00	1min avg:	13.264	4.560
10:16:00	1min avg:	13.306	4.544
10:17:00	1min avg:	13.280	4.556
10:18:00	1min avg:	13.298	4.548
10:19:00	1min avg:	13.283	4.556
10:20:00	1min avg:	13.269	4.563
10:21:00	1min avg:	13.299	4.545
10:22:00	1min avg:	13.273	4.561
10:23:00	1min avg:	13.316	4.539
10:24:00	1min avg:	13.276	4.562
10:25:00	1min avg:	13.303	4.546
10:26:00	1min avg:	13.285	4.553
10:27:00	1min avg:	13.301	4.547
10:28:00	1min avg:	13.290	4.553
10:29:00	1min avg:	13.301	4.547
10:30:00	1min avg:	13.284	4.553
10:31:00	1min avg:	13.290	4.552
10:32:00	1min avg:	13.293	4.546
10:33:00	1min avg:	13.291	4.548
10:34:00	1min avg:	13.286	4.552
10:35:00	1min avg:	13.290	4.548
10:36:00	1min avg:	13.292	4.549
10:37:00	1min avg:	13.305	4.541
10:38:00	1min avg:	13.289	4.547
10:39:00	1min avg:	13.291	4.545
10:40:00	1min avg:	13.285	4.550
10:41:00	1min avg:	13.299	4.544
10:42:00	1min avg:	13.295	4.544
10:43:00	1min avg:	13.287	4.549
10:44:00	1min avg:	13.294	4.546
10:44:00	Test Avgs:	13.002	4.547

GP 2022 October 14

Test Run 2

Start: 10/14/2022 11:05:00
End: 10/14/2022 14:22:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
11:06:00	1min avg:	13.249	4.541
11:07:00	1min avg:	13.164	4.546
11:08:00	1min avg:	13.201	4.539
11:09:00	1min avg:	13.200	4.541
11:10:00	1min avg:	13.200	4.540
11:11:00	1min avg:	13.207	4.538
11:12:00	1min avg:	13.201	4.539
11:13:00	1min avg:	13.210	4.537
11:14:00	1min avg:	13.204	4.538
11:15:00	1min avg:	13.268	4.542
11:16:00	1min avg:	13.146	4.539
11:17:00	1min avg:	13.152	4.536
11:18:00	1min avg:	13.141	4.538
11:19:00	1min avg:	13.074	4.534
11:20:00	1min avg:	13.207	4.526
11:21:00	1min avg:	13.187	4.541
11:22:00	1min avg:	13.190	4.540
11:23:00	1min avg:	13.202	4.534
11:24:00	1min avg:	13.199	4.536
11:25:00	1min avg:	13.208	4.533
11:26:00	1min avg:	13.204	4.533
11:27:00	1min avg:	13.191	4.544
11:28:00	1min avg:	13.202	4.535
11:29:00	1min avg:	13.224	4.525
11:30:00	1min avg:	13.401	4.537
11:31:00	1min avg:	13.250	4.546
11:32:00	1min avg:	13.282	4.528
11:33:00	1min avg:	13.227	4.550
11:34:00	1min avg:	13.265	4.531
11:35:00	1min avg:	13.253	4.535
11:36:00	1min avg:	13.227	4.552
11:37:00	1min avg:	13.268	4.530
11:38:00	1min avg:	13.258	4.534
11:39:00	1min avg:	13.235	4.541
11:40:00	1min avg:	13.238	4.540

GP 2022 October 14

Test Run 2

Start: 10/14/2022 11:05:00
End: 10/14/2022 14:22:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
11:41:00	1min avg:	13.262	4.526
11:42:00	1min avg:	13.218	4.548
11:43:00	1min avg:	13.239	4.537
11:44:00	1min avg:	13.255	4.527
11:45:00	1min avg:	13.237	4.540
11:46:00	1min avg:	13.259	4.527
11:47:00	1min avg:	13.225	4.544
11:48:00	1min avg:	13.254	4.528
11:49:00	1min avg:	13.241	4.536
11:50:00	1min avg:	13.232	4.538
11:51:00	1min avg:	13.247	4.530
11:52:00	1min avg:	13.244	4.533
11:53:00	1min avg:	13.229	4.541
11:54:00	1min avg:	13.240	4.536
11:55:00	1min avg:	13.255	4.528
11:56:00	1min avg:	13.244	4.534
11:57:00	1min avg:	13.248	4.532
11:58:00	1min avg:	13.251	4.529
11:59:00	1min avg:	13.234	4.539
12:00:00	1min avg:	13.240	4.534
12:01:00	1min avg:	13.249	4.529
12:02:00	1min avg:	13.237	4.536
12:03:00	1min avg:	13.249	4.530
12:04:00	1min avg:	13.251	4.529
12:05:00	1min avg:	13.255	4.528
12:06:00	1min avg:	13.234	4.542
12:07:00	1min avg:	13.254	4.533
12:08:00	1min avg:	13.240	4.535
12:09:00	1min avg:	13.239	4.540
12:10:00	1min avg:	13.263	4.525
12:11:00	1min avg:	13.231	4.540
12:12:00	1min avg:	13.260	4.525
12:13:00	1min avg:	13.236	4.539
12:14:00	1min avg:	13.265	4.521
12:15:00	1min avg:	13.228	4.540

GP 2022 October 14

Test Run 2

Start: 10/14/2022 11:05:00
End: 10/14/2022 14:22:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
12:16:00	1min avg:	13.230	4.538
12:17:00	1min avg:	13.262	4.520
12:18:00	1min avg:	13.231	4.535
12:19:00	1min avg:	13.222	4.544
12:20:00	1min avg:	13.258	4.524
12:21:00	1min avg:	13.236	4.532
12:22:00	1min avg:	13.233	4.538
12:23:00	1min avg:	13.247	4.530
12:24:00	1min avg:	13.227	4.537
12:25:00	1min avg:	13.254	4.523
12:26:00	1min avg:	13.223	4.541
12:27:00	1min avg:	13.230	4.536
12:28:00	1min avg:	13.248	4.528
12:29:00	1min avg:	13.242	4.529
12:30:00	1min avg:	13.245	4.529
12:31:00	1min avg:	13.219	4.530
12:32:00	1min avg:	13.160	4.533
12:33:00	1min avg:	13.167	4.529
12:34:00	1min avg:	13.176	4.526
12:35:00	1min avg:	13.173	4.530
12:36:00	1min avg:	13.173	4.527
12:37:00	1min avg:	13.171	4.529
12:38:00	1min avg:	13.171	4.529
12:39:00	1min avg:	13.174	4.530
12:40:00	1min avg:	13.173	4.529
12:41:00	1min avg:	13.172	4.529
12:42:00	1min avg:	13.061	4.519
12:43:00	1min avg:	12.908	4.514
12:44:00	1min avg:	12.892	4.520
12:45:00	1min avg:	12.882	4.526
12:46:00	1min avg:	12.887	4.521
12:47:00	1min avg:	12.901	4.513
12:48:00	1min avg:	12.890	4.518
12:49:00	1min avg:	12.884	4.521
12:50:00	1min avg:	12.895	4.515

GP 2022 October 14

Test Run 2

Start: 10/14/2022 11:05:00
End: 10/14/2022 14:22:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
12:51:00	1min avg:	12.892	4.514
12:52:00	1min avg:	12.897	4.513
12:53:00	1min avg:	12.889	4.516
12:54:00	1min avg:	12.889	4.516
12:55:00	1min avg:	12.894	4.516
12:56:00	1min avg:	12.893	4.515
12:57:00	1min avg:	12.891	4.516
12:58:00	1min avg:	12.881	4.519
12:59:00	1min avg:	12.887	4.516
13:00:00	1min avg:	12.904	4.502
13:01:00	1min avg:	12.870	4.521
13:02:00	1min avg:	12.903	4.505
13:03:00	1min avg:	12.881	4.518
13:04:00	1min avg:	12.907	4.503
13:05:00	1min avg:	12.872	4.521
13:06:00	1min avg:	12.894	4.512
13:07:00	1min avg:	12.878	4.516
13:08:00	1min avg:	12.884	4.514
13:09:00	1min avg:	12.894	4.508
13:10:00	1min avg:	12.867	4.523
13:11:00	1min avg:	12.889	4.511
13:12:00	1min avg:	12.862	4.528
13:13:00	1min avg:	12.899	4.507
13:14:00	1min avg:	12.879	4.517
13:15:00	1min avg:	12.878	4.516
13:16:00	1min avg:	12.882	4.516
13:17:00	1min avg:	12.893	4.511
13:18:00	1min avg:	12.877	4.516
13:19:00	1min avg:	12.897	4.507
13:20:00	1min avg:	12.868	4.518
13:21:00	1min avg:	12.899	4.503
13:22:00	1min avg:	12.869	4.519
13:23:00	1min avg:	12.885	4.512
13:24:00	1min avg:	12.892	4.505
13:25:00	1min avg:	12.869	4.518

GP 2022 October 14

Test Run 2

Start: 10/14/2022 11:05:00
End: 10/14/2022 14:22:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
13:26:00	1min avg:	12.895	4.505
13:27:00	1min avg:	12.870	4.516
13:28:00	1min avg:	12.884	4.510
13:29:00	1min avg:	12.874	4.517
13:30:00	1min avg:	12.885	4.510
13:31:00	1min avg:	12.964	4.524
13:32:00	1min avg:	13.162	4.508
13:33:00	1min avg:	13.138	4.525
13:34:00	1min avg:	13.158	4.515
13:35:00	1min avg:	13.138	4.528
13:36:00	1min avg:	13.170	4.511
13:37:00	1min avg:	13.148	4.521
13:38:00	1min avg:	13.151	4.525
13:39:00	1min avg:	13.172	4.515
13:40:00	1min avg:	13.156	4.522
13:41:00	1min avg:	13.151	4.525
13:42:00	1min avg:	13.156	4.521
13:43:00	1min avg:	13.094	4.514
13:44:00	1min avg:	13.144	4.512
13:45:00	1min avg:	13.161	4.514
13:46:00	1min avg:	13.156	4.519
13:47:00	1min avg:	13.386	4.519
13:48:00	1min avg:	13.173	4.521
13:49:00	1min avg:	13.173	4.519
13:50:00	1min avg:	13.164	4.522
13:51:00	1min avg:	13.169	4.520
13:52:00	1min avg:	13.174	4.518
13:53:00	1min avg:	13.174	4.517
13:54:00	1min avg:	13.177	4.517
13:55:00	1min avg:	13.171	4.520
13:56:00	1min avg:	13.110	4.518
13:57:00	1min avg:	13.139	4.513
13:58:00	1min avg:	13.149	4.515
13:59:00	1min avg:	13.150	4.517
14:00:00	1min avg:	13.154	4.517

GP 2022 October 14

Test Run 2

Start: 10/14/2022 11:05:00
End: 10/14/2022 14:22:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4A

Time	Entry	O2	CO2
14:01:00	1min avg:	13.150	4.518
14:02:00	1min avg:	13.151	4.517
14:03:00	1min avg:	13.313	4.515
14:04:00	1min avg:	13.197	4.518
14:05:00	1min avg:	13.188	4.523
14:06:00	1min avg:	13.185	4.521
14:07:00	1min avg:	13.179	4.525
14:08:00	1min avg:	13.140	4.512
14:09:00	1min avg:	13.139	4.515
14:10:00	1min avg:	13.152	4.511
14:11:00	1min avg:	13.149	4.515
14:12:00	1min avg:	13.305	4.518
14:13:00	1min avg:	13.165	4.516
14:14:00	1min avg:	13.161	4.515
14:15:00	1min avg:	13.165	4.514
14:16:00	1min avg:	13.154	4.519
14:17:00	1min avg:	13.148	4.520
14:18:00	1min avg:	13.119	4.515
14:19:00	1min avg:	13.136	4.510
14:20:00	1min avg:	13.139	4.515
14:21:00	1min avg:	13.128	4.521
14:22:00	1min avg:	13.156	4.511
14:22:00	Test Avgs:	13.125	4.525

GP 2022 October 17

Test Run 1

Start: 10/17/2022 8:17:00
End: 10/17/2022 9:20:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
08:17:59	1min avg:	-0.105	12.891	4.535
08:18:59	1min avg:	-0.123	12.882	4.542
08:19:59	1min avg:	-0.116	12.886	4.540
08:20:59	1min avg:	-0.140	12.876	4.544
08:21:59	1min avg:	-0.132	12.887	4.537
08:22:59	1min avg:	-0.151	12.892	4.536
08:23:59	1min avg:	-0.133	12.874	4.545
08:24:59	1min avg:	-0.153	12.893	4.536
08:25:59	1min avg:	-0.140	12.890	4.537
08:26:59	1min avg:	-0.148	12.881	4.543
08:27:59	1min avg:	-0.150	12.889	4.538
08:28:59	1min avg:	-0.129	12.892	4.535
08:29:59	1min avg:	-0.144	12.874	4.542
08:30:59	1min avg:	-0.107	12.885	4.539
08:31:59	1min avg:	-0.123	12.899	4.530
08:32:59	1min avg:	-0.147	12.874	4.544
08:33:59	1min avg:	-0.132	12.883	4.539
08:34:59	1min avg:	-0.135	12.897	4.532
08:35:59	1min avg:	-0.143	12.873	4.547
08:36:59	1min avg:	-0.136	12.908	4.531
08:37:59	1min avg:	-0.149	12.886	4.539
08:38:59	1min avg:	-0.140	12.881	4.544
08:39:59	1min avg:	-0.154	12.907	4.534
08:40:59	1min avg:	-0.147	12.887	4.541
08:41:59	1min avg:	-0.178	12.893	4.539
08:42:59	1min avg:	-0.159	12.901	4.531
08:43:59	1min avg:	-0.146	12.880	4.543
08:44:59	1min avg:	-0.146	12.902	4.530
08:45:59	1min avg:	-0.135	12.894	4.535
08:46:59	1min avg:	-0.152	12.876	4.546
08:47:59	1min avg:	-0.132	12.905	4.529
08:48:59	1min avg:	-0.128	12.888	4.539
08:49:59	1min avg:	-0.115	12.878	4.543
08:50:59	1min avg:	-0.129	12.895	4.535
08:51:59	1min avg:	-0.135	12.886	4.539

GP 2022 October 17

Test Run 1

Start: 10/17/2022 8:17:00
End: 10/17/2022 9:20:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
08:52:59	1min avg:	-0.135	12.880	4.541
08:53:59	1min avg:	-0.120	12.907	4.525 Strat Pt 10
08:54:59	1min avg:	-0.136	12.881	4.541
08:55:59	1min avg:	-0.112	12.897	4.535
08:56:59	1min avg:	-0.103	12.891	4.532 Strat Pt 11
08:57:59	1min avg:	-0.144	12.880	4.542
08:58:59	1min avg:	-0.112	12.904	4.529
08:59:59	1min avg:	-0.142	12.881	4.540 Strat Pt 12
09:00:59	1min avg:	-0.142	12.892	4.535
09:01:59	1min avg:	-0.127	12.900	4.532
09:02:59	1min avg:	-0.145	12.887	4.536
09:03:59	1min avg:	-0.133	12.888	4.535
09:04:59	1min avg:	-0.137	12.894	4.533
09:05:59	1min avg:	-0.131	12.883	4.538
09:06:59	1min avg:	-0.148	12.887	4.538
09:07:59	1min avg:	-0.121	12.895	4.532
09:08:59	1min avg:	-0.114	12.870	4.547
09:09:59	1min avg:	-0.124	12.897	4.534
09:10:59	1min avg:	-0.114	12.894	4.535
09:11:59	1min avg:	-0.125	12.885	4.541
09:12:59	1min avg:	-0.122	12.891	4.536
09:13:59	1min avg:	-0.122	12.899	4.532
09:14:59	1min avg:	-0.134	12.878	4.540
09:15:59	1min avg:	-0.114	12.885	4.542
09:16:59	1min avg:	-0.111	12.902	4.530
09:17:59	1min avg:	-0.157	12.873	4.543
09:18:59	1min avg:	-0.108	12.902	4.529
09:19:59	1min avg:	-0.138	12.890	4.538
09:20:00	Test Avgs:	-0.133	12.889	4.537

GP 2022 October 17

Test Run 2

Start: 10/17/2022 9:35:13
End: 10/17/2022 10:35:13

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
09:36:12	1min avg:	-0.157	12.874	4.521
09:37:12	1min avg:	-0.163	12.862	4.531
09:38:12	1min avg:	-0.155	12.874	4.529
09:39:12	1min avg:	-0.140	12.874	4.530
09:40:12	1min avg:	-0.133	12.883	4.528
09:41:12	1min avg:	-0.146	12.872	4.531
09:42:12	1min avg:	-0.147	12.867	4.537
09:43:12	1min avg:	-0.122	12.895	4.524
09:44:12	1min avg:	-0.133	12.868	4.535
09:45:12	1min avg:	-0.140	12.880	4.532
09:46:12	1min avg:	-0.135	12.893	4.526
09:47:12	1min avg:	-0.147	12.872	4.539
09:48:12	1min avg:	-0.136	12.896	4.527
09:49:12	1min avg:	-0.148	12.880	4.534
09:50:12	1min avg:	-0.145	12.879	4.536
09:51:12	1min avg:	-0.153	12.900	4.523
09:52:12	1min avg:	-0.153	12.882	4.535
09:53:12	1min avg:	-0.144	12.883	4.533
09:54:12	1min avg:	-0.135	12.891	4.529
09:55:12	1min avg:	-0.148	12.872	4.538
09:56:12	1min avg:	-0.160	12.894	4.527
09:57:12	1min avg:	-0.156	12.880	4.533
09:58:12	1min avg:	-0.139	12.881	4.534
09:59:12	1min avg:	-0.148	12.891	4.529
10:00:12	1min avg:	-0.139	12.871	4.539
10:01:12	1min avg:	-0.133	12.882	4.536
10:02:12	1min avg:	-0.135	12.896	4.523
10:03:12	1min avg:	-0.151	12.882	4.533
10:04:12	1min avg:	-0.152	12.889	4.530
10:05:12	1min avg:	-0.144	12.891	4.527
10:06:12	1min avg:	-0.144	12.865	4.541
10:07:12	1min avg:	-0.139	12.897	4.522
10:08:12	1min avg:	-0.141	12.871	4.539
10:09:12	1min avg:	-0.142	12.895	4.527
10:10:12	1min avg:	-0.134	12.872	4.533

GP 2022 October 17

Test Run 2

Start: 10/17/2022 9:35:13
End: 10/17/2022 10:35:13

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
10:11:12	1min avg:	-0.159	12.874	4.534
10:12:12	1min avg:	-0.120	12.886	4.525
10:13:12	1min avg:	-0.124	12.880	4.531
10:14:12	1min avg:	-0.155	12.874	4.535
10:15:12	1min avg:	-0.125	12.897	4.523
10:16:12	1min avg:	-0.136	12.880	4.533
10:17:12	1min avg:	-0.162	12.876	4.535
10:18:12	1min avg:	-0.124	12.898	4.523
10:19:12	1min avg:	-0.154	12.880	4.532
10:20:12	1min avg:	-0.174	12.887	4.530
10:21:12	1min avg:	-0.144	12.896	4.525
10:22:12	1min avg:	-0.152	12.887	4.529
10:23:12	1min avg:	-0.147	12.885	4.533
10:24:12	1min avg:	-0.135	12.894	4.525
10:25:12	1min avg:	-0.160	12.886	4.529
10:26:12	1min avg:	-0.156	12.887	4.528
10:27:12	1min avg:	-0.152	12.897	4.524
10:28:12	1min avg:	-0.175	12.883	4.531
10:29:12	1min avg:	-0.165	12.882	4.532
10:30:12	1min avg:	-0.156	12.902	4.521
10:31:12	1min avg:	-0.169	12.875	4.539
10:32:12	1min avg:	-0.157	12.907	4.520
10:33:12	1min avg:	-0.155	12.886	4.531
10:34:12	1min avg:	-0.136	12.900	4.523
10:35:12	1min avg:	-0.176	12.903	4.522
10:35:13	Test Avgs:	-0.147	12.884	4.530

GP 2022 October 17

Test Run 3

Start: 10/17/2022 10:45:00
End: 10/17/2022 11:45:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
10:45:59	1min avg:	-0.159	12.859	4.519
10:46:59	1min avg:	-0.145	12.867	4.525
10:47:59	1min avg:	-0.183	12.874	4.525
10:48:59	1min avg:	-0.169	12.883	4.522
10:49:59	1min avg:	-0.189	12.875	4.526
10:50:59	1min avg:	-0.180	12.870	4.533
10:51:59	1min avg:	-0.183	12.886	4.525
10:52:59	1min avg:	-0.177	12.885	4.526
10:53:59	1min avg:	-0.182	12.873	4.535
10:54:59	1min avg:	-0.152	12.901	4.518
10:55:59	1min avg:	-0.175	12.889	4.526
10:56:59	1min avg:	-0.169	12.877	4.533
10:57:59	1min avg:	-0.152	12.904	4.519
10:58:59	1min avg:	-0.176	12.878	4.531
10:59:59	1min avg:	-0.186	12.885	4.529
11:00:59	1min avg:	-0.151	12.898	4.521
11:01:59	1min avg:	-0.181	12.874	4.532
11:02:59	1min avg:	-0.154	12.895	4.522
11:03:59	1min avg:	-0.178	12.881	4.531
11:04:59	1min avg:	-0.221	12.880	4.529
11:05:59	1min avg:	-0.185	12.900	4.520
11:06:59	1min avg:	-0.181	12.883	4.529
11:07:59	1min avg:	-0.166	12.879	4.531
11:08:59	1min avg:	-0.169	12.885	4.527
11:09:59	1min avg:	-0.173	12.885	4.528
11:10:59	1min avg:	-0.181	12.902	4.520
11:11:59	1min avg:	-0.210	12.882	4.532
11:12:59	1min avg:	-0.186	12.885	4.530
11:13:59	1min avg:	-0.163	12.896	4.523
11:14:59	1min avg:	-0.187	12.891	4.524
11:15:59	1min avg:	-0.199	12.867	4.537
11:16:59	1min avg:	-0.190	12.895	4.525
11:17:59	1min avg:	-0.187	12.901	4.524
11:18:59	1min avg:	-0.178	12.889	4.528
11:19:59	1min avg:	-0.202	12.880	4.534

GP 2022 October 17

Test Run 3

Start: 10/17/2022 10:45:00
End: 10/17/2022 11:45:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
11:20:59	1min avg:	-0.187	12.898	4.522
11:21:59	1min avg:	-0.203	12.888	4.528
11:22:59	1min avg:	-0.168	12.874	4.533
11:23:59	1min avg:	-0.174	12.886	4.526
11:24:59	1min avg:	-0.173	12.889	4.524
11:25:59	1min avg:	-0.205	12.876	4.530
11:26:59	1min avg:	-0.196	12.885	4.527
11:27:59	1min avg:	-0.179	12.889	4.525
11:28:59	1min avg:	-0.180	12.891	4.526
11:29:59	1min avg:	-0.190	12.885	4.530
11:30:59	1min avg:	-0.210	12.888	4.526
11:31:59	1min avg:	-0.186	12.895	4.521
11:32:59	1min avg:	-0.194	12.878	4.532
11:33:59	1min avg:	-0.183	12.891	4.529
11:34:59	1min avg:	-0.195	12.885	4.525
11:35:59	1min avg:	-0.178	12.881	4.527
11:36:59	1min avg:	-0.203	12.893	4.522
11:37:59	1min avg:	-0.157	12.885	4.525
11:38:59	1min avg:	-0.166	12.879	4.528
11:39:59	1min avg:	-0.196	12.887	4.527
11:40:59	1min avg:	-0.205	12.876	4.530
11:41:59	1min avg:	-0.185	12.881	4.527
11:42:59	1min avg:	-0.199	12.890	4.520
11:43:59	1min avg:	-0.157	12.878	4.527
11:44:59	1min avg:	-0.178	12.874	4.528
11:45:00	Test Avgs:	-0.181	12.885	4.527

GP 2022 October 17

Test Run 4

Start: 10/17/2022 11:55:00
End: 10/17/2022 12:55:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
11:55:59	1min avg:	-0.189	12.876	4.515
11:56:59	1min avg:	-0.160	12.865	4.524
11:57:59	1min avg:	-0.190	12.864	4.527
11:58:59	1min avg:	-0.188	12.885	4.520
11:59:59	1min avg:	-0.188	12.866	4.527
12:00:59	1min avg:	-0.172	12.887	4.520
12:01:59	1min avg:	-0.171	12.888	4.519
12:02:59	1min avg:	-0.189	12.885	4.525
12:03:59	1min avg:	-0.162	12.884	4.525
12:04:59	1min avg:	-0.200	12.903	4.515
12:05:59	1min avg:	-0.194	12.881	4.526
12:06:59	1min avg:	-0.199	12.875	4.528
12:07:59	1min avg:	-0.168	12.912	4.511
12:08:59	1min avg:	-0.159	12.880	4.527
12:09:59	1min avg:	-0.189	12.882	4.529
12:10:59	1min avg:	-0.189	12.887	4.524
12:11:59	1min avg:	-0.192	12.878	4.528
12:12:59	1min avg:	-0.186	12.897	4.518
12:13:59	1min avg:	-0.195	12.889	4.522
12:14:59	1min avg:	-0.196	12.891	4.523
12:15:59	1min avg:	-0.187	12.886	4.524
12:16:59	1min avg:	-0.198	12.879	4.529
12:17:59	1min avg:	-0.193	12.907	4.514
12:18:59	1min avg:	-0.198	12.884	4.525
12:19:59	1min avg:	-0.194	12.883	4.527
12:20:59	1min avg:	-0.199	12.891	4.519
12:21:59	1min avg:	-0.195	12.893	4.518
12:22:59	1min avg:	-0.223	12.881	4.523
12:23:59	1min avg:	-0.205	12.883	4.520
12:24:59	1min avg:	-0.163	12.893	4.517
12:25:59	1min avg:	-0.179	12.874	4.527
12:26:59	1min avg:	-0.190	12.876	4.524
12:27:59	1min avg:	-0.193	12.896	4.513
12:28:59	1min avg:	-0.188	12.878	4.524
12:29:59	1min avg:	-0.189	12.872	4.524

GP 2022 October 17

Test Run 4

Start: 10/17/2022 11:55:00
End: 10/17/2022 12:55:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
12:30:59	1min avg:	-0.193	12.888	4.516
12:31:59	1min avg:	-0.187	12.869	4.526
12:32:59	1min avg:	-0.196	12.879	4.522
12:33:59	1min avg:	-0.205	12.885	4.519
12:34:59	1min avg:	-0.172	12.881	4.519
12:35:59	1min avg:	-0.210	12.882	4.520
12:36:59	1min avg:	-0.193	12.874	4.522
12:37:59	1min avg:	-0.209	12.873	4.523
12:38:59	1min avg:	-0.189	12.886	4.515
12:39:59	1min avg:	-0.182	12.870	4.526
12:40:59	1min avg:	-0.211	12.861	4.529
12:41:59	1min avg:	-0.210	12.888	4.518
12:42:59	1min avg:	-0.163	12.875	4.521
12:43:59	1min avg:	-0.201	12.872	4.525
12:44:59	1min avg:	-0.176	12.887	4.515
12:45:59	1min avg:	-0.188	12.879	4.520
12:46:59	1min avg:	-0.196	12.876	4.520
12:47:59	1min avg:	-0.194	12.886	4.513
12:48:59	1min avg:	-0.178	12.868	4.523
12:49:59	1min avg:	-0.171	12.868	4.523
12:50:59	1min avg:	-0.173	12.875	4.519
12:51:59	1min avg:	-0.162	12.875	4.519
12:52:59	1min avg:	-0.179	12.886	4.514
12:53:59	1min avg:	-0.179	12.880	4.515
12:54:59	1min avg:	-0.205	12.862	4.525
12:55:00	Test Avgs:	-0.188	12.881	4.522

GP 2022 October 17

Test Run 5

Start: 10/17/2022 13:05:00
End: 10/17/2022 14:05:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
13:05:59	1min avg:	-0.203	12.858	4.516
13:06:59	1min avg:	-0.193	12.855	4.516
13:07:59	1min avg:	-0.201	12.880	4.508
13:08:59	1min avg:	-0.201	12.874	4.508
13:09:59	1min avg:	-0.215	12.852	4.523
13:10:59	1min avg:	-0.219	12.883	4.511
13:11:59	1min avg:	-0.180	12.892	4.508
13:12:59	1min avg:	-0.203	12.867	4.518
13:13:59	1min avg:	-0.213	12.853	4.521
13:14:59	1min avg:	-0.184	12.885	4.507
13:15:59	1min avg:	-0.193	12.858	4.519
13:16:59	1min avg:	-0.210	12.869	4.516
13:17:59	1min avg:	-0.197	12.879	4.510
13:18:59	1min avg:	-0.179	12.861	4.519
13:19:59	1min avg:	-0.204	12.876	4.511
13:20:59	1min avg:	-0.191	12.881	4.507
13:21:59	1min avg:	-0.189	12.854	4.520
13:22:59	1min avg:	-0.213	12.880	4.510
13:23:59	1min avg:	-0.225	12.878	4.512
13:24:59	1min avg:	-0.201	12.860	4.520
13:25:59	1min avg:	-0.171	12.878	4.510
13:26:59	1min avg:	-0.188	12.881	4.508
13:27:59	1min avg:	-0.202	12.858	4.520
13:28:59	1min avg:	-0.168	12.875	4.511
13:29:59	1min avg:	-0.185	12.868	4.516
13:30:59	1min avg:	-0.187	12.862	4.519
13:31:59	1min avg:	-0.176	12.871	4.512
13:32:59	1min avg:	-0.190	12.863	4.515
13:33:59	1min avg:	-0.194	12.866	4.513
13:34:59	1min avg:	-0.196	12.860	4.515
13:35:59	1min avg:	-0.174	12.884	4.505
13:36:59	1min avg:	-0.165	12.864	4.514
13:37:59	1min avg:	-0.192	12.858	4.520
13:38:59	1min avg:	-0.179	12.884	4.507
13:39:59	1min avg:	-0.174	12.864	4.514

GP 2022 October 17

Test Run 5

Start: 10/17/2022 13:05:00
End: 10/17/2022 14:05:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
13:40:59	1min avg:	-0.206	12.860	4.516
13:41:59	1min avg:	-0.192	12.872	4.513
13:42:59	1min avg:	-0.177	12.872	4.513
13:43:59	1min avg:	-0.188	12.856	4.520
13:44:59	1min avg:	-0.193	12.874	4.509
13:45:59	1min avg:	-0.194	12.865	4.514
13:46:59	1min avg:	-0.178	12.869	4.511
13:47:59	1min avg:	-0.203	12.862	4.512
13:48:59	1min avg:	-0.182	12.866	4.511
13:49:59	1min avg:	-0.205	12.863	4.512
13:50:59	1min avg:	-0.176	12.858	4.514
13:51:59	1min avg:	-0.187	12.868	4.509
13:52:59	1min avg:	-0.177	12.870	4.508
13:53:59	1min avg:	-0.201	12.868	4.510
13:54:59	1min avg:	-0.201	12.865	4.511
13:55:59	1min avg:	-0.175	12.864	4.511
13:56:59	1min avg:	-0.190	12.866	4.509
13:57:59	1min avg:	-0.186	12.864	4.511
13:58:59	1min avg:	-0.182	12.864	4.511
13:59:59	1min avg:	-0.194	12.871	4.505
14:00:59	1min avg:	-0.184	12.864	4.512
14:01:59	1min avg:	-0.186	12.860	4.513
14:02:59	1min avg:	-0.197	12.867	4.507
14:03:59	1min avg:	-0.195	12.872	4.505
14:04:59	1min avg:	-0.197	12.862	4.513
14:05:00	Test Avgs:	-0.192	12.868	4.513

GP 2022 October 17

Test Run 6

Start: 10/17/2022 14:20:00
End: 10/17/2022 15:20:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
14:20:59	1min avg:	-0.177	12.857	4.497
14:21:59	1min avg:	-0.192	12.842	4.508
14:22:59	1min avg:	-0.214	12.863	4.503
14:23:59	1min avg:	-0.171	12.863	4.503
14:24:59	1min avg:	-0.182	12.868	4.503
14:25:59	1min avg:	-0.199	12.853	4.512
14:26:59	1min avg:	-0.178	12.869	4.503
14:27:59	1min avg:	-0.208	12.863	4.505
14:28:59	1min avg:	-0.205	12.873	4.501
14:29:59	1min avg:	-0.214	12.858	4.507
14:30:59	1min avg:	-0.193	12.851	4.511
14:31:59	1min avg:	-0.212	12.868	4.502
14:32:59	1min avg:	-0.207	12.864	4.504
14:33:59	1min avg:	-0.185	12.853	4.510
14:34:59	1min avg:	-0.207	12.856	4.507
14:35:59	1min avg:	-0.217	12.854	4.509
14:36:59	1min avg:	-0.203	12.857	4.508
14:37:59	1min avg:	-0.200	12.858	4.507
14:38:59	1min avg:	-0.176	12.855	4.510
14:39:59	1min avg:	-0.179	12.860	4.507
14:40:59	1min avg:	-0.180	12.869	4.504
14:41:59	1min avg:	-0.209	12.867	4.503
14:42:59	1min avg:	-0.198	12.871	4.498
14:43:59	1min avg:	-0.190	12.870	4.502
14:44:59	1min avg:	-0.195	12.862	4.506
14:45:59	1min avg:	-0.205	12.859	4.509
14:46:59	1min avg:	-0.206	12.871	4.501
14:47:59	1min avg:	-0.192	12.856	4.510
14:48:59	1min avg:	-0.183	12.867	4.504
14:49:59	1min avg:	-0.185	12.863	4.504
14:50:59	1min avg:	-0.189	12.862	4.504
14:51:59	1min avg:	-0.207	12.864	4.504
14:52:59	1min avg:	-0.204	12.872	4.500
14:53:59	1min avg:	-0.202	12.862	4.503
14:54:59	1min avg:	-0.195	12.863	4.506

GP 2022 October 17

Test Run 6

Start: 10/17/2022 14:20:00
End: 10/17/2022 15:20:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
14:55:59	1min avg:	-0.205	12.866	4.502
14:56:59	1min avg:	-0.193	12.873	4.497
14:57:59	1min avg:	-0.205	12.855	4.505
14:58:59	1min avg:	-0.194	12.856	4.504
14:59:59	1min avg:	-0.191	12.878	4.490
15:00:59	1min avg:	-0.179	12.859	4.501
15:01:59	1min avg:	-0.197	12.851	4.507
15:02:59	1min avg:	-0.207	12.872	4.496
15:03:59	1min avg:	-0.208	12.849	4.508
15:04:59	1min avg:	-0.196	12.857	4.503
15:05:59	1min avg:	-0.195	12.858	4.503
15:06:59	1min avg:	-0.185	12.855	4.505
15:07:59	1min avg:	-0.205	12.864	4.500
15:08:59	1min avg:	-0.184	12.858	4.505
15:09:59	1min avg:	-0.212	12.855	4.506
15:10:59	1min avg:	-0.193	12.868	4.499
15:11:59	1min avg:	-0.172	12.857	4.504
15:12:59	1min avg:	-0.198	12.862	4.499
15:13:59	1min avg:	-0.197	12.862	4.502
15:14:59	1min avg:	-0.214	12.856	4.505
15:15:59	1min avg:	-0.192	12.875	4.493
15:16:59	1min avg:	-0.202	12.858	4.504
15:17:59	1min avg:	-0.198	12.858	4.505
15:18:59	1min avg:	-0.202	12.865	4.503
15:19:59	1min avg:	-0.184	12.860	4.504
15:20:00	Test Avgs:	-0.196	12.862	4.504

GP 2022 October 17

Test Run 7

Start: 10/17/2022 15:35:00
End: 10/17/2022 16:35:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
15:35:59	1min avg:	-0.226	12.865	4.494
15:36:59	1min avg:	-0.208	12.855	4.499
15:37:59	1min avg:	-0.211	12.846	4.507
15:38:59	1min avg:	-0.214	12.863	4.498
15:39:59	1min avg:	-0.196	12.863	4.499
15:40:59	1min avg:	-0.219	12.844	4.511
15:41:59	1min avg:	-0.192	12.874	4.495
15:42:59	1min avg:	-0.193	12.858	4.504
15:43:59	1min avg:	-0.221	12.859	4.502
15:44:59	1min avg:	-0.184	12.868	4.499
15:45:59	1min avg:	-0.187	12.852	4.507
15:46:59	1min avg:	-0.200	12.857	4.504
15:47:59	1min avg:	-0.194	12.868	4.500
15:48:59	1min avg:	-0.196	12.861	4.503
15:49:59	1min avg:	-0.173	12.856	4.506
15:50:59	1min avg:	-0.190	12.858	4.505
15:51:59	1min avg:	-0.180	12.869	4.497
15:52:59	1min avg:	-0.177	12.865	4.501
15:53:59	1min avg:	-0.190	12.851	4.509
15:54:59	1min avg:	-0.212	12.867	4.500
15:55:59	1min avg:	-0.213	12.862	4.501
15:56:59	1min avg:	-0.180	12.857	4.505
15:57:59	1min avg:	-0.195	12.860	4.501
15:58:59	1min avg:	-0.217	12.862	4.502
15:59:59	1min avg:	-0.219	12.870	4.497
16:00:59	1min avg:	-0.215	12.864	4.500
16:01:59	1min avg:	-0.206	12.856	4.507
16:02:59	1min avg:	-0.207	12.865	4.499
16:03:59	1min avg:	-0.196	12.857	4.505
16:04:59	1min avg:	-0.201	12.854	4.507
16:05:59	1min avg:	-0.203	12.850	4.508
16:06:59	1min avg:	-0.170	12.862	4.502
16:07:59	1min avg:	-0.199	12.859	4.503
16:08:59	1min avg:	-0.172	12.860	4.504
16:09:59	1min avg:	-0.208	12.868	4.499

GP 2022 October 17

Test Run 7

Start: 10/17/2022 15:35:00
End: 10/17/2022 16:35:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	CO ppm	O2 %	CO2 %
16:10:59	1min avg:	-0.210	12.853	4.505
16:11:59	1min avg:	-0.203	12.866	4.500
16:12:59	1min avg:	-0.206	12.866	4.501
16:13:59	1min avg:	-0.182	12.859	4.504
16:14:59	1min avg:	-0.199	12.873	4.500
16:15:59	1min avg:	-0.196	12.871	4.500
16:16:59	1min avg:	-0.213	12.863	4.506
16:17:59	1min avg:	-0.209	12.862	4.508
16:18:59	1min avg:	-0.195	12.876	4.499
16:19:59	1min avg:	-0.209	12.861	4.508
16:20:59	1min avg:	-0.225	12.864	4.506
16:21:59	1min avg:	-0.210	12.876	4.498
16:22:59	1min avg:	-0.226	12.854	4.509
16:23:59	1min avg:	-0.211	12.876	4.503
16:24:59	1min avg:	-0.218	12.877	4.498
16:25:59	1min avg:	-0.203	12.865	4.506
16:26:59	1min avg:	-0.196	12.878	4.496
16:27:59	1min avg:	-0.201	12.864	4.504
16:28:59	1min avg:	-0.208	12.865	4.506
16:29:59	1min avg:	-0.210	12.870	4.503
16:30:59	1min avg:	-0.201	12.855	4.512
16:31:59	1min avg:	-0.198	12.863	4.506
16:32:59	1min avg:	-0.197	12.870	4.501
16:33:59	1min avg:	-0.193	12.865	4.504
16:34:59	1min avg:	-0.178	12.858	4.508
16:35:00	Test Avgs:	-0.201	12.863	4.503

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2 %	CO2 %
07:43:00	1min avg:	12.987	4.483
07:44:00	1min avg:	12.988	4.480
07:45:00	1min avg:	12.993	4.479
07:46:00	1min avg:	12.990	4.481
07:47:00	1min avg:	12.981	4.487
07:48:00	1min avg:	12.997	4.479
07:49:00	1min avg:	13.001	4.482
07:50:00	1min avg:	12.987	4.486
07:51:00	1min avg:	12.991	4.483
07:52:00	1min avg:	12.990	4.485
07:53:00	1min avg:	12.986	4.485
07:54:00	1min avg:	12.996	4.484
07:55:00	1min avg:	12.997	4.483
07:56:00	1min avg:	12.992	4.484
07:57:00	1min avg:	12.984	4.490
07:58:00	1min avg:	12.998	4.480
07:59:00	1min avg:	12.994	4.486
08:00:00	1min avg:	12.985	4.489
08:01:00	1min avg:	12.996	4.483
08:02:00	1min avg:	13.000	4.481
08:03:00	1min avg:	12.992	4.485
08:04:00	1min avg:	12.988	4.483
08:05:00	1min avg:	13.108	4.475
08:06:00	1min avg:	13.095	4.484
08:07:00	1min avg:	13.088	4.488
08:08:00	1min avg:	13.086	4.486
08:09:00	1min avg:	13.108	4.483
08:10:00	1min avg:	13.106	4.483
08:11:00	1min avg:	13.079	4.495
08:12:00	1min avg:	13.115	4.483
08:13:00	1min avg:	13.107	4.483
08:14:00	1min avg:	13.093	4.492
08:15:00	1min avg:	13.113	4.484
08:16:00	1min avg:	13.112	4.480
08:17:00	1min avg:	13.093	4.491

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
08:18:00	1min avg:	13.106	4.485
08:19:00	1min avg:	13.116	4.481
08:20:00	1min avg:	13.104	4.488
08:21:00	1min avg:	13.110	4.486
08:22:00	1min avg:	13.114	4.487
08:23:00	1min avg:	13.111	4.488
08:24:00	1min avg:	13.109	4.488
08:25:00	1min avg:	13.116	4.487
08:26:00	1min avg:	13.127	4.481
08:27:00	1min avg:	13.121	4.484
08:28:00	1min avg:	13.111	4.490
08:29:00	1min avg:	13.121	4.485
08:30:00	1min avg:	13.188	4.482
08:31:00	1min avg:	13.024	4.485
08:32:00	1min avg:	13.027	4.487
08:33:00	1min avg:	13.024	4.487
08:34:00	1min avg:	13.027	4.483
08:35:00	1min avg:	13.026	4.483
08:36:00	1min avg:	13.022	4.484
08:37:00	1min avg:	13.043	4.472
08:38:00	1min avg:	13.029	4.481
08:39:00	1min avg:	13.021	4.487
08:40:00	1min avg:	13.035	4.479
08:41:00	1min avg:	13.032	4.480
08:42:00	1min avg:	13.022	4.487
08:43:00	1min avg:	13.038	4.480
08:44:00	1min avg:	13.045	4.475
08:45:00	1min avg:	13.020	4.487
08:46:00	1min avg:	13.032	4.481
08:47:00	1min avg:	13.045	4.478
08:48:00	1min avg:	13.022	4.490
08:49:00	1min avg:	13.032	4.482
08:50:00	1min avg:	13.045	4.476
08:51:00	1min avg:	13.028	4.484
08:52:00	1min avg:	13.025	4.486

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
08:53:00	1min avg:	13.033	4.482
08:54:00	1min avg:	13.046	4.473
08:55:00	1min avg:	13.029	4.486
08:56:00	1min avg:	13.037	4.483
08:57:00	1min avg:	13.051	4.473
08:58:00	1min avg:	13.023	4.488
08:59:00	1min avg:	13.032	4.485
09:00:00	1min avg:	13.055	4.474
09:01:00	1min avg:	13.033	4.484
09:02:00	1min avg:	13.032	4.484
09:03:00	1min avg:	13.048	4.478
09:04:00	1min avg:	13.042	4.482
09:05:00	1min avg:	13.026	4.489
09:06:00	1min avg:	13.052	4.476
09:07:00	1min avg:	13.047	4.477
09:08:00	1min avg:	13.024	4.486
09:09:00	1min avg:	13.034	4.480
09:10:00	1min avg:	13.039	4.474
09:11:00	1min avg:	13.017	4.486
09:12:00	1min avg:	13.039	4.475
09:13:00	1min avg:	13.034	4.477
09:14:00	1min avg:	13.013	4.489
09:15:00	1min avg:	13.044	4.476
09:16:00	1min avg:	13.007	4.478
09:17:00	1min avg:	13.003	4.483
09:18:00	1min avg:	13.012	4.476
09:19:00	1min avg:	13.012	4.476
09:20:00	1min avg:	13.000	4.480
09:21:00	1min avg:	13.002	4.481
09:22:00	1min avg:	13.004	4.480
09:23:00	1min avg:	13.019	4.473
09:24:00	1min avg:	13.004	4.478
09:25:00	1min avg:	12.991	4.486
09:26:00	1min avg:	13.027	4.469
09:27:00	1min avg:	13.002	4.481

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
09:28:00	1min avg:	12.988	4.485
09:29:00	1min avg:	13.019	4.470
09:30:00	1min avg:	12.998	4.480
09:31:00	1min avg:	13.002	4.482
09:32:00	1min avg:	13.038	4.472
09:33:00	1min avg:	13.162	4.483
09:34:00	1min avg:	13.149	4.490
09:35:00	1min avg:	13.177	4.480
09:36:00	1min avg:	13.178	4.482
09:37:00	1min avg:	13.164	4.489
09:38:00	1min avg:	13.168	4.483
09:39:00	1min avg:	13.111	4.479
09:40:00	1min avg:	13.106	4.482
09:41:00	1min avg:	13.096	4.489
09:42:00	1min avg:	13.117	4.474
09:43:00	1min avg:	13.111	4.478
09:44:00	1min avg:	13.093	4.486
09:45:00	1min avg:	13.160	4.475
09:46:00	1min avg:	13.191	4.481
09:47:00	1min avg:	13.175	4.486
09:48:00	1min avg:	13.195	4.479
09:49:00	1min avg:	13.194	4.480
09:50:00	1min avg:	13.151	4.485
09:51:00	1min avg:	13.098	4.475
09:52:00	1min avg:	13.094	4.479
09:53:00	1min avg:	13.102	4.473
09:54:00	1min avg:	13.079	4.483
09:55:00	1min avg:	13.097	4.474
09:56:00	1min avg:	13.125	4.475
09:57:00	1min avg:	13.189	4.478
09:58:00	1min avg:	13.181	4.484
09:59:00	1min avg:	13.178	4.488
10:00:00	1min avg:	13.164	4.496
10:01:00	1min avg:	13.115	4.499
10:02:00	1min avg:	13.085	4.502

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
10:03:00	1min avg:	13.095	4.498
10:04:00	1min avg:	13.097	4.498
10:05:00	1min avg:	13.098	4.498
10:06:00	1min avg:	13.093	4.495
10:07:00	1min avg:	13.082	4.495
10:08:00	1min avg:	13.093	4.493
10:09:00	1min avg:	13.093	4.493
10:10:00	1min avg:	13.100	4.490
10:11:00	1min avg:	13.093	4.496
10:12:00	1min avg:	13.089	4.490
10:13:00	1min avg:	13.057	4.489
10:14:00	1min avg:	13.061	4.490
10:15:00	1min avg:	13.053	4.491
10:16:00	1min avg:	13.056	4.489
10:17:00	1min avg:	13.052	4.489
10:18:00	1min avg:	13.051	4.490
10:19:00	1min avg:	13.087	4.496
10:20:00	1min avg:	13.157	4.494
10:21:00	1min avg:	13.157	4.494
10:22:00	1min avg:	13.157	4.493
10:23:00	1min avg:	13.165	4.491
10:24:00	1min avg:	13.169	4.489
10:25:00	1min avg:	13.150	4.493
10:26:00	1min avg:	13.126	4.490
10:27:00	1min avg:	13.123	4.491
10:28:00	1min avg:	13.122	4.491
10:29:00	1min avg:	13.121	4.491
10:30:00	1min avg:	13.119	4.494
10:31:00	1min avg:	13.109	4.499
10:32:00	1min avg:	13.126	4.502
10:33:00	1min avg:	13.103	4.494
10:34:00	1min avg:	13.111	4.493
10:35:00	1min avg:	13.115	4.494
10:36:00	1min avg:	13.112	4.495
10:37:00	1min avg:	13.113	4.496

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
10:38:00	1min avg:	13.093	4.493
10:39:00	1min avg:	13.072	4.498
10:40:00	1min avg:	13.078	4.496
10:41:00	1min avg:	13.071	4.497
10:42:00	1min avg:	13.074	4.495
10:43:00	1min avg:	13.088	4.496
10:44:00	1min avg:	13.204	4.500
10:45:00	1min avg:	13.203	4.501
10:46:00	1min avg:	13.218	4.496
10:47:00	1min avg:	13.224	4.499
10:48:00	1min avg:	13.174	4.499
10:49:00	1min avg:	13.035	4.495
10:50:00	1min avg:	13.037	4.496
10:51:00	1min avg:	13.028	4.502
10:52:00	1min avg:	13.033	4.495
10:53:00	1min avg:	13.027	4.496
10:54:00	1min avg:	13.024	4.501
10:55:00	1min avg:	13.089	4.497
10:56:00	1min avg:	13.095	4.495
10:57:00	1min avg:	13.096	4.491
10:58:00	1min avg:	13.093	4.496
10:59:00	1min avg:	13.090	4.502
11:00:00	1min avg:	13.085	4.503
11:01:00	1min avg:	13.073	4.501
11:02:00	1min avg:	13.044	4.499
11:03:00	1min avg:	13.047	4.498
11:04:00	1min avg:	13.049	4.497
11:05:00	1min avg:	13.048	4.499
11:06:00	1min avg:	13.041	4.499
11:07:00	1min avg:	13.043	4.498
11:08:00	1min avg:	13.047	4.497
11:09:00	1min avg:	13.045	4.499
11:10:00	1min avg:	13.043	4.498
11:11:00	1min avg:	12.974	4.499
11:12:00	1min avg:	12.980	4.498

GP 2022 October 18

Test Run 1

Start: 10/18/2022 7:42:00
End: 10/18/2022 11:17:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
11:13:00	1min avg:	12.986	4.495
11:14:00	1min avg:	12.979	4.498
11:15:00	1min avg:	12.980	4.500
11:16:00	1min avg:	13.004	4.499
11:17:00	1min avg:	13.072	4.504
11:17:00	Test Avgs:	13.069	4.487

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
11:37:59	1min avg:	13.033	4.507
11:38:59	1min avg:	13.036	4.506
11:39:59	1min avg:	13.047	4.497
11:40:59	1min avg:	13.045	4.498
11:41:59	1min avg:	13.012	4.504
11:42:59	1min avg:	13.032	4.506
11:43:59	1min avg:	13.055	4.495
11:44:59	1min avg:	13.048	4.498
11:45:59	1min avg:	13.042	4.503
11:46:59	1min avg:	13.064	4.499
11:47:59	1min avg:	13.161	4.501
11:48:59	1min avg:	13.145	4.508
11:49:59	1min avg:	13.150	4.505
11:50:59	1min avg:	13.161	4.498
11:51:59	1min avg:	13.149	4.501
11:52:59	1min avg:	13.144	4.504
11:53:59	1min avg:	13.119	4.501
11:54:59	1min avg:	13.072	4.495
11:55:59	1min avg:	13.062	4.498
11:56:59	1min avg:	13.066	4.497
11:57:59	1min avg:	13.069	4.499
11:58:59	1min avg:	13.059	4.503
11:59:59	1min avg:	13.054	4.503
12:00:59	1min avg:	13.102	4.495
12:01:59	1min avg:	13.090	4.497
12:02:59	1min avg:	13.078	4.504
12:03:59	1min avg:	13.104	4.493
12:04:59	1min avg:	13.077	4.505
12:05:59	1min avg:	13.046	4.502
12:06:59	1min avg:	13.071	4.487
12:07:59	1min avg:	13.050	4.500
12:08:59	1min avg:	13.052	4.502
12:09:59	1min avg:	13.074	4.491
12:10:59	1min avg:	13.042	4.502
12:11:59	1min avg:	13.039	4.496

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
12:12:59	1min avg:	13.045	4.494
12:13:59	1min avg:	13.028	4.504
12:14:59	1min avg:	13.052	4.491
12:15:59	1min avg:	13.094	4.492
12:16:59	1min avg:	13.161	4.502
12:17:59	1min avg:	13.166	4.507
12:18:59	1min avg:	13.191	4.495
12:19:59	1min avg:	13.174	4.503
12:20:59	1min avg:	13.179	4.505
12:21:59	1min avg:	13.184	4.498
12:22:59	1min avg:	13.187	4.498
12:23:59	1min avg:	13.179	4.503
12:24:59	1min avg:	13.177	4.505
12:25:59	1min avg:	13.181	4.497
12:26:59	1min avg:	13.162	4.500
12:27:59	1min avg:	13.154	4.507
12:28:59	1min avg:	13.160	4.501
12:29:59	1min avg:	13.166	4.499
12:30:59	1min avg:	13.157	4.504
12:31:59	1min avg:	13.152	4.504
12:32:59	1min avg:	13.176	4.493
12:33:59	1min avg:	13.153	4.503
12:34:59	1min avg:	13.158	4.501
12:35:59	1min avg:	13.170	4.494
12:36:59	1min avg:	13.153	4.503
12:37:59	1min avg:	13.152	4.504
12:38:59	1min avg:	13.177	4.489
12:39:59	1min avg:	13.152	4.503
12:40:59	1min avg:	13.153	4.503
12:41:59	1min avg:	13.167	4.493
12:42:59	1min avg:	13.158	4.498
12:43:59	1min avg:	13.151	4.502
12:44:59	1min avg:	13.153	4.500
12:45:59	1min avg:	13.168	4.494
12:46:59	1min avg:	13.160	4.498

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
12:47:59	1min avg:	13.151	4.504
12:48:59	1min avg:	13.165	4.494
12:49:59	1min avg:	13.169	4.491
12:50:59	1min avg:	13.144	4.507
12:51:59	1min avg:	13.172	4.490
12:52:59	1min avg:	13.171	4.492
12:53:59	1min avg:	13.152	4.499
12:54:59	1min avg:	13.167	4.493
12:55:59	1min avg:	13.162	4.494
12:56:59	1min avg:	13.141	4.505
12:57:59	1min avg:	13.162	4.493
12:58:59	1min avg:	13.158	4.494
12:59:59	1min avg:	13.144	4.502
13:00:59	1min avg:	13.160	4.495
13:01:59	1min avg:	13.160	4.491
13:02:59	1min avg:	13.141	4.502
13:03:59	1min avg:	13.151	4.500
13:04:59	1min avg:	13.164	4.489
13:05:59	1min avg:	13.140	4.502
13:06:59	1min avg:	13.156	4.493
13:07:59	1min avg:	13.153	4.496
13:08:59	1min avg:	13.138	4.503
13:09:59	1min avg:	13.146	4.499
13:10:59	1min avg:	13.162	4.491
13:11:59	1min avg:	13.144	4.501
13:12:59	1min avg:	13.151	4.498
13:13:59	1min avg:	13.128	4.490
13:14:59	1min avg:	13.074	4.490
13:15:59	1min avg:	13.061	4.501
13:16:59	1min avg:	13.085	4.489
13:17:59	1min avg:	13.081	4.490
13:18:59	1min avg:	13.069	4.498
13:19:59	1min avg:	13.094	4.488
13:20:59	1min avg:	13.049	4.497
13:21:59	1min avg:	13.145	4.488

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
13:22:59	1min avg:	13.138	4.491
13:23:59	1min avg:	13.127	4.501
13:24:59	1min avg:	13.141	4.490
13:25:59	1min avg:	13.134	4.497
13:26:59	1min avg:	13.046	4.498
13:27:59	1min avg:	13.060	4.490
13:28:59	1min avg:	13.064	4.487
13:29:59	1min avg:	13.052	4.497
13:30:59	1min avg:	13.058	4.488
13:31:59	1min avg:	13.067	4.488
13:32:59	1min avg:	13.055	4.496
13:33:59	1min avg:	13.062	4.490
13:34:59	1min avg:	13.063	4.492
13:35:59	1min avg:	13.056	4.494
13:36:59	1min avg:	13.064	4.495
13:37:59	1min avg:	13.041	4.489
13:38:59	1min avg:	13.046	4.488
13:39:59	1min avg:	13.049	4.487
13:40:59	1min avg:	13.036	4.494
13:41:59	1min avg:	13.035	4.497
13:42:59	1min avg:	13.042	4.494
13:43:59	1min avg:	13.059	4.492
13:44:59	1min avg:	12.976	4.487
13:45:59	1min avg:	12.989	4.481
13:46:59	1min avg:	12.978	4.489
13:47:59	1min avg:	12.976	4.490
13:48:59	1min avg:	12.978	4.490
13:49:59	1min avg:	12.986	4.484
13:50:59	1min avg:	12.991	4.489
13:51:59	1min avg:	13.128	4.494
13:52:59	1min avg:	13.138	4.490
13:53:59	1min avg:	13.134	4.493
13:54:59	1min avg:	13.130	4.494
13:55:59	1min avg:	13.131	4.493
13:56:59	1min avg:	13.243	4.491

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
13:57:59	1min avg:	13.042	4.494
13:58:59	1min avg:	13.057	4.492
13:59:59	1min avg:	13.059	4.489
14:00:59	1min avg:	13.053	4.491
14:01:59	1min avg:	13.050	4.494
14:02:59	1min avg:	13.055	4.490
14:03:59	1min avg:	13.058	4.489
14:04:59	1min avg:	12.757	4.480
14:05:59	1min avg:	12.741	4.481
14:06:59	1min avg:	12.731	4.487
14:07:59	1min avg:	12.747	4.479
14:08:59	1min avg:	12.746	4.482
14:09:59	1min avg:	12.753	4.476
14:10:59	1min avg:	12.858	4.485
14:11:59	1min avg:	13.051	4.490
14:12:59	1min avg:	13.048	4.492
14:13:59	1min avg:	13.054	4.490
14:14:59	1min avg:	13.042	4.496
14:15:59	1min avg:	13.051	4.494
14:16:59	1min avg:	12.957	4.491
14:17:59	1min avg:	12.989	4.489
14:18:59	1min avg:	12.998	4.485
14:19:59	1min avg:	12.995	4.487
14:20:59	1min avg:	12.996	4.492
14:21:59	1min avg:	12.992	4.492
14:22:59	1min avg:	12.989	4.493
14:23:59	1min avg:	13.093	4.493
14:24:59	1min avg:	13.055	4.490
14:25:59	1min avg:	13.053	4.492
14:26:59	1min avg:	13.044	4.496
14:27:59	1min avg:	13.051	4.492
14:28:59	1min avg:	13.054	4.490
14:29:59	1min avg:	12.951	4.489
14:30:59	1min avg:	12.740	4.482
14:31:59	1min avg:	12.734	4.482

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2 %	CO2 %
14:32:59	1min avg:	12.754	4.471
14:33:59	1min avg:	12.744	4.478
14:34:59	1min avg:	12.736	4.486
14:35:59	1min avg:	12.807	4.474
14:36:59	1min avg:	13.079	4.487
14:37:59	1min avg:	13.072	4.495
14:38:59	1min avg:	13.082	4.489
14:39:59	1min avg:	13.074	4.495
14:40:59	1min avg:	13.074	4.494
14:41:59	1min avg:	13.080	4.489
14:42:59	1min avg:	13.073	4.492
14:43:59	1min avg:	13.040	4.494
14:44:59	1min avg:	13.020	4.489
14:45:59	1min avg:	13.025	4.492
14:46:59	1min avg:	13.018	4.497
14:47:59	1min avg:	13.024	4.494
14:48:59	1min avg:	13.038	4.488
14:49:59	1min avg:	13.035	4.492
14:50:59	1min avg:	13.030	4.492
14:51:59	1min avg:	13.195	4.492
14:52:59	1min avg:	13.115	4.494
14:53:59	1min avg:	13.115	4.497
14:54:59	1min avg:	13.114	4.497
14:55:59	1min avg:	13.117	4.494
14:56:59	1min avg:	13.125	4.490
14:57:59	1min avg:	13.115	4.494
14:58:59	1min avg:	13.076	4.496
14:59:59	1min avg:	13.123	4.491
15:00:59	1min avg:	13.134	4.487
15:01:59	1min avg:	13.124	4.493
15:02:59	1min avg:	13.119	4.493
15:03:59	1min avg:	13.129	4.490
15:04:59	1min avg:	13.141	4.489
15:05:59	1min avg:	13.283	4.501
15:06:59	1min avg:	13.136	4.496

GP 2022 October 18

Test Run 2

Start: 10/18/2022 11:37:00
End: 10/18/2022 15:12:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
15:07:59	1min avg:	13.140	4.498
15:08:59	1min avg:	13.130	4.502
15:09:59	1min avg:	13.146	4.496
15:10:59	1min avg:	13.104	4.496
15:11:59	1min avg:	13.038	4.497
15:12:00	Test Avgs:	13.076	4.494

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
07:06:00	1min avg:	12.929	4.494
07:07:00	1min avg:	12.921	4.497
07:08:00	1min avg:	12.920	4.495
07:09:00	1min avg:	12.927	4.492
07:10:00	1min avg:	12.921	4.492
07:11:00	1min avg:	12.919	4.494
07:12:00	1min avg:	12.937	4.495
07:13:00	1min avg:	13.043	4.495
07:14:00	1min avg:	13.044	4.496
07:15:00	1min avg:	13.040	4.498
07:16:00	1min avg:	13.043	4.497
07:17:00	1min avg:	13.042	4.498
07:18:00	1min avg:	13.042	4.498
07:19:00	1min avg:	13.042	4.496
07:20:00	1min avg:	13.045	4.497
07:21:00	1min avg:	13.044	4.498
07:22:00	1min avg:	13.046	4.495
07:23:00	1min avg:	13.050	4.496
07:24:00	1min avg:	13.048	4.494
07:25:00	1min avg:	13.045	4.496
07:26:00	1min avg:	13.049	4.497
07:27:00	1min avg:	13.051	4.497
07:28:00	1min avg:	13.059	4.494
07:29:00	1min avg:	13.051	4.497
07:30:00	1min avg:	13.048	4.499
07:31:00	1min avg:	13.056	4.492
07:32:00	1min avg:	13.054	4.494
07:33:00	1min avg:	13.048	4.498
07:34:00	1min avg:	13.051	4.493
07:35:00	1min avg:	13.052	4.497
07:36:00	1min avg:	13.048	4.495
07:37:00	1min avg:	13.052	4.495
07:38:00	1min avg:	13.054	4.495
07:39:00	1min avg:	13.052	4.491
07:40:00	1min avg:	13.046	4.496

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2 %	CO2 %
07:41:00	1min avg:	13.054	4.497
07:42:00	1min avg:	13.058	4.490
07:43:00	1min avg:	13.052	4.497
07:44:00	1min avg:	13.055	4.495
07:45:00	1min avg:	13.059	4.492
07:46:00	1min avg:	13.057	4.495
07:47:00	1min avg:	13.055	4.495
07:48:00	1min avg:	13.062	4.491
07:49:00	1min avg:	13.059	4.493
07:50:00	1min avg:	13.059	4.495
07:51:00	1min avg:	13.059	4.494
07:52:00	1min avg:	13.055	4.499
07:53:00	1min avg:	13.057	4.497
07:54:00	1min avg:	13.060	4.494
07:55:00	1min avg:	13.061	4.494
07:56:00	1min avg:	13.062	4.495
07:57:00	1min avg:	13.062	4.495
07:58:00	1min avg:	13.049	4.493
07:59:00	1min avg:	13.093	4.495
08:00:00	1min avg:	13.113	4.498
08:01:00	1min avg:	13.121	4.495
08:02:00	1min avg:	13.126	4.492
08:03:00	1min avg:	13.120	4.497
08:04:00	1min avg:	13.199	4.498
08:05:00	1min avg:	13.023	4.495
08:06:00	1min avg:	13.023	4.491
08:07:00	1min avg:	13.020	4.494
08:08:00	1min avg:	13.023	4.494
08:09:00	1min avg:	13.021	4.490
08:10:00	1min avg:	13.026	4.490
08:11:00	1min avg:	13.025	4.490
08:12:00	1min avg:	13.026	4.490
08:13:00	1min avg:	13.028	4.491
08:14:00	1min avg:	13.026	4.494
08:15:00	1min avg:	13.026	4.494

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
08:16:00	1min avg:	13.034	4.490
08:17:00	1min avg:	13.035	4.488
08:18:00	1min avg:	13.024	4.494
08:19:00	1min avg:	13.038	4.487
08:20:00	1min avg:	13.055	4.478
08:21:00	1min avg:	13.038	4.485
08:22:00	1min avg:	13.034	4.488
08:23:00	1min avg:	13.062	4.475
08:24:00	1min avg:	13.042	4.484
08:25:00	1min avg:	13.041	4.487
08:26:00	1min avg:	13.059	4.476
08:27:00	1min avg:	13.043	4.483
08:28:00	1min avg:	13.048	4.484
08:29:00	1min avg:	13.060	4.477
08:30:00	1min avg:	13.046	4.483
08:31:00	1min avg:	13.041	4.486
08:32:00	1min avg:	13.066	4.474
08:33:00	1min avg:	13.044	4.484
08:34:00	1min avg:	13.046	4.483
08:35:00	1min avg:	13.069	4.471
08:36:00	1min avg:	13.047	4.485
08:37:00	1min avg:	13.054	4.482
08:38:00	1min avg:	13.069	4.476
08:39:00	1min avg:	13.047	4.484
08:40:00	1min avg:	13.068	4.478
08:41:00	1min avg:	13.067	4.477
08:42:00	1min avg:	13.043	4.488
08:43:00	1min avg:	13.070	4.478
08:44:00	1min avg:	13.067	4.477
08:45:00	1min avg:	13.048	4.487
08:46:00	1min avg:	13.068	4.475
08:47:00	1min avg:	13.056	4.480
08:48:00	1min avg:	13.051	4.483
08:49:00	1min avg:	13.065	4.476
08:50:00	1min avg:	13.046	4.487

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
08:51:00	1min avg:	13.041	4.488
08:52:00	1min avg:	13.065	4.477
08:53:00	1min avg:	13.054	4.480
08:54:00	1min avg:	13.051	4.484
08:55:00	1min avg:	13.054	4.474
08:56:00	1min avg:	13.112	4.482
08:57:00	1min avg:	13.117	4.481
08:58:00	1min avg:	13.126	4.476
08:59:00	1min avg:	13.127	4.478
09:00:00	1min avg:	13.130	4.480
09:01:00	1min avg:	13.140	4.473
09:02:00	1min avg:	13.130	4.480
09:03:00	1min avg:	13.134	4.478
09:04:00	1min avg:	13.221	4.476
09:05:00	1min avg:	13.140	4.480
09:06:00	1min avg:	13.117	4.486
09:07:00	1min avg:	13.116	4.483
09:08:00	1min avg:	13.124	4.483
09:09:00	1min avg:	13.131	4.479
09:10:00	1min avg:	13.127	4.485
09:11:00	1min avg:	13.121	4.486
09:12:00	1min avg:	13.060	4.487
09:13:00	1min avg:	13.074	4.480
09:14:00	1min avg:	13.069	4.484
09:15:00	1min avg:	13.072	4.482
09:16:00	1min avg:	13.075	4.484
09:17:00	1min avg:	13.080	4.480
09:18:00	1min avg:	13.074	4.485
09:19:00	1min avg:	13.082	4.479
09:20:00	1min avg:	13.084	4.481
09:21:00	1min avg:	13.099	4.485
09:22:00	1min avg:	13.121	4.488
09:23:00	1min avg:	13.126	4.483
09:24:00	1min avg:	13.118	4.487
09:25:00	1min avg:	13.120	4.485

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
09:26:00	1min avg:	13.138	4.479
09:27:00	1min avg:	13.121	4.483
09:28:00	1min avg:	13.062	4.486
09:29:00	1min avg:	13.116	4.473
09:30:00	1min avg:	13.099	4.481
09:31:00	1min avg:	13.105	4.481
09:32:00	1min avg:	13.115	4.478
09:33:00	1min avg:	13.104	4.484
09:34:00	1min avg:	13.127	4.476
09:35:00	1min avg:	13.200	4.485
09:36:00	1min avg:	13.187	4.491
09:37:00	1min avg:	13.203	4.479
09:38:00	1min avg:	13.201	4.478
09:39:00	1min avg:	13.192	4.485
09:40:00	1min avg:	13.174	4.492
09:41:00	1min avg:	13.045	4.497
09:42:00	1min avg:	13.089	4.494
09:43:00	1min avg:	13.096	4.494
09:44:00	1min avg:	13.089	4.499
09:45:00	1min avg:	13.088	4.501
09:46:00	1min avg:	13.088	4.499
09:47:00	1min avg:	13.171	4.498
09:48:00	1min avg:	13.113	4.501
09:49:00	1min avg:	13.122	4.502
09:50:00	1min avg:	13.121	4.506
09:51:00	1min avg:	13.115	4.514
09:52:00	1min avg:	13.116	4.508
09:53:00	1min avg:	13.119	4.504
09:54:00	1min avg:	13.117	4.506
09:55:00	1min avg:	13.123	4.502
09:56:00	1min avg:	13.118	4.504
09:57:00	1min avg:	13.119	4.502
09:58:00	1min avg:	13.119	4.503
09:59:00	1min avg:	13.124	4.503
10:00:00	1min avg:	13.129	4.496

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
10:01:00	1min avg:	13.124	4.503
10:02:00	1min avg:	13.102	4.506
10:03:00	1min avg:	12.966	4.495
10:04:00	1min avg:	12.966	4.495
10:05:00	1min avg:	12.951	4.504
10:06:00	1min avg:	12.964	4.494
10:07:00	1min avg:	12.965	4.495
10:08:00	1min avg:	12.953	4.500
10:09:00	1min avg:	12.946	4.498
10:10:00	1min avg:	13.092	4.497
10:11:00	1min avg:	13.076	4.508
10:12:00	1min avg:	13.099	4.499
10:13:00	1min avg:	13.097	4.504
10:14:00	1min avg:	13.079	4.509
10:15:00	1min avg:	13.104	4.499
10:16:00	1min avg:	13.094	4.506
10:17:00	1min avg:	13.064	4.509
10:18:00	1min avg:	13.032	4.499
10:19:00	1min avg:	13.036	4.498
10:20:00	1min avg:	13.021	4.507
10:21:00	1min avg:	13.018	4.506
10:22:00	1min avg:	13.037	4.495
10:23:00	1min avg:	13.025	4.501
10:24:00	1min avg:	13.007	4.510
10:25:00	1min avg:	13.072	4.494
10:26:00	1min avg:	13.063	4.501
10:27:00	1min avg:	13.063	4.505
10:28:00	1min avg:	13.086	4.498
10:29:00	1min avg:	13.079	4.504
10:30:00	1min avg:	13.078	4.504
10:31:00	1min avg:	13.092	4.498
10:32:00	1min avg:	13.085	4.499
10:33:00	1min avg:	13.073	4.505
10:34:00	1min avg:	13.188	4.499
10:35:00	1min avg:	12.875	4.502

GP 2022 October 19

Test Run 1

Start: 10/19/2022 7:05:01
End: 10/19/2022 10:40:01

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
10:36:00	1min avg:	12.881	4.495
10:37:00	1min avg:	12.893	4.492
10:38:00	1min avg:	12.875	4.501
10:39:00	1min avg:	12.887	4.495
10:40:00	1min avg:	12.877	4.497
10:40:01	Test Avgs:	13.064	4.491

GP 2022 October 19

Test Run 2

Start: 10/19/2022 11:18:00
End: 10/19/2022 14:26:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
11:18:59	1min avg:	13.069	4.497
11:19:59	1min avg:	13.092	4.487
11:20:59	1min avg:	13.052	4.494
11:21:59	1min avg:	13.043	4.494
11:22:59	1min avg:	13.035	4.496
11:23:59	1min avg:	13.030	4.496
11:24:59	1min avg:	13.026	4.499
11:25:59	1min avg:	13.033	4.493
11:26:59	1min avg:	13.019	4.499
11:27:59	1min avg:	13.027	4.498
11:28:59	1min avg:	13.130	4.501
11:29:59	1min avg:	13.130	4.498
11:30:59	1min avg:	13.135	4.499
11:31:59	1min avg:	13.137	4.500
11:32:59	1min avg:	13.133	4.502
11:33:59	1min avg:	13.141	4.495
11:34:59	1min avg:	13.145	4.498
11:35:59	1min avg:	13.103	4.495
11:36:59	1min avg:	12.878	4.494
11:37:59	1min avg:	12.864	4.496
11:38:59	1min avg:	12.874	4.493
11:39:59	1min avg:	12.867	4.495
11:40:59	1min avg:	12.911	4.498
11:41:59	1min avg:	13.118	4.497
11:42:59	1min avg:	13.126	4.495
11:43:59	1min avg:	13.119	4.500
11:44:59	1min avg:	13.125	4.501
11:45:59	1min avg:	13.136	4.494
11:46:59	1min avg:	13.127	4.502
11:47:59	1min avg:	13.077	4.504
11:48:59	1min avg:	13.101	4.493
11:49:59	1min avg:	13.096	4.497
11:50:59	1min avg:	13.093	4.496
11:51:59	1min avg:	13.088	4.499
11:52:59	1min avg:	13.085	4.503

GP 2022 October 19

Test Run 2

Start: 10/19/2022 11:18:00
End: 10/19/2022 14:26:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
11:53:59	1min avg:	13.089	4.497
11:54:59	1min avg:	12.993	4.494
11:55:59	1min avg:	12.998	4.491
11:56:59	1min avg:	13.002	4.491
11:57:59	1min avg:	12.996	4.494
11:58:59	1min avg:	13.002	4.495
11:59:59	1min avg:	12.998	4.497
12:00:59	1min avg:	13.015	4.489
12:01:59	1min avg:	13.000	4.497
12:02:59	1min avg:	13.072	4.498
12:03:59	1min avg:	13.094	4.489
12:04:59	1min avg:	13.065	4.500
12:05:59	1min avg:	13.071	4.498
12:06:59	1min avg:	13.093	4.488
12:07:59	1min avg:	13.067	4.496
12:08:59	1min avg:	13.037	4.503
12:09:59	1min avg:	13.079	4.493
12:10:59	1min avg:	13.092	4.494
12:11:59	1min avg:	13.098	4.493
12:12:59	1min avg:	13.096	4.496
12:13:59	1min avg:	13.092	4.498
12:14:59	1min avg:	13.162	4.493
12:15:59	1min avg:	13.033	4.492
12:16:59	1min avg:	12.968	4.488
12:17:59	1min avg:	12.955	4.495
12:18:59	1min avg:	12.966	4.490
12:19:59	1min avg:	12.960	4.493
12:20:59	1min avg:	12.954	4.492
12:21:59	1min avg:	12.960	4.493
12:22:59	1min avg:	13.045	4.486
12:23:59	1min avg:	13.100	4.492
12:24:59	1min avg:	13.091	4.497
12:25:59	1min avg:	13.103	4.496
12:26:59	1min avg:	13.116	4.488
12:27:59	1min avg:	13.103	4.497

GP 2022 October 19

Test Run 2

Start: 10/19/2022 11:18:00
End: 10/19/2022 14:26:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
12:28:59	1min avg:	13.104	4.494
12:29:59	1min avg:	13.234	4.493
12:30:59	1min avg:	13.101	4.496
12:31:59	1min avg:	13.103	4.494
12:32:59	1min avg:	13.101	4.494
12:33:59	1min avg:	13.102	4.493
12:34:59	1min avg:	13.094	4.497
12:35:59	1min avg:	13.103	4.492
12:36:59	1min avg:	13.100	4.493
12:37:59	1min avg:	13.097	4.494
12:38:59	1min avg:	12.950	4.493
12:39:59	1min avg:	12.928	4.491
12:40:59	1min avg:	12.946	4.482
12:41:59	1min avg:	12.944	4.482
12:42:59	1min avg:	12.937	4.489
12:43:59	1min avg:	12.940	4.487
12:44:59	1min avg:	12.951	4.482
12:45:59	1min avg:	12.940	4.485
12:46:59	1min avg:	13.048	4.488
12:47:59	1min avg:	12.937	4.493
12:48:59	1min avg:	12.952	4.485
12:49:59	1min avg:	12.942	4.488
12:50:59	1min avg:	12.931	4.495
12:51:59	1min avg:	12.944	4.484
12:52:59	1min avg:	12.948	4.484
12:53:59	1min avg:	12.934	4.489
12:54:59	1min avg:	12.944	4.486
12:55:59	1min avg:	12.949	4.482
12:56:59	1min avg:	12.934	4.492
12:57:59	1min avg:	12.954	4.483
12:58:59	1min avg:	12.948	4.484
12:59:59	1min avg:	12.936	4.485
13:00:59	1min avg:	12.932	4.489
13:01:59	1min avg:	12.953	4.481
13:02:59	1min avg:	12.942	4.483

GP 2022 October 19

Test Run 2

Start: 10/19/2022 11:18:00
End: 10/19/2022 14:26:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
13:03:59	1min avg:	12.918	4.495
13:04:59	1min avg:	12.954	4.473
13:05:59	1min avg:	12.928	4.484
13:06:59	1min avg:	12.925	4.488
13:07:59	1min avg:	12.958	4.475
13:08:59	1min avg:	12.933	4.486
13:09:59	1min avg:	12.942	4.483
13:10:59	1min avg:	12.942	4.481
13:11:59	1min avg:	12.932	4.485
13:12:59	1min avg:	12.940	4.482
13:13:59	1min avg:	12.951	4.478
13:14:59	1min avg:	12.934	4.486
13:15:59	1min avg:	12.930	4.486
13:16:59	1min avg:	12.951	4.474
13:17:59	1min avg:	12.930	4.482
13:18:59	1min avg:	12.929	4.484
13:19:59	1min avg:	12.946	4.475
13:20:59	1min avg:	12.926	4.483
13:21:59	1min avg:	12.949	4.475
13:22:59	1min avg:	12.942	4.480
13:23:59	1min avg:	12.930	4.488
13:24:59	1min avg:	12.936	4.482
13:25:59	1min avg:	12.945	4.477
13:26:59	1min avg:	12.927	4.486
13:27:59	1min avg:	12.937	4.481
13:28:59	1min avg:	12.943	4.477
13:29:59	1min avg:	12.931	4.480
13:30:59	1min avg:	12.937	4.480
13:31:59	1min avg:	12.962	4.476
13:32:59	1min avg:	12.987	4.479
13:33:59	1min avg:	12.974	4.484
13:34:59	1min avg:	12.978	4.483
13:35:59	1min avg:	12.981	4.478
13:36:59	1min avg:	12.976	4.484
13:37:59	1min avg:	12.974	4.484

GP 2022 October 19

Test Run 2

Start: 10/19/2022 11:18:00
End: 10/19/2022 14:26:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
13:38:59	1min avg:	12.982	4.482
13:39:59	1min avg:	12.981	4.482
13:40:59	1min avg:	12.972	4.485
13:41:59	1min avg:	12.987	4.478
13:42:59	1min avg:	12.991	4.476
13:43:59	1min avg:	12.970	4.490
13:44:59	1min avg:	12.986	4.479
13:45:59	1min avg:	12.984	4.479
13:46:59	1min avg:	12.974	4.485
13:47:59	1min avg:	12.977	4.482
13:48:59	1min avg:	12.977	4.478
13:49:59	1min avg:	12.979	4.481
13:50:59	1min avg:	12.979	4.482
13:51:59	1min avg:	12.982	4.478
13:52:59	1min avg:	12.970	4.483
13:53:59	1min avg:	12.972	4.482
13:54:59	1min avg:	12.997	4.472
13:55:59	1min avg:	12.978	4.480
13:56:59	1min avg:	12.968	4.485
13:57:59	1min avg:	12.993	4.470
13:58:59	1min avg:	12.970	4.483
13:59:59	1min avg:	12.975	4.484
14:00:59	1min avg:	12.992	4.474
14:01:59	1min avg:	12.986	4.476
14:02:59	1min avg:	12.980	4.478
14:03:59	1min avg:	12.960	4.489
14:04:59	1min avg:	12.984	4.477
14:05:59	1min avg:	12.978	4.481
14:06:59	1min avg:	12.968	4.484
14:07:59	1min avg:	12.983	4.479
14:08:59	1min avg:	12.978	4.479
14:09:59	1min avg:	12.976	4.478
14:10:59	1min avg:	12.971	4.482
14:11:59	1min avg:	12.975	4.480
14:12:59	1min avg:	12.967	4.482

GP 2022 October 19

Test Run 2

Start: 10/19/2022 11:18:00
End: 10/19/2022 14:26:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
14:13:59	1min avg:	12.965	4.487
14:14:59	1min avg:	12.984	4.478
14:15:59	1min avg:	12.980	4.481
14:16:59	1min avg:	12.981	4.478
14:17:59	1min avg:	12.985	4.476
14:18:59	1min avg:	12.978	4.479
14:19:59	1min avg:	12.978	4.479
14:20:59	1min avg:	12.986	4.476
14:21:59	1min avg:	12.983	4.478
14:22:59	1min avg:	12.974	4.482
14:23:59	1min avg:	12.969	4.484
14:24:59	1min avg:	12.987	4.475
14:25:59	1min avg:	12.977	4.481
14:26:00	Test Avgs:	13.003	4.488

GP 2022 October 20

Test Run 1

Start: 10/20/2022 7:37:00
End: 10/20/2022 7:58:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
07:38:00	1min avg:	11.817	5.102
07:39:00	1min avg:	11.798	5.117
07:40:00	1min avg:	11.789	5.121
07:41:00	1min avg:	11.787	5.122
07:42:00	1min avg:	11.766	5.136
07:43:00	1min avg:	11.753	5.143
07:44:00	1min avg:	11.754	5.142
07:45:00	1min avg:	11.744	5.142
07:46:00	1min avg:	11.721	5.154
07:47:00	1min avg:	11.727	5.153
07:48:00	1min avg:	11.734	5.152
07:49:00	1min avg:	11.713	5.160
07:50:00	1min avg:	11.712	5.161
07:51:00	1min avg:	11.687	5.172
07:52:00	1min avg:	11.689	5.173
07:53:00	1min avg:	11.691	5.169
07:54:00	1min avg:	11.685	5.175
07:55:00	1min avg:	11.679	5.178
07:56:00	1min avg:	11.696	5.170
07:57:00	1min avg:	11.701	5.167
07:58:00	1min avg:	11.689	5.174
07:58:00	Test Avgs:	11.730	5.152

GP 2022 October 20

Test Run 2

Start: 10/20/2022 8:09:00
End: 10/20/2022 8:30:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
08:10:00	1min avg:	11.762	5.123
08:11:00	1min avg:	11.772	5.122
08:12:00	1min avg:	11.756	5.133
08:13:00	1min avg:	11.730	5.150
08:14:00	1min avg:	11.739	5.147
08:15:00	1min avg:	11.751	5.142
08:16:00	1min avg:	11.732	5.149
08:17:00	1min avg:	11.707	5.166
08:18:00	1min avg:	11.737	5.152
08:19:00	1min avg:	11.703	5.167
08:20:00	1min avg:	11.699	5.171
08:21:00	1min avg:	11.717	5.161
08:22:00	1min avg:	11.680	5.178
08:23:00	1min avg:	11.671	5.184
08:24:00	1min avg:	11.689	5.173
08:25:00	1min avg:	11.700	5.168
08:26:00	1min avg:	11.701	5.167
08:27:00	1min avg:	11.698	5.168
08:28:00	1min avg:	11.694	5.170
08:29:00	1min avg:	11.679	5.179
08:30:00	1min avg:	11.675	5.180
08:30:00	Test Avgs:	11.714	5.160

GP 2022 October 20

Test Run 3

Start: 10/20/2022 8:41:00
End: 10/20/2022 9:02:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
08:42:00	1min avg:	11.759	5.125
08:43:00	1min avg:	11.759	5.129
08:44:00	1min avg:	11.741	5.140
08:45:00	1min avg:	11.743	5.142
08:46:00	1min avg:	11.741	5.140
08:47:00	1min avg:	11.713	5.158
08:48:00	1min avg:	11.760	5.136
08:49:00	1min avg:	11.760	5.136
08:50:00	1min avg:	11.746	5.143
08:51:00	1min avg:	11.763	5.136
08:52:00	1min avg:	11.783	5.123
08:53:00	1min avg:	11.752	5.140
08:54:00	1min avg:	11.744	5.147
08:55:00	1min avg:	11.765	5.135
08:56:00	1min avg:	11.757	5.138
08:57:00	1min avg:	11.759	5.136
08:58:00	1min avg:	11.759	5.135
08:59:00	1min avg:	11.731	5.153
09:00:00	1min avg:	11.754	5.144
09:01:00	1min avg:	11.751	5.142
09:02:00	1min avg:	11.728	5.156
09:02:00	Test Avgs:	11.751	5.140

GP 2022 October 20

Test Run 4

Start: 10/20/2022 9:14:00
End: 10/20/2022 9:35:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
09:15:00	1min avg:	11.778	5.123
09:16:00	1min avg:	11.772	5.115
09:17:00	1min avg:	11.734	5.131
09:18:00	1min avg:	11.770	5.118
09:19:00	1min avg:	11.799	5.101
09:20:00	1min avg:	11.766	5.123
09:21:00	1min avg:	11.769	5.123
09:22:00	1min avg:	11.747	5.134
09:23:00	1min avg:	11.716	5.147
09:24:00	1min avg:	11.732	5.141
09:25:00	1min avg:	11.716	5.149
09:26:00	1min avg:	11.692	5.161
09:27:00	1min avg:	11.725	5.141
09:28:00	1min avg:	11.631	5.136
09:29:00	1min avg:	11.626	5.138
09:30:00	1min avg:	11.645	5.132
09:31:00	1min avg:	11.974	5.144
09:32:00	1min avg:	11.932	5.141
09:33:00	1min avg:	11.915	5.153
09:34:00	1min avg:	11.914	5.151
09:35:00	1min avg:	11.921	5.147
09:35:00	Test Avgs:	11.775	5.136

GP 2022 October 20

Test Run 5

Start: 10/20/2022 9:49:00
End: 10/20/2022 10:10:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
09:50:00	1min avg:	11.933	5.140
09:51:00	1min avg:	11.930	5.144
09:52:00	1min avg:	11.916	5.150
09:53:00	1min avg:	11.905	5.163
09:54:00	1min avg:	11.904	5.159
09:55:00	1min avg:	11.919	5.149
09:56:00	1min avg:	11.901	5.156
09:57:00	1min avg:	11.903	5.157
09:58:00	1min avg:	11.892	5.161
09:59:00	1min avg:	11.871	5.175
10:00:00	1min avg:	11.890	5.164
10:01:00	1min avg:	11.908	5.156
10:02:00	1min avg:	11.893	5.159
10:03:00	1min avg:	11.901	5.159
10:04:00	1min avg:	11.912	5.154
10:05:00	1min avg:	11.887	5.167
10:06:00	1min avg:	11.876	5.174
10:07:00	1min avg:	11.872	5.175
10:08:00	1min avg:	11.921	5.150
10:09:00	1min avg:	11.898	5.160
10:10:00	1min avg:	11.895	5.163
10:10:00	Test Avgs:	11.901	5.159

GP 2022 October 20

Test Run 6

Start: 10/20/2022 10:21:00
End: 10/20/2022 10:42:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
10:22:00	1min avg:	11.947	5.127
10:23:00	1min avg:	11.966	5.115
10:24:00	1min avg:	11.934	5.133
10:25:00	1min avg:	11.955	5.128
10:26:00	1min avg:	11.940	5.132
10:27:00	1min avg:	11.931	5.141
10:28:00	1min avg:	11.930	5.143
10:29:00	1min avg:	11.930	5.144
10:30:00	1min avg:	11.926	5.144
10:31:00	1min avg:	11.901	5.160
10:32:00	1min avg:	11.936	5.142
10:33:00	1min avg:	11.911	5.152
10:34:00	1min avg:	11.877	5.171
10:35:00	1min avg:	11.914	5.149
10:36:00	1min avg:	11.888	5.164
10:37:00	1min avg:	11.872	5.175
10:38:00	1min avg:	11.898	5.160
10:39:00	1min avg:	11.910	5.153
10:40:00	1min avg:	11.888	5.165
10:41:00	1min avg:	11.898	5.157
10:42:00	1min avg:	11.915	5.150
10:42:00	Test Avgs:	11.917	5.148

GP 2022 October 20

Test Run 7

Start: 10/20/2022 10:53:00
End: 10/20/2022 11:14:00

Operator: J. Grizzle
Plant: Plant McDonough
Location: Smyrna, GA
Source ID: Unit 4B

Time	Entry	O2	CO2
		%	%
10:54:00	1min avg:	11.942	5.117
10:55:00	1min avg:	11.932	5.127
10:56:00	1min avg:	11.966	5.112
10:57:00	1min avg:	11.933	5.131
10:58:00	1min avg:	11.943	5.131
10:59:00	1min avg:	11.949	5.127
11:00:00	1min avg:	11.937	5.138
11:01:00	1min avg:	11.938	5.137
11:02:00	1min avg:	11.916	5.149
11:03:00	1min avg:	11.914	5.149
11:04:00	1min avg:	11.905	5.153
11:05:00	1min avg:	11.930	5.140
11:06:00	1min avg:	11.901	5.155
11:07:00	1min avg:	11.899	5.161
11:08:00	1min avg:	11.922	5.146
11:09:00	1min avg:	11.906	5.151
11:10:00	1min avg:	11.904	5.155
11:11:00	1min avg:	11.924	5.140
11:12:00	1min avg:	11.916	5.146
11:13:00	1min avg:	11.932	5.139
11:14:00	1min avg:	11.959	5.122
11:14:00	Test Avgs:	11.927	5.139

Operator: J. Grizzle
 Plant: Plant McDonough
 Location: Smyrna, GA
 Source ID: Unit 4B

Response Time Results

Analyte:	CO	O2	CO2		
Units:	ppm	%	%		
Span:	11.600	22.000	21.700		
Range:	100	25	25		
Method:	EPA 7E	EPA 7E	EPA 7E		
Upscale Lvl:	5.115	9.495	9.544		
Dnscale Lvl:	0.580	1.100	1.085		
Upscale (s):	1:03	0:36	0:37		
Dnscale (s):	1:02	0:34	0:35		
Upscale	Dnscale	Upscale	Dnscale	Upscale	Dnscale
0.101	5.565	0.145	9.902	0.068	9.876
0.115	5.597	0.135	9.895	0.065	9.884
0.090	5.610	0.137	9.897	0.081	9.879
0.090	5.635	0.142	9.895	0.066	9.892
0.083	5.642	0.141	9.906	0.066	9.881
0.072	5.602	0.134	9.911	0.062	9.903
0.062	5.609	0.145	9.914	0.069	9.911
0.061	5.610	0.141	9.910	0.081	9.909
0.048	5.606	0.139	9.909	0.070	9.912
0.031	5.604	0.140	9.920	0.060	9.915
0.021	5.623	0.138	9.923	0.063	9.913
0.026	5.620	0.134	9.915	0.072	9.920
0.009	5.614	0.141	9.931	0.072	9.926
-0.026	5.608	0.141	9.923	0.070	9.935
-0.043	5.611	0.144	9.936	0.067	9.936
-0.067	5.637	0.135	9.927	0.075	9.938
-0.060	5.633	0.147	9.923	0.065	9.930
-0.065	5.637	0.142	9.928	0.053	9.945
-0.039	5.651	0.145	9.925	0.053	9.942
-0.017	5.655	0.143	9.929	0.048	9.938
-0.021	5.656	0.150	9.927	0.065	9.941
-0.016	5.666	0.248	9.994	0.061	9.944
0.003	5.651	1.143	10.330	0.071	9.944
0.029	5.644	2.081	10.825	0.113	9.901
0.068	5.647	1.872	10.832	0.316	9.336
0.100	5.636	1.293	10.569	0.665	8.427
0.121	5.612	0.997	10.223	0.755	8.175
0.137	5.583	2.068	9.270	0.569	8.583
0.139	5.525	4.466	7.252	0.492	9.014
0.177	5.458	6.338	5.150	1.098	8.576
0.251	5.383	7.500	3.016	3.122	6.306
0.345	5.267	8.217	1.932	5.538	3.909
0.473	5.156	8.694	1.283	7.312	2.295
0.610	5.032	9.046	0.915	8.389	1.316
0.737	4.876	9.287		8.915	0.870
0.918	4.706	9.460		9.265	
1.107	4.524	9.589		9.471	
1.290	4.399			9.579	
1.500	4.164				
1.702	3.961				
1.891	3.761				
2.097	3.570				
2.310	3.373				
2.531	3.161				
2.727	2.954				
2.923	2.791				
3.111	2.620				
3.308	2.425				
3.475	2.231				
3.670	2.054				
3.869	1.898				
4.031	1.739				
4.157	1.553				
4.267	1.400				
4.462	1.286				
4.584	1.139				
4.679	1.000				
4.772	0.898				
4.885	0.787				
4.997	0.691				
5.078	0.590				
5.113	0.527				
5.154					

Lab Analysis

Filterable Particulate Sample Analysis Summary				
--	--	--	--	--

Project#: 499970
 Company: Georgia Power
 Plant: McDonough

Unit ID: Unit 4A
 Location: Exhaust
 Test Date(s): 10/12/2022

Filterable PM	Run 1	Run 2	Run 3	Run 4	Blank
Filter material collected in acetone rinse?	N	Y	N	N	
Filter final - Filter tare (mg):	-0.83	-1.19	-1.13	-4.00	
Rinse volume, V_{aw} , (ml):	72.9	32.9	76.1	64.1	0.1
Rinse final - Rinse tare, m_a , (mg):	7.44	0.00	3.12	12.50	0.0
Rinse blank correction, W_a (mg)**:	0.00	0.00	0.00	0.00	
Total rinse mass (mg):	7.44	0.00	3.12	12.50	
*Total Filterable PM, m_n, (milligrams):	7.94	1.00	3.62	13.00	

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is \geq zero, subsequent calculations are performed using that value.

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is $<$ zero, subsequent calculations are performed using a value of 1 mg

* If filter material was not recovered in the acetone rinse, and the result from the lab for either fraction is $<$ zero, subsequent calculations are performed using a value of 0.5 mg for that fraction

** - the maximum allowable blank correction is 0.0079 mg/ml

Method 29 Sample Analysis Summary

Project#:	<u>499970</u>	Unit ID:	<u>Unit 4A</u>
Company:	<u>Georgia Power</u>	Location:	<u>Exhaust</u>
Plant:	<u>McDonough</u>	Test Date(s):	<u>October 12, 2022</u>

Filter Diameter (mm): 82 (NuTech)

	Gross front-half metals					Reagent Blank
	Run 1	Run 2	Run 3	Run 4		
Ag (ug)	-	-	-	-	-	-
As (ug)	< 1.78	< 1.78	< 1.78	< 1.78	< 1.78	< 0.00
Ba (ug)	-	-	-	-	-	-
Be (ug)	0.018	< 0.016	< 0.016	< 0.016	< 0.016	< 0.000
Cd (ug)	< 0.28	< 0.28	< 0.28	4.45	< 0.00	-
Cr (ug)	2.86	2.28	2.30	2.51	-	1.93
Co (ug)	4.05	< 2.00	< 2.00	< 2.00	< 0.00	-
Cu (ug)	-	-	-	-	-	-
1B Hg (ug)	< 0.084	< 0.084	< 0.084	< 0.084	< 0.000	-
Mn (ug)	2.58	1.02	3.15	1.42	< 0.00	-
Ni (ug)	1.87	0.748	1.52	1.33	-	0.65
P (ug)	-	-	-	-	-	-
Pb (ug)	2.32	1.48	1.87	1.49	< 0.00	-
Sb (ug)	< 1.10	1.10	< 1.10	< 1.10	-	1.63
Se (ug)	1.64	< 1.32	< 1.32	< 1.32	< 0.00	-
Tl (ug)	-	-	-	-	-	-
Zn (ug)	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

	Blank-corrected front-half metals			
	Run 1	Run 2	Run 3	Run 4
Ag (ug)	-	-	-	-
As (ug)	1.78 *	1.78 *	1.78 *	1.78 *
Ba (ug)	-	-	-	-
Be (ug)	0.02	0.02 *	0.02 *	0.02 *
Cd (ug)	0.28 *	0.28 *	0.28 *	4.45
Cr (ug)	0.93	0.35	0.37	0.58
Co (ug)	4.05	2.00 *	2.00 *	2.00 *
Cu (ug)	-	-	-	-
1B Hg (ug)	N/A *	N/A *	N/A *	N/A *
Mn (ug)	2.58	1.02	3.15	1.42
Ni (ug)	1.22	0.10	0.87	0.68
P (ug)	-	-	-	-
Pb (ug)	2.32	1.48	1.87	1.49
Sb (ug)	0.00 *	0.00	0.00 *	0.00 *
Se (ug)	1.64	1.32 *	1.32 *	1.32 *
Tl (ug)	-	-	-	-
Zn (ug)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used

the detection limit

If a Reagent Blank value was below the detection limit, subsequent calculations used

a value of 0.0

Method 29 Sample Analysis Summary

FSR#:	<u>499970</u>	Unit ID:	<u>Unit 4A</u>
Company:	<u>Georgia Power</u>	Location:	<u>Exhaust</u>
Plant:	<u>McDonough</u>	Test Date(s):	<u>October 12, 2022</u>

You must select an option in cell J54 & J55 for this sheet to function

Gross Back-half metals

	<u>Run 1</u>	<u>Run 2</u>	<u>Run 3</u>	<u>Run 4</u>	<u>Reagent Blank</u>
Ag (µg)	-	-	-	-	-
As (µg)	0.441	1.880	0.196	<	0.180
Ba (µg)	-	-	-	-	-
Be (µg)	<	0.047	<	0.047	<
Cd (µg)	0.04	0.089	0.052	0.095	<
Cr (µg)	1.03	0.778	0.877	0.545	<
Co (µg)	<	0.10	<	0.10	<
Cu (µg)	-	-	-	-	-
2B Hg (µg)	<	0.12	<	0.12	<
3A Hg (µg)	<	0.12	<	0.12	<
3B Hg (µg)	<	0.0438	<	0.0450	<
3C Hg (µg)	<	0.121	<	0.121	<
Mn (µg)	1.40	2.47	1.43	2.48	<
Ni (µg)	0.419	0.839	0.424	0.783	<
P (µg)	-	-	-	-	-
Pb (µg)	0.743	0.683	<	0.480	0.818
Sb (µg)	<	0.84	<	0.84	<
Se (µg)	0.745	0.617	0.645	0.780	<
Tl (µg)	-	-	-	-	-
Zn (µg)	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

Blank-corrected back-half metals

	<u>Run 1</u>	<u>Run 2</u>	<u>Run 3</u>	<u>Run 4</u>
Ag (µg)	-	-	-	-
As (µg)	0.44	1.88	0.20	0.18 *
Ba (µg)	-	-	-	-
Be (µg)	0.05 *	0.05 *	0.05 *	0.05 *
Cd (µg)	0.04	0.09	0.05	0.10
Cr (µg)	1.03	0.78	0.88	0.55
Co (µg)	0.10 *	0.10 *	0.10 *	0.10 *
Cu (µg)	-	-	-	-
Total Hg (front and back) (µg)	0.49	0.49	0.49	0.49
Mn (µg)	1.40	2.47	1.43	2.48
Ni (µg)	0.42	0.84	0.42	0.78
P (µg)	-	-	-	-
Pb (µg)	0.74	0.68	0.48 *	0.82
Sb (µg)	0.84 *	0.84 *	0.84 *	0.84 *
Se (µg)	0.75	0.62	0.65	0.78
Tl (µg)	-	-	-	-
Zn (µg)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used

the detection limit

Filterable Particulate Sample Analysis Summary	
--	--

Project#: 499970
 Company: Georgia Power
 Plant: McDonough

Unit ID: Unit 4A
 Location: Exhaust
 Test Date(s): 10/12/2022

You must select Y or N for each Run in Row 9

Filterable PM	Run 5	Run 6	Run 7	Run 8	Blank
Filter material collected in acetone rinse?	N	N	N	-	
Filter final - Filter tare (mg):	0.15	0.72	0.54	-	
Rinse volume, V_{aw} , (ml):	64.5	87.5	72.6	-	0.1
Rinse final - Rinse tare, m_a , (mg):	0.915	1.88	2.34	-	0.0
Rinse blank correction, W_a (mg)**:	0.00	0.00	0.00	-	
Total rinse mass (mg):	0.92	1.88	2.34	-	
*Total Filterable PM, m_n, (milligrams):	1.06	2.60	2.88	-	

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is \geq zero, subsequent calculations are performed using that value.

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is $<$ zero, subsequent calculations are performed using a value of 1 mg

* If filter material was not recovered in the acetone rinse, and the result from the lab for either fraction is $<$ zero, subsequent calculations are performed using a value of 0.5 mg for that fraction

** - the maximum allowable blank correction is 0.0079 mg/ml

Method 29 Sample Analysis Summary

Project#:	499970	Unit ID:	Unit 4A
Company:	Georgia Power	Location:	Exhaust
Plant:	McDonough	Test Date(s):	October 12, 2022

Filter Diameter (mm): 82 (NuTech)

	Gross front-half metals					Reagent Blank
	<u>Run 5</u>	<u>Run 6</u>	<u>Run 7</u>	<u>Run 8</u>		
Ag (ug)	-	-	-	-	-	-
As (ug)	< 1.78	< 1.78	< 1.78	-	< 0.00	
Ba (ug)	-	-	-	-	-	
Be (ug)	< 0.016	< 0.016	< 0.016	-	< 0.000	
Cd (ug)	< 0.28	8.20	< 0.28	-	< 0.00	
Cr (ug)	1.91	1.49	1.81	-	1.93	
Co (ug)	< 2.00	< 2.00	< 2.00	-	< 0.00	
Cu (ug)	-	-	-	-	-	
1B Hg (ug)	< 0.084	< 0.084	< 0.084	-	< 0.000	
Mn (ug)	1.02	1.16	1.26	-	< 0.00	
Ni (ug)	0.64	< 0.50	0.542	-	0.65	
P (ug)	-	-	-	-	-	
Pb (ug)	0.95	1.28	0.964	-	< 0.00	
Sb (ug)	< 1.10	< 1.10	< 1.10	-	1.63	
Se (ug)	< 1.32	< 1.32	< 1.32	-	< 0.00	
Tl (ug)	-	-	-	-	-	
Zn (ug)	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

	Blank-corrected front-half metals			
	<u>Run 5</u>	<u>Run 6</u>	<u>Run 7</u>	<u>Run 8</u>
Ag (ug)	-	-	-	-
As (ug)	1.78 *	1.78 *	1.78 *	-
Ba (ug)	-	-	-	-
Be (ug)	0.02 *	0.02 *	0.02 *	-
Cd (ug)	0.28 *	8.20	0.28 *	-
Cr (ug)	0.00	0.00	0.00	-
Co (ug)	2.00 *	2.00 *	2.00 *	-
Cu (ug)	-	-	-	-
1B Hg (ug)	N/A *	N/A *	N/A *	N/A
Mn (ug)	1.02	1.16	1.26	-
Ni (ug)	0.00	0.00 *	0.00	-
P (ug)	-	-	-	-
Pb (ug)	0.95	1.28	0.96	-
Sb (ug)	0.00 *	0.00 *	0.00 *	-
Se (ug)	1.32 *	1.32 *	1.32 *	-
Tl (ug)	-	-	-	-
Zn (ug)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used
If a Reagent Blank value was below the detection limit, subsequent calculations used

the detection limit
a value of 0.0

Method 29 Sample Analysis Summary

FSR#:	<u>499970</u>	Unit ID:	<u>Unit 4A</u>
Company:	<u>Georgia Power</u>	Location:	<u>Exhaust</u>
Plant:	<u>McDonough</u>	Test Date(s):	<u>October 12, 2022</u>

You must select an option in cell J54 & J55 for this sheet to function

Gross Back-half metals

	<u>Run 5</u>	<u>Run 6</u>	<u>Run 7</u>	<u>Run 8</u>	<u>Reagent Blank</u>
Ag (µg)	-	-	-	-	-
As (µg)	< 0.18	< 0.18	< 0.18	-	< 0.00
Ba (µg)	-	-	-	-	-
Be (µg)	< 0.047	< 0.047	< 0.047	-	< 0.000
Cd (µg)	< 0.018	0.028	0.019	-	< 0.000
Cr (µg)	1.02	0.457	1.05	-	< 0.00
Co (µg)	< 0.10	< 0.10	< 0.10	-	< 0.00
Cu (µg)	-	-	-	-	-
2B Hg (µg)	< 0.12	< 0.12	< 0.12	-	< 0.00
3A Hg (µg)	< 0.12	< 0.12	< 0.12	-	< 0.00
3B Hg (µg)	< 0.0474	< 0.0480	< 0.0468	-	< 0.0000
3C Hg (µg)	< 0.119	< 0.123	< 0.121	-	< 0.000
Mn (µg)	2.07	2.87	1.71	-	< 0.00
Ni (µg)	0.285	0.283	< 0.260	-	< 0.000
P (µg)	-	-	-	-	-
Pb (µg)	< 0.48	< 0.48	< 0.48	-	< 0.00
Sb (µg)	< 0.84	< 0.84	< 0.84	-	< 0.00
Se (µg)	0.521	0.419	0.590	-	< 0.000
Tl (µg)	-	-	-	-	-
Zn (µg)	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

Blank-corrected back-half metals

	<u>Run 5</u>	<u>Run 6</u>	<u>Run 7</u>	<u>Run 8</u>
Ag (µg)	-	-	-	-
As (µg)	0.18 *	0.18 *	0.18 *	-
Ba (µg)	-	-	-	-
Be (µg)	0.05 *	0.05 *	0.05 *	-
Cd (µg)	0.02 *	0.03	0.02	-
Cr (µg)	1.02	0.46	1.05	-
Co (µg)	0.10 *	0.10 *	0.10 *	-
Cu (µg)	-	-	-	-
Total Hg (front and back) (µg)	0.49	0.50	0.49	-
Mn (µg)	2.07	2.87	1.71	-
Ni (µg)	0.29	0.28	0.26 *	-
P (µg)	-	-	-	-
Pb (µg)	0.48 *	0.48 *	0.48 *	-
Sb (µg)	0.84 *	0.84 *	0.84 *	-
Se (µg)	0.52	0.42	0.59	-
Tl (µg)	-	-	-	-
Zn (µg)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used

the detection limit



eurofins

Environment Testing



ANALYTICAL REPORT

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

Laboratory Job ID: 140-29339-1

Client Project/Site: Georgia Power ICR - Unit 4A M5/M29

For:

TRC Environmental Corporation
3800 Colonnade
Suite 175
Birmingham, Alabama 35243

Attn: Jon Howard

Authorized for release by:

11/11/2022 1:39:31 PM

Courtney Adkins, Project Manager II
(865)291-3019

Courtney.Adkins@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

TRC Report Number 499970
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Default Detection Limits	20
QC Sample Results	22
QC Association Summary	27
Lab Chronicle	33
Certification Summary	51
Method Summary	52
Sample Summary	53
Chain of Custody	55

Definitions/Glossary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Job ID: 140-29339-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative

140-29339-1

Receipt

The samples were received on 10/21/2022 8:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 17.6° C.

Metals

Multi-Metals Train Preparation and Analysis

These stack gas samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0006 which is based on EPA SW-846 Method 0060, "Determination of Metals in Stack Emissions" and Method 29, "Determination of Metals Emissions from Stationary Sources". SW-846 Methods 6010C and 7470A as incorporated in Eurofins TestAmerica Knoxville standard operating procedures KNOX-MT-0007 and KNOX-MT-0009 were used to perform the final instrument analysis.

Acid digestion was performed on the front half particulate filter and the acetone and nitric acid probe rinse fractions separately using HNO₃ and HF. After digestion, the HF was sequestered using H₃BO₃ followed by another heating cycle. These digestates were combined, adjusted to final volume and analyzed by ICP. A portion of the ICP digestate was prepared for CVAA analysis in order to determine the particle-bound mercury. Results were calculated using the following equations:

$$\text{ICP Analyte, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume ICP Digestate, L})$$

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume ICP Digestate, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume ICP Digestate Used, mL})$$

The 5%HNO₃/10%H₂O₂ impinger samples were reduced in volume to 100 mL. A 20 milliliter portion of the concentrated sample was removed and processed for mercury. The remaining 80 mL of concentrated sample was digested using HNO₃ and H₂O₂, adjusted to a final volume of 80 mL, and analyzed by ICP. Results were calculated using the following equations:

$$\text{ICP Analyte, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume Concentrated Sample, L}) \times (\text{Final Volume ICP Digestate, mL} / \text{Volume Conc. Sample Digested, mL})$$

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume Concentrated Sample, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume Conc. Sample Digested, mL})$$

For the 0.1N HNO₃ rinse samples (empty impingers), a 2.5 milliliter portion of the sample as received was removed and processed for mercury.

The 4% KMnO₄/10%H₂SO₄ impinger samples were filtered to remove MnO₂, followed by removal of a 25 mL portion of filtrate for mercury processing. The filtered MnO₂ residue was digested in HCl, combined with the HCl rinse sample and analyzed for mercury.

Results for the 0.1N HNO₃ rinse samples and the KMnO₄ filtrate were calculated using the following equation:

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Total Sample Volume, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume Sample Digested, mL})$$

Results for the combined MnO₂ residue HCl digestates and HCl rinse samples were calculated as follows:

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Total Sample Volume, L} + \text{MnO}_2 \text{ HCl Volume, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume Sample Digested, mL})$$

Note: The total sample volume for the 5%HNO₃/10%H₂O₂ impinger samples is the final volume of the concentrated sample. The total TRC Report Number 499970

Case Narrative

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Job ID: 140-29339-1 (Continued)

Laboratory: Eurofins Knoxville (Continued)

sample volume for the combined MnO₂ residue HCl digestates and HCl rinse samples is equal to the total sample volume plus the MnO₂ HCl volume.

Method 29/6010C: The following samples were diluted due to the presence of Silicon which interferes with Arsenic, Cobalt, Lead, Nickel and Selenium: UNIT_4A-5-29_RUN1_CONT1,2,3 (140-29339-3), UNIT_4A-5-29_RUN2_CONT1,2,3 (140-29339-10), UNIT_4A-5-29_RUN3_CONT1,2,3 (140-29339-17), UNIT_4A-5-29_RUN4_CONT1,2,3 (140-29339-24), UNIT_4A-5-29_RUN5_CONT1,2,3 (140-29339-31), UNIT_4A-5-29_RUN6_CONT1,2,3 (140-29339-38), UNIT_4A-5-29_RUN7_CONT1,2,3 (140-29339-45) and FTRB-5-29_CONT1,2,3 (140-29339-52). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

Total Particulates: The measurement of the mass of particulate matter trapped by the particulate filter and probe rinse derived from an M-5 sampling train was performed using SOP number KNOX-WC-0006 (based on EPA Methods 0050 and 5). Microfiber filters and 150 mL beakers are carefully inspected and tare weighed to constant weight. After sample collection, the filters are dried, and then carefully weighed to constant weight to determine the mass of particulate matter trapped on the filters. The acetone probe rinse solution is evaporated to dryness, and then weighed to constant weight to determine the total particulate mass collected in the rinse. The total particulate mass collected by an M-5 train is the sum of the particulate filter and the acetone probe rinse residue weights.

Method 5: Sample filters UNIT_4A-5-29_RUN1_CONT1 (140-29339-1), UNIT_4A-5-29_RUN3_CONT1 (140-29339-15), UNIT_4A-5-29_RUN4_CONT1 (140-29339-22), UNIT_4A-5-29_RUN6_CONT1 (140-29339-36) and FTRB-5-29_CONT1 (140-29339-50) arrived with significant damage. Results may reflect a low bias.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN1_CONT1

Lab Sample ID: 140-29339-1

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT2

Lab Sample ID: 140-29339-2

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	7.44		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT1,2,3

Lab Sample ID: 140-29339-3

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 11:43	11/09/22 14:13	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 11:43	11/09/22 16:58	2
Beryllium	0.0180 J		0.500	0.0160	ug/Sample		11/04/22 11:43	11/09/22 14:13	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 11:43	11/09/22 14:13	1
Chromium	2.86		1.00	0.190	ug/Sample		11/04/22 11:43	11/09/22 14:13	1
Cobalt	4.05 J		10.0	2.00	ug/Sample		11/04/22 11:43	11/09/22 16:58	2
Lead	2.32		2.00	0.940	ug/Sample		11/04/22 11:43	11/09/22 16:58	2
Manganese	2.58		1.50	0.120	ug/Sample		11/04/22 11:43	11/09/22 14:13	1
Nickel	1.87 J		8.00	0.500	ug/Sample		11/04/22 11:43	11/09/22 16:58	2
Selenium	1.64 J		2.00	1.32	ug/Sample		11/04/22 11:43	11/09/22 16:58	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 11:43	11/08/22 14:18	1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT4

Lab Sample ID: 140-29339-4

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Arsenic	0.441 J		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Cadmium	0.0400 J		0.500	0.0180	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Chromium	1.03		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Lead	0.743 J		1.00	0.480	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Manganese	1.40 J		1.50	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Nickel	0.419 J		4.00	0.260	ug/Sample		11/01/22 08:00	11/09/22 12:06	1
Selenium	0.745 J		1.00	0.390	ug/Sample		11/01/22 08:00	11/09/22 12:06	1

Eurofins Knoxville

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN1_CONT4

Lab Sample ID: 140-29339-4

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 10:41	1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT5A

Lab Sample ID: 140-29339-5

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 16:45	1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT5B

Lab Sample ID: 140-29339-6

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.146	0.0438	ug/Sample		11/01/22 07:00	11/02/22 17:38	1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT5C

Lab Sample ID: 140-29339-7

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample		11/03/22 09:15	11/04/22 10:01	1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT1

Lab Sample ID: 140-29339-8

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT2

Lab Sample ID: 140-29339-9

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN2_CONT1,2,3

Lab Sample ID: 140-29339-10

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.10	J	6.00	1.10	ug/Sample	11/04/22 11:43	11/09/22 14:18		1
Arsenic	ND		2.00	1.78	ug/Sample	11/04/22 11:43	11/09/22 17:03		2
Beryllium	ND		0.500	0.0160	ug/Sample	11/04/22 11:43	11/09/22 14:18		1
Cadmium	ND		0.500	0.280	ug/Sample	11/04/22 11:43	11/09/22 14:18		1
Chromium	2.28		1.00	0.190	ug/Sample	11/04/22 11:43	11/09/22 14:18		1
Cobalt	ND		10.0	2.00	ug/Sample	11/04/22 11:43	11/09/22 17:03		2
Lead	1.48	J	2.00	0.940	ug/Sample	11/04/22 11:43	11/09/22 17:03		2
Manganese	1.02	J	1.50	0.120	ug/Sample	11/04/22 11:43	11/09/22 14:18		1
Nickel	0.748	J	8.00	0.500	ug/Sample	11/04/22 11:43	11/09/22 17:03		2
Selenium	ND		2.00	1.32	ug/Sample	11/04/22 11:43	11/09/22 17:03		2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample	11/04/22 11:43	11/08/22 14:20		1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT4

Lab Sample ID: 140-29339-11

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Arsenic	1.88		1.00	0.180	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Beryllium	ND		0.500	0.0470	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Cadmium	0.0890	J	0.500	0.0180	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Chromium	0.778	J	1.00	0.180	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Cobalt	ND		5.00	0.100	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Lead	0.683	J	1.00	0.480	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Manganese	2.47		1.50	0.180	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Nickel	0.839	J	4.00	0.260	ug/Sample	11/01/22 08:00	11/09/22 12:11		1
Selenium	0.617	J	1.00	0.390	ug/Sample	11/01/22 08:00	11/09/22 12:11		1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample	11/03/22 09:15	11/04/22 10:44		1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT5A

Lab Sample ID: 140-29339-12

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample	11/01/22 07:00	11/02/22 16:47		1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN2_CONT5B

Lab Sample ID: 140-29339-13

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.150	0.0450	ug/Sample		11/01/22 07:00	11/02/22 17:46	1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT5C

Lab Sample ID: 140-29339-14

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample		11/03/22 09:15	11/04/22 10:08	1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT1

Lab Sample ID: 140-29339-15

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT2

Lab Sample ID: 140-29339-16

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	3.12		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT1,2,3

Lab Sample ID: 140-29339-17

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 11:43	11/09/22 14:23	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 11:43	11/09/22 17:08	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 11:43	11/09/22 14:23	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 11:43	11/09/22 14:23	1
Chromium	2.30		1.00	0.190	ug/Sample		11/04/22 11:43	11/09/22 14:23	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 11:43	11/09/22 17:08	2
Lead	1.87 J		2.00	0.940	ug/Sample		11/04/22 11:43	11/09/22 17:08	2
Manganese	3.15		1.50	0.120	ug/Sample		11/04/22 11:43	11/09/22 14:23	1
Nickel	1.52 J		8.00	0.500	ug/Sample		11/04/22 11:43	11/09/22 17:08	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 11:43	11/09/22 17:08	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 11:43	11/08/22 14:23	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Lab Sample ID: 140-29339-18

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Arsenic	0.196 J		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Cadmium	0.0520 J		0.500	0.0180	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Chromium	0.877 J		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Manganese	1.43 J		1.50	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Nickel	0.424 J		4.00	0.260	ug/Sample		11/01/22 08:00	11/09/22 12:16	1
Selenium	0.645 J		1.00	0.390	ug/Sample		11/01/22 08:00	11/09/22 12:16	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 10:46	1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5A

Lab Sample ID: 140-29339-19

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 16:50	1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5B

Lab Sample ID: 140-29339-20

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.152	0.0456	ug/Sample		11/01/22 07:00	11/02/22 17:48	1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5C

Lab Sample ID: 140-29339-21

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample		11/03/22 09:15	11/04/22 10:11	1

Client Sample ID: UNIT_4A-5-29_RUN4_CONT1

Lab Sample ID: 140-29339-22

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN4_CONT2

Lab Sample ID: 140-29339-23

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	12.5		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4A-5-29_RUN4_CONT1,2,3

Lab Sample ID: 140-29339-24

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample			11/09/22 14:38	1
Arsenic	ND		2.00	1.78	ug/Sample			11/09/22 17:23	2
Beryllium	ND		0.500	0.0160	ug/Sample			11/09/22 14:38	1
Cadmium	4.45		0.500	0.280	ug/Sample			11/09/22 14:38	1
Chromium	2.51		1.00	0.190	ug/Sample			11/09/22 14:38	1
Cobalt	ND		10.0	2.00	ug/Sample			11/09/22 17:23	2
Lead	1.49 J		2.00	0.940	ug/Sample			11/09/22 17:23	2
Manganese	1.42 J		1.50	0.120	ug/Sample			11/09/22 14:38	1
Nickel	1.33 J		8.00	0.500	ug/Sample			11/09/22 17:23	2
Selenium	ND		2.00	1.32	ug/Sample			11/09/22 17:23	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample			11/08/22 14:31	1

Client Sample ID: UNIT_4A-5-29_RUN4_CONT4

Lab Sample ID: 140-29339-25

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample			11/09/22 12:30	1
Arsenic	ND		1.00	0.180	ug/Sample			11/09/22 12:30	1
Beryllium	ND		0.500	0.0470	ug/Sample			11/09/22 12:30	1
Cadmium	0.0950 J		0.500	0.0180	ug/Sample			11/09/22 12:30	1
Chromium	0.545 J		1.00	0.180	ug/Sample			11/09/22 12:30	1
Cobalt	ND		5.00	0.100	ug/Sample			11/09/22 12:30	1
Lead	0.818 J		1.00	0.480	ug/Sample			11/09/22 12:30	1
Manganese	2.48		1.50	0.180	ug/Sample			11/09/22 12:30	1
Nickel	0.783 J		4.00	0.260	ug/Sample			11/09/22 12:30	1
Selenium	0.780 J		1.00	0.390	ug/Sample			11/09/22 12:30	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample			11/04/22 10:54	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN4_CONT5A

Lab Sample ID: 140-29339-26

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 16:57	1

Client Sample ID: UNIT_4A-5-29_RUN4_CONT5B

Lab Sample ID: 140-29339-27

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.154	0.0462	ug/Sample		11/01/22 07:00	11/02/22 17:56	1

Client Sample ID: UNIT_4A-5-29_RUN4_CONT5C

Lab Sample ID: 140-29339-28

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample		11/03/22 09:15	11/04/22 10:18	1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT1

Lab Sample ID: 140-29339-29

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT2

Lab Sample ID: 140-29339-30

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	0.915		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT1,2,3

Lab Sample ID: 140-29339-31

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 11:43	11/09/22 14:58	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 11:43	11/09/22 17:28	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 11:43	11/09/22 14:58	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 11:43	11/09/22 14:58	1
Chromium	1.91		1.00	0.190	ug/Sample		11/04/22 11:43	11/09/22 14:58	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 11:43	11/09/22 17:28	2

Eurofins Knoxville

TRC Report Number 499970

387 of 628

GPC Plant McDonough ICR Testing

Page 12 of 59

11/11/2022

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN5_CONT1,2,3

Lab Sample ID: 140-29339-31

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.950	J	2.00	0.940	ug/Sample		11/04/22 11:43	11/09/22 17:28	2
Manganese	1.02	J	1.50	0.120	ug/Sample		11/04/22 11:43	11/09/22 14:58	1
Nickel	0.640	J	8.00	0.500	ug/Sample		11/04/22 11:43	11/09/22 17:28	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 11:43	11/09/22 17:28	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 11:43	11/08/22 14:38	1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT4

Lab Sample ID: 140-29339-32

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Chromium	1.02		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Manganese	2.07		1.50	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Nickel	0.285	J	4.00	0.260	ug/Sample		11/01/22 08:00	11/09/22 12:35	1
Selenium	0.521	J	1.00	0.390	ug/Sample		11/01/22 08:00	11/09/22 12:35	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 10:56	1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT5A

Lab Sample ID: 140-29339-33

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 17:00	1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT5B

Lab Sample ID: 140-29339-34

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.158	0.0474	ug/Sample		11/01/22 07:00	11/02/22 17:58	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN5_CONT5C

Lab Sample ID: 140-29339-35

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.270	0.119	ug/Sample		11/03/22 09:15	11/04/22 10:21	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT1

Lab Sample ID: 140-29339-36

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	0.720		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT2

Lab Sample ID: 140-29339-37

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	1.88		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT1,2,3

Lab Sample ID: 140-29339-38

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 11:43	11/09/22 15:03	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 11:43	11/09/22 17:33	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 11:43	11/09/22 15:03	1
Cadmium	8.20		0.500	0.280	ug/Sample		11/04/22 11:43	11/09/22 15:03	1
Chromium	1.49		1.00	0.190	ug/Sample		11/04/22 11:43	11/09/22 15:03	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 11:43	11/09/22 17:33	2
Lead	1.28 J		2.00	0.940	ug/Sample		11/04/22 11:43	11/09/22 17:33	2
Manganese	1.16 J		1.50	0.120	ug/Sample		11/04/22 11:43	11/09/22 15:03	1
Nickel	ND		8.00	0.500	ug/Sample		11/04/22 11:43	11/09/22 17:33	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 11:43	11/09/22 17:33	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 11:43	11/08/22 14:41	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT4

Lab Sample ID: 140-29339-39

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:55	1

Eurofins Knoxville

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN6_CONT4

Lab Sample ID: 140-29339-39

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Cadmium	0.0280 J		0.500	0.0180	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Chromium	0.457 J		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Manganese	2.87		1.50	0.180	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Nickel	0.283 J		4.00	0.260	ug/Sample		11/01/22 08:00	11/09/22 12:55	1
Selenium	0.419 J		1.00	0.390	ug/Sample		11/01/22 08:00	11/09/22 12:55	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 10:59	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT5A

Lab Sample ID: 140-29339-40

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 17:02	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT5B

Lab Sample ID: 140-29339-41

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		11/01/22 07:00	11/02/22 18:01	1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT5C

Lab Sample ID: 140-29339-42

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.280	0.123	ug/Sample		11/03/22 09:15	11/04/22 10:23	1

Client Sample ID: UNIT_4A-5-29_RUN7_CONT1

Lab Sample ID: 140-29339-43

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	0.540		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN7_CONT2

Lab Sample ID: 140-29339-44

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	2.34		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4A-5-29_RUN7_CONT1,2,3

Lab Sample ID: 140-29339-45

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample			11/09/22 15:08	1
Arsenic	ND		2.00	1.78	ug/Sample			11/09/22 17:38	2
Beryllium	ND		0.500	0.0160	ug/Sample			11/09/22 15:08	1
Cadmium	ND		0.500	0.280	ug/Sample			11/09/22 15:08	1
Chromium	1.81		1.00	0.190	ug/Sample			11/09/22 15:08	1
Cobalt	ND		10.0	2.00	ug/Sample			11/09/22 17:38	2
Lead	0.964 J		2.00	0.940	ug/Sample			11/09/22 17:38	2
Manganese	1.26 J		1.50	0.120	ug/Sample			11/09/22 15:08	1
Nickel	0.542 J		8.00	0.500	ug/Sample			11/09/22 17:38	2
Selenium	ND		2.00	1.32	ug/Sample			11/09/22 17:38	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample			11/08/22 14:43	1

Client Sample ID: UNIT_4A-5-29_RUN7_CONT4

Lab Sample ID: 140-29339-46

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample			11/09/22 13:00	1
Arsenic	ND		1.00	0.180	ug/Sample			11/09/22 13:00	1
Beryllium	ND		0.500	0.0470	ug/Sample			11/09/22 13:00	1
Cadmium	0.0190 J		0.500	0.0180	ug/Sample			11/09/22 13:00	1
Chromium	1.05		1.00	0.180	ug/Sample			11/09/22 13:00	1
Cobalt	ND		5.00	0.100	ug/Sample			11/09/22 13:00	1
Lead	ND		1.00	0.480	ug/Sample			11/09/22 13:00	1
Manganese	1.71		1.50	0.180	ug/Sample			11/09/22 13:00	1
Nickel	ND		4.00	0.260	ug/Sample			11/09/22 13:00	1
Selenium	0.590 J		1.00	0.390	ug/Sample			11/09/22 13:00	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample			11/04/22 11:02	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN7_CONT5A

Lab Sample ID: 140-29339-47

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 17:05	1

Client Sample ID: UNIT_4A-5-29_RUN7_CONT5B

Lab Sample ID: 140-29339-48

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.156	0.0468	ug/Sample		11/01/22 07:00	11/02/22 18:03	1

Client Sample ID: UNIT_4A-5-29_RUN7_CONT5C

Lab Sample ID: 140-29339-49

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample		11/03/22 09:15	11/04/22 10:26	1

Client Sample ID: FTRB-5-29_CONT1

Lab Sample ID: 140-29339-50

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	1.18		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: FTRB-5-29_CONT2

Lab Sample ID: 140-29339-51

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: FTRB-5-29_CONT1,2,3

Lab Sample ID: 140-29339-52

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 11:43	11/09/22 15:13	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 11:43	11/09/22 18:02	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 11:43	11/09/22 15:13	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 11:43	11/09/22 15:13	1
Chromium	1.32		1.00	0.190	ug/Sample		11/04/22 11:43	11/09/22 15:13	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 11:43	11/09/22 18:02	2

Eurofins Knoxville

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: FTRB-5-29_CONT1,2,3

Lab Sample ID: 140-29339-52

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.00	0.940	ug/Sample		11/04/22 11:43	11/09/22 18:02	2
Manganese	4.87		1.50	0.120	ug/Sample		11/04/22 11:43	11/09/22 15:13	1
Nickel	ND		8.00	0.500	ug/Sample		11/04/22 11:43	11/09/22 18:02	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 11:43	11/09/22 18:02	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 11:43	11/08/22 14:46	1

Client Sample ID: FTRB-5-29_CONT4

Lab Sample ID: 140-29339-53

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Chromium	0.217 J		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Manganese	0.470 J		1.50	0.180	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Nickel	ND		4.00	0.260	ug/Sample		11/01/22 08:00	11/09/22 13:05	1
Selenium	ND		1.00	0.390	ug/Sample		11/01/22 08:00	11/09/22 13:05	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:09	1

Client Sample ID: FTRB-5-29_CONT5A

Lab Sample ID: 140-29339-54

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/01/22 07:00	11/02/22 17:07	1

Client Sample ID: FTRB-5-29_CONT5B

Lab Sample ID: 140-29339-55

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		11/01/22 07:00	11/02/22 18:06	1

Client Sample Results

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: FTRB-5-29_CONT5C

Lab Sample ID: 140-29339-56

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.150	0.0660	ug/Sample		11/03/22 09:15	11/04/22 10:28	1

Default Detection Limits

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Method: 29/6010C - Metals (ICP), Stationary Source

Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Antimony	6.00	0.840	ug/Sample
Arsenic	1.00	0.180	ug/Sample
Beryllium	0.500	0.0470	ug/Sample
Cadmium	0.500	0.0180	ug/Sample
Chromium	1.00	0.180	ug/Sample
Cobalt	5.00	0.100	ug/Sample
Lead	1.00	0.480	ug/Sample
Manganese	1.50	0.180	ug/Sample
Nickel	4.00	0.260	ug/Sample
Selenium	1.00	0.390	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source

Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Antimony	6.00	1.10	ug/Sample
Arsenic	1.00	0.890	ug/Sample
Beryllium	0.500	0.0160	ug/Sample
Cadmium	0.500	0.280	ug/Sample
Chromium	1.00	0.190	ug/Sample
Cobalt	5.00	1.00	ug/Sample
Lead	1.00	0.470	ug/Sample
Manganese	1.50	0.120	ug/Sample
Nickel	4.00	0.250	ug/Sample
Selenium	1.00	0.660	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Mercury	0.400	0.120	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (Empty)

Analyte	RL	MDL	Units
Mercury	0.200	0.0600	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Mercury	0.200	0.0840	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (HCl)

Analyte	RL	MDL	Units
Mercury	0.0500	0.0220	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (KMnO4)

Analyte	RL	MDL	Units
Mercury	0.0200	0.00600	ug/Sample

Default Detection Limits

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

General Chemistry

Analyte	RL	MDL	Units
Particulates, Total	0.500	0.500	mg/sample

QC Sample Results

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Method: 29/6010C - Metals (ICP), Stationary Source

Lab Sample ID: MB 140-66892/1-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Chromium	ND		1.00	0.180	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Manganese	ND		1.50	0.180	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Nickel	ND		4.00	0.260	ug/Sample		11/01/22 08:00	11/09/22 10:52	1
Selenium	ND		1.00	0.390	ug/Sample		11/01/22 08:00	11/09/22 10:52	1

Lab Sample ID: LCS 140-66892/2-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66892

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Antimony		50.0	50.17		ug/Sample		100	80 - 120	
Arsenic		10.0	10.12		ug/Sample		101	80 - 120	
Beryllium		5.00	5.180		ug/Sample		104	80 - 120	
Cadmium		5.00	5.045		ug/Sample		101	80 - 120	
Chromium		20.0	20.18		ug/Sample		101	80 - 120	
Cobalt		10.0	10.16		ug/Sample		102	80 - 120	
Lead		10.0	9.560		ug/Sample		96	80 - 120	
Manganese		10.0	9.741		ug/Sample		97	80 - 120	
Nickel		50.0	51.34		ug/Sample		103	80 - 120	
Selenium		15.0	14.63		ug/Sample		98	80 - 120	

Lab Sample ID: LCSD 140-66892/3-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66892

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony		50.0	50.28		ug/Sample		101	80 - 120	0	20
Arsenic		10.0	10.09		ug/Sample		101	80 - 120	0	20
Beryllium		5.00	5.102		ug/Sample		102	80 - 120	2	20
Cadmium		5.00	4.986		ug/Sample		100	80 - 120	1	20
Chromium		20.0	19.73		ug/Sample		99	80 - 120	2	20
Cobalt		10.0	10.10		ug/Sample		101	80 - 120	1	20
Lead		10.0	9.365		ug/Sample		94	80 - 120	2	20
Manganese		10.0	9.561		ug/Sample		96	80 - 120	2	20
Nickel		50.0	50.95		ug/Sample		102	80 - 120	1	20
Selenium		15.0	14.53		ug/Sample		97	80 - 120	1	20

Lab Sample ID: MB 140-67012/1-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67012

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 11:43	11/09/22 11:07	1

QC Sample Results

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: MB 140-67012/1-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67012

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.00	0.890	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Chromium	ND		1.00	0.190	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Cobalt	ND		5.00	1.00	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Lead	ND		1.00	0.470	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Manganese	ND		1.50	0.120	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Nickel	ND		4.00	0.250	ug/Sample		11/04/22 11:43	11/09/22 11:07	1
Selenium	ND		1.00	0.660	ug/Sample		11/04/22 11:43	11/09/22 11:07	1

Lab Sample ID: LCS 140-67012/2-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67012

Analyte	Spike Added	LCS		Unit	D	%Rec		Limits
		Result	Qualifier			%Rec	Limits	
Antimony	50.0	52.36		ug/Sample		105	80 - 120	
Arsenic	10.0	10.93		ug/Sample		109	80 - 120	
Beryllium	5.00	4.945		ug/Sample		99	80 - 120	
Cadmium	5.00	5.062		ug/Sample		101	80 - 120	
Chromium	20.0	19.93		ug/Sample		100	80 - 120	
Cobalt	10.0	10.27		ug/Sample		103	80 - 120	
Lead	10.0	9.702		ug/Sample		97	80 - 120	
Manganese	10.0	9.657		ug/Sample		97	80 - 120	
Nickel	50.0	52.15		ug/Sample		104	80 - 120	
Selenium	15.0	14.75		ug/Sample		98	80 - 120	

Lab Sample ID: LCSD 140-67012/3-A

Matrix: Air

Analysis Batch: 67294

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67012

Analyte	Spike Added	LCSD		Unit	D	%Rec		RPD	Limit
		Result	Qualifier			%Rec	Limits		
Antimony	50.0	52.41		ug/Sample		105	80 - 120	0	20
Arsenic	10.0	10.83		ug/Sample		108	80 - 120	1	20
Beryllium	5.00	4.922		ug/Sample		98	80 - 120	0	20
Cadmium	5.00	5.005		ug/Sample		100	80 - 120	1	20
Chromium	20.0	19.75		ug/Sample		99	80 - 120	1	20
Cobalt	10.0	10.19		ug/Sample		102	80 - 120	1	20
Lead	10.0	9.418		ug/Sample		94	80 - 120	3	20
Manganese	10.0	9.626		ug/Sample		96	80 - 120	0	20
Nickel	50.0	51.59		ug/Sample		103	80 - 120	1	20
Selenium	15.0	14.69		ug/Sample		98	80 - 120	0	20

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: MB 140-66818/1-B

Matrix: Air

Analysis Batch: 66987

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0200	0.00600	ug/Sample		11/01/22 07:00	11/02/22 17:15	1

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: LCS 140-66818/2-B

Matrix: Air

Analysis Batch: 66987

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.500	0.5064		ug/Sample	101		80 - 120

Lab Sample ID: 140-29339-20 MS

Matrix: Air

Analysis Batch: 66987

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5B

Prep Type: Total/NA

Prep Batch: 66878

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.760	0.7874		ug/Sample	104		80 - 120

Lab Sample ID: 140-29339-20 MSD

Matrix: Air

Analysis Batch: 66987

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5B

Prep Type: Total/NA

Prep Batch: 66878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Mercury	ND		0.760	0.7822		ug/Sample	103		80 - 120	1 20

Lab Sample ID: MB 140-66821/1-B

Matrix: Air

Analysis Batch: 67055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66879

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	0.0220	ug/Sample		11/03/22 09:15	11/04/22 09:36	1

Lab Sample ID: LCS 140-66821/2-B

Matrix: Air

Analysis Batch: 67055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.25	1.266		ug/Sample	101		80 - 120

Lab Sample ID: 140-29339-21 MS

Matrix: Air

Analysis Batch: 67055

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5C

Prep Type: Total/NA

Prep Batch: 66879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.38	1.458		ug/Sample	106		80 - 120

Lab Sample ID: 140-29339-21 MSD

Matrix: Air

Analysis Batch: 67055

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5C

Prep Type: Total/NA

Prep Batch: 66879

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Mercury	ND		1.38	1.436		ug/Sample	104		80 - 120	2 20

Lab Sample ID: MB 140-66815/1-B

Matrix: Air

Analysis Batch: 66987

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66880

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0600	ug/Sample		11/01/22 07:00	11/02/22 16:17	1

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: LCS 140-66815/2-B

Matrix: Air

Analysis Batch: 66987

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.097		ug/Sample	102		80 - 120

Lab Sample ID: 140-29339-19 MS

Matrix: Air

Analysis Batch: 66987

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5A

Prep Type: Total/NA

Prep Batch: 66880

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		2.00	2.105		ug/Sample	105		80 - 120

Lab Sample ID: 140-29339-19 MSD

Matrix: Air

Analysis Batch: 66987

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5A

Prep Type: Total/NA

Prep Batch: 66880

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Mercury	ND		2.00	2.022		ug/Sample	101		80 - 120	4 20

Lab Sample ID: MB 140-66985/1-B

Matrix: Air

Analysis Batch: 67055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66986

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 10:31	1

Lab Sample ID: LCS 140-66985/2-B

Matrix: Air

Analysis Batch: 67055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	10.0	10.23		ug/Sample	102		80 - 120

Lab Sample ID: 140-29339-18 MS

Matrix: Air

Analysis Batch: 67055

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Prep Type: Total/NA

Prep Batch: 66986

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		2.00	2.012		ug/Sample	101		80 - 120

Lab Sample ID: 140-29339-18 MSD

Matrix: Air

Analysis Batch: 67055

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Prep Type: Total/NA

Prep Batch: 66986

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Mercury	ND		2.00	2.005		ug/Sample	100		80 - 120	0 20

Lab Sample ID: MB 140-67012/1-B

Matrix: Air

Analysis Batch: 67216

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67012

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 11:43	11/08/22 14:08	1

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: LCS 140-67012/2-B

Matrix: Air

Analysis Batch: 67216

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67012

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.959		ug/Sample	99	80 - 120	

Lab Sample ID: LCSD 140-67012/3-B

Matrix: Air

Analysis Batch: 67216

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67012

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.957		ug/Sample	99	80 - 120		0	20

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Metals

Pre Prep Batch: 66815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-5	UNIT_4A-5-29_RUN1_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-12	UNIT_4A-5-29_RUN2_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-19	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-26	UNIT_4A-5-29_RUN4_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-33	UNIT_4A-5-29_RUN5_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-40	UNIT_4A-5-29_RUN6_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-47	UNIT_4A-5-29_RUN7_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-54	FTRB-5-29_CONT5A	Total/NA	Air	Air Train Vol.	
MB 140-66815/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-66815/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29339-19 MS	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	Air Train Vol.	
140-29339-19 MSD	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 66818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-6	UNIT_4A-5-29_RUN1_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-13	UNIT_4A-5-29_RUN2_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-20	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-27	UNIT_4A-5-29_RUN4_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-34	UNIT_4A-5-29_RUN5_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-41	UNIT_4A-5-29_RUN6_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-48	UNIT_4A-5-29_RUN7_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-55	FTRB-5-29_CONT5B	Total/NA	Air	Air Train Vol.	
MB 140-66818/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-66818/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29339-20 MS	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	Air Train Vol.	
140-29339-20 MSD	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 66821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-7	UNIT_4A-5-29_RUN1_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-14	UNIT_4A-5-29_RUN2_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-21	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-28	UNIT_4A-5-29_RUN4_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-35	UNIT_4A-5-29_RUN5_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-42	UNIT_4A-5-29_RUN6_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-49	UNIT_4A-5-29_RUN7_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-56	FTRB-5-29_CONT5C	Total/NA	Air	Air Train Vol.	
MB 140-66821/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-66821/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29339-21 MS	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	Air Train Vol.	
140-29339-21 MSD	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	Air Train Vol.	

Prep Batch: 66878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-6	UNIT_4A-5-29_RUN1_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-13	UNIT_4A-5-29_RUN2_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-20	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Metals (Continued)

Prep Batch: 66878 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-27	UNIT_4A-5-29_RUN4_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-34	UNIT_4A-5-29_RUN5_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-41	UNIT_4A-5-29_RUN6_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-48	UNIT_4A-5-29_RUN7_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-55	FTRB-5-29_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
MB 140-66818/1-B	Method Blank	Total/NA	Air	AT Prep (KMnO4)	66818
LCS 140-66818/2-B	Lab Control Sample	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-20 MS	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818
140-29339-20 MSD	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	AT Prep (KMnO4)	66818

Prep Batch: 66879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-7	UNIT_4A-5-29_RUN1_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-14	UNIT_4A-5-29_RUN2_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-21	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-28	UNIT_4A-5-29_RUN4_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-35	UNIT_4A-5-29_RUN5_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-42	UNIT_4A-5-29_RUN6_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-49	UNIT_4A-5-29_RUN7_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-56	FTRB-5-29_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
MB 140-66821/1-B	Method Blank	Total/NA	Air	AT Prep (HCl)	66821
LCS 140-66821/2-B	Lab Control Sample	Total/NA	Air	AT Prep (HCl)	66821
140-29339-21 MS	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	AT Prep (HCl)	66821
140-29339-21 MSD	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	AT Prep (HCl)	66821

Prep Batch: 66880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-5	UNIT_4A-5-29_RUN1_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-12	UNIT_4A-5-29_RUN2_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-19	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-26	UNIT_4A-5-29_RUN4_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-33	UNIT_4A-5-29_RUN5_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-40	UNIT_4A-5-29_RUN6_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-47	UNIT_4A-5-29_RUN7_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-54	FTRB-5-29_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
MB 140-66815/1-B	Method Blank	Total/NA	Air	AT Prep (Empty)	66815
LCS 140-66815/2-B	Lab Control Sample	Total/NA	Air	AT Prep (Empty)	66815
140-29339-19 MS	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	AT Prep (Empty)	66815
140-29339-19 MSD	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	AT Prep (Empty)	66815

Prep Batch: 66892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-4	UNIT_4A-5-29_RUN1_CONT4	Total/NA	Air	AT Prep (BH)	
140-29339-11	UNIT_4A-5-29_RUN2_CONT4	Total/NA	Air	AT Prep (BH)	

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Metals (Continued)

Prep Batch: 66892 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-18	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	AT Prep (BH)	
140-29339-25	UNIT_4A-5-29_RUN4_CONT4	Total/NA	Air	AT Prep (BH)	
140-29339-32	UNIT_4A-5-29_RUN5_CONT4	Total/NA	Air	AT Prep (BH)	
140-29339-39	UNIT_4A-5-29_RUN6_CONT4	Total/NA	Air	AT Prep (BH)	
140-29339-46	UNIT_4A-5-29_RUN7_CONT4	Total/NA	Air	AT Prep (BH)	
140-29339-53	FTRB-5-29_CONT4	Total/NA	Air	AT Prep (BH)	
MB 140-66892/1-A	Method Blank	Total/NA	Air	AT Prep (BH)	
LCS 140-66892/2-A	Lab Control Sample	Total/NA	Air	AT Prep (BH)	
LCSD 140-66892/3-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (BH)	

Pre Prep Batch: 66985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-4	UNIT_4A-5-29_RUN1_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-11	UNIT_4A-5-29_RUN2_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-18	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-25	UNIT_4A-5-29_RUN4_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-32	UNIT_4A-5-29_RUN5_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-39	UNIT_4A-5-29_RUN6_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-46	UNIT_4A-5-29_RUN7_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-53	FTRB-5-29_CONT4	Total/NA	Air	Air Train Vol.	
MB 140-66985/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-66985/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29339-18 MS	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	Air Train Vol.	
140-29339-18 MSD	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	Air Train Vol.	

Prep Batch: 66986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-4	UNIT_4A-5-29_RUN1_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-11	UNIT_4A-5-29_RUN2_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-18	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-25	UNIT_4A-5-29_RUN4_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-32	UNIT_4A-5-29_RUN5_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-39	UNIT_4A-5-29_RUN6_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-46	UNIT_4A-5-29_RUN7_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-53	FTRB-5-29_CONT4	Total/NA	Air	AT Prep (BH)	66985
MB 140-66985/1-B	Method Blank	Total/NA	Air	AT Prep (BH)	66985
LCS 140-66985/2-B	Lab Control Sample	Total/NA	Air	AT Prep (BH)	66985
140-29339-18 MS	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29339-18 MSD	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	AT Prep (BH)	66985

Analysis Batch: 66987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-5	UNIT_4A-5-29_RUN1_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-6	UNIT_4A-5-29_RUN1_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-12	UNIT_4A-5-29_RUN2_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-13	UNIT_4A-5-29_RUN2_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-19	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-20	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-26	UNIT_4A-5-29_RUN4_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-27	UNIT_4A-5-29_RUN4_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-33	UNIT_4A-5-29_RUN5_CONT5A	Total/NA	Air	29/7470A	66880

Eurofins Knoxville

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Metals (Continued)

Analysis Batch: 66987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-34	UNIT_4A-5-29_RUN5_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-40	UNIT_4A-5-29_RUN6_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-41	UNIT_4A-5-29_RUN6_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-47	UNIT_4A-5-29_RUN7_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-48	UNIT_4A-5-29_RUN7_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-54	FTRB-5-29_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-55	FTRB-5-29_CONT5B	Total/NA	Air	29/7470A	66878
MB 140-66815/1-B	Method Blank	Total/NA	Air	29/7470A	66880
MB 140-66818/1-B	Method Blank	Total/NA	Air	29/7470A	66878
LCS 140-66815/2-B	Lab Control Sample	Total/NA	Air	29/7470A	66880
LCS 140-66818/2-B	Lab Control Sample	Total/NA	Air	29/7470A	66878
140-29339-19 MS	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-19 MSD	UNIT_4A-5-29_RUN3_CONT5A	Total/NA	Air	29/7470A	66880
140-29339-20 MS	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	29/7470A	66878
140-29339-20 MSD	UNIT_4A-5-29_RUN3_CONT5B	Total/NA	Air	29/7470A	66878

Prep Batch: 67012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-3	UNIT_4A-5-29_RUN1_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-10	UNIT_4A-5-29_RUN2_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-17	UNIT_4A-5-29_RUN3_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-24	UNIT_4A-5-29_RUN4_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-31	UNIT_4A-5-29_RUN5_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-38	UNIT_4A-5-29_RUN6_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-45	UNIT_4A-5-29_RUN7_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29339-52	FTRB-5-29_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
MB 140-67012/1-A	Method Blank	Total/NA	Air	AT Prep (FH)	
MB 140-67012/1-B	Method Blank	Total/NA	Air	AT Prep (FH)	
LCS 140-67012/2-A	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCS 140-67012/2-B	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCSD 140-67012/3-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	
LCSD 140-67012/3-B	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	

Analysis Batch: 67055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-4	UNIT_4A-5-29_RUN1_CONT4	Total/NA	Air	29/7470A	66986
140-29339-7	UNIT_4A-5-29_RUN1_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-11	UNIT_4A-5-29_RUN2_CONT4	Total/NA	Air	29/7470A	66986
140-29339-14	UNIT_4A-5-29_RUN2_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-18	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	29/7470A	66986
140-29339-21	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-25	UNIT_4A-5-29_RUN4_CONT4	Total/NA	Air	29/7470A	66986
140-29339-28	UNIT_4A-5-29_RUN4_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-32	UNIT_4A-5-29_RUN5_CONT4	Total/NA	Air	29/7470A	66986
140-29339-35	UNIT_4A-5-29_RUN5_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-39	UNIT_4A-5-29_RUN6_CONT4	Total/NA	Air	29/7470A	66986
140-29339-42	UNIT_4A-5-29_RUN6_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-46	UNIT_4A-5-29_RUN7_CONT4	Total/NA	Air	29/7470A	66986
140-29339-49	UNIT_4A-5-29_RUN7_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-53	FTRB-5-29_CONT4	Total/NA	Air	29/7470A	66986
140-29339-56	FTRB-5-29_CONT5C	Total/NA	Air	29/7470A	66879

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Metals (Continued)

Analysis Batch: 67055 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 140-66821/1-B	Method Blank	Total/NA	Air	29/7470A	66879
MB 140-66985/1-B	Method Blank	Total/NA	Air	29/7470A	66986
LCS 140-66821/2-B	Lab Control Sample	Total/NA	Air	29/7470A	66879
LCS 140-66985/2-B	Lab Control Sample	Total/NA	Air	29/7470A	66986
140-29339-18 MS	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	29/7470A	66986
140-29339-18 MSD	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	29/7470A	66986
140-29339-21 MS	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	29/7470A	66879
140-29339-21 MSD	UNIT_4A-5-29_RUN3_CONT5C	Total/NA	Air	29/7470A	66879

Cleanup Batch: 67109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-3	UNIT_4A-5-29_RUN1_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-10	UNIT_4A-5-29_RUN2_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-17	UNIT_4A-5-29_RUN3_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-24	UNIT_4A-5-29_RUN4_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-31	UNIT_4A-5-29_RUN5_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-38	UNIT_4A-5-29_RUN6_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-45	UNIT_4A-5-29_RUN7_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
140-29339-52	FTRB-5-29_CONT1,2,3	Total/NA	Air	AT Prep FH	67012
MB 140-67012/1-B	Method Blank	Total/NA	Air	AT Prep FH	67012
LCS 140-67012/2-B	Lab Control Sample	Total/NA	Air	AT Prep FH	67012
LCSD 140-67012/3-B	Lab Control Sample Dup	Total/NA	Air	AT Prep FH	67012

Analysis Batch: 67216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-3	UNIT_4A-5-29_RUN1_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-10	UNIT_4A-5-29_RUN2_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-17	UNIT_4A-5-29_RUN3_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-24	UNIT_4A-5-29_RUN4_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-31	UNIT_4A-5-29_RUN5_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-38	UNIT_4A-5-29_RUN6_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-45	UNIT_4A-5-29_RUN7_CONT1,2,3	Total/NA	Air	29/7470A	67109
140-29339-52	FTRB-5-29_CONT1,2,3	Total/NA	Air	29/7470A	67109
MB 140-67012/1-B	Method Blank	Total/NA	Air	29/7470A	67109
LCS 140-67012/2-B	Lab Control Sample	Total/NA	Air	29/7470A	67109
LCSD 140-67012/3-B	Lab Control Sample Dup	Total/NA	Air	29/7470A	67109

Analysis Batch: 67294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-3	UNIT_4A-5-29_RUN1_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-3	UNIT_4A-5-29_RUN1_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-4	UNIT_4A-5-29_RUN1_CONT4	Total/NA	Air	29/6010C	66892
140-29339-10	UNIT_4A-5-29_RUN2_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-10	UNIT_4A-5-29_RUN2_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-11	UNIT_4A-5-29_RUN2_CONT4	Total/NA	Air	29/6010C	66892
140-29339-17	UNIT_4A-5-29_RUN3_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-17	UNIT_4A-5-29_RUN3_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-18	UNIT_4A-5-29_RUN3_CONT4	Total/NA	Air	29/6010C	66892
140-29339-24	UNIT_4A-5-29_RUN4_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-24	UNIT_4A-5-29_RUN4_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-25	UNIT_4A-5-29_RUN4_CONT4	Total/NA	Air	29/6010C	66892

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Metals (Continued)

Analysis Batch: 67294 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-31	UNIT_4A-5-29_RUN5_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-31	UNIT_4A-5-29_RUN5_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-32	UNIT_4A-5-29_RUN5_CONT4	Total/NA	Air	29/6010C	66892
140-29339-38	UNIT_4A-5-29_RUN6_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-38	UNIT_4A-5-29_RUN6_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-39	UNIT_4A-5-29_RUN6_CONT4	Total/NA	Air	29/6010C	66892
140-29339-45	UNIT_4A-5-29_RUN7_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-45	UNIT_4A-5-29_RUN7_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-46	UNIT_4A-5-29_RUN7_CONT4	Total/NA	Air	29/6010C	66892
140-29339-52	FTRB-5-29_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-52	FTRB-5-29_CONT1,2,3	Total/NA	Air	29/6010C	67012
140-29339-53	FTRB-5-29_CONT4	Total/NA	Air	29/6010C	66892
MB 140-66892/1-A	Method Blank	Total/NA	Air	29/6010C	66892
MB 140-67012/1-A	Method Blank	Total/NA	Air	29/6010C	67012
LCS 140-66892/2-A	Lab Control Sample	Total/NA	Air	29/6010C	66892
LCS 140-67012/2-A	Lab Control Sample	Total/NA	Air	29/6010C	67012
LCSD 140-66892/3-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	66892
LCSD 140-67012/3-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	67012

General Chemistry

Analysis Batch: 66900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29339-1	UNIT_4A-5-29_RUN1_CONT1	Total/NA	Air	5	
140-29339-2	UNIT_4A-5-29_RUN1_CONT2	Total/NA	Air	5	
140-29339-8	UNIT_4A-5-29_RUN2_CONT1	Total/NA	Air	5	
140-29339-9	UNIT_4A-5-29_RUN2_CONT2	Total/NA	Air	5	
140-29339-15	UNIT_4A-5-29_RUN3_CONT1	Total/NA	Air	5	
140-29339-16	UNIT_4A-5-29_RUN3_CONT2	Total/NA	Air	5	
140-29339-22	UNIT_4A-5-29_RUN4_CONT1	Total/NA	Air	5	
140-29339-23	UNIT_4A-5-29_RUN4_CONT2	Total/NA	Air	5	
140-29339-29	UNIT_4A-5-29_RUN5_CONT1	Total/NA	Air	5	
140-29339-30	UNIT_4A-5-29_RUN5_CONT2	Total/NA	Air	5	
140-29339-36	UNIT_4A-5-29_RUN6_CONT1	Total/NA	Air	5	
140-29339-37	UNIT_4A-5-29_RUN6_CONT2	Total/NA	Air	5	
140-29339-43	UNIT_4A-5-29_RUN7_CONT1	Total/NA	Air	5	
140-29339-44	UNIT_4A-5-29_RUN7_CONT2	Total/NA	Air	5	
140-29339-50	FTRB-5-29_CONT1	Total/NA	Air	5	
140-29339-51	FTRB-5-29_CONT2	Total/NA	Air	5	

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT1

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-1

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4A-5-29_RUN1_CONT2

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-2

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4A-5-29_RUN1_CONT1,2,3

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-3

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 14:13	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 16:58	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:18	LAH	EET KNX
	Instrument ID: ADT									

Client Sample ID: UNIT_4A-5-29_RUN1_CONT4

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-4

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 12:06	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:41	LAH	EET KNX
	Instrument ID: ADT									

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN1_CONT5A

Lab Sample ID: 140-29339-5

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:45	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN1_CONT5B

Lab Sample ID: 140-29339-6

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	365 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:38	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN1_CONT5C

Lab Sample ID: 140-29339-7

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:01	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN2_CONT1

Lab Sample ID: 140-29339-8

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4A-5-29_RUN2_CONT2

Lab Sample ID: 140-29339-9

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT1,2,3

Lab Sample ID: 140-29339-10

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		1			67294	11/09/22 14:18	KNC	EET KNX
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		2			67294	11/09/22 17:03	KNC	EET KNX
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67216	11/08/22 14:20	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN2_CONT4

Lab Sample ID: 140-29339-11

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		1			67294	11/09/22 12:11	KNC	EET KNX
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67055	11/04/22 10:44	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN2_CONT5A

Lab Sample ID: 140-29339-12

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			66987	11/02/22 16:47	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN2_CONT5B

Lab Sample ID: 140-29339-13

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	375 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			66987	11/02/22 17:46	LAH	EET KNX

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN2_CONT5C

Lab Sample ID: 140-29339-14

Matrix: Air

Date Collected: 10/12/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:08	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT1

Lab Sample ID: 140-29339-15

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID:	NOEQUIP							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT2

Lab Sample ID: 140-29339-16

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID:	NOEQUIP							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT1,2,3

Lab Sample ID: 140-29339-17

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 14:23	KNC	EET KNX
		Instrument ID:	DUO							
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 17:08	KNC	EET KNX
		Instrument ID:	DUO							
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:23	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Lab Sample ID: 140-29339-18

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 12:16	KNC	EET KNX
		Instrument ID:	DUO							

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Lab Sample ID: 140-29339-18

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:46	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5A

Lab Sample ID: 140-29339-19

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:50	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5B

Lab Sample ID: 140-29339-20

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	380 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:48	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5C

Lab Sample ID: 140-29339-21

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:11	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN4_CONT1

Lab Sample ID: 140-29339-22

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID:	NOEQUIP							

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN4_CONT2

Lab Sample ID: 140-29339-23

Matrix: Air

Date Collected: 10/13/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4A-5-29_RUN4_CONT1,2,3

Lab Sample ID: 140-29339-24

Matrix: Air

Date Collected: 10/13/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 14:38	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 17:23	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:31	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4A-5-29_RUN4_CONT4

Lab Sample ID: 140-29339-25

Matrix: Air

Date Collected: 10/13/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 12:30	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:54	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4A-5-29_RUN4_CONT5A

Lab Sample ID: 140-29339-26

Matrix: Air

Date Collected: 10/13/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:57	LAH	EET KNX
Instrument ID: ADT										

Lab Chronicle

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN4_CONT5B

Lab Sample ID: 140-29339-27

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	385 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:56	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN4_CONT5C

Lab Sample ID: 140-29339-28

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:18	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN5_CONT1

Lab Sample ID: 140-29339-29

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4A-5-29_RUN5_CONT2

Lab Sample ID: 140-29339-30

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4A-5-29_RUN5_CONT1,2,3

Lab Sample ID: 140-29339-31

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 14:58	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 17:28	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:38	LAH	EET KNX
		Instrument ID: ADT								

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN5_CONT4

Lab Sample ID: 140-29339-32

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		1			67294	11/09/22 12:35	KNC	EET KNX
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67055	11/04/22 10:56	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN5_CONT5A

Lab Sample ID: 140-29339-33

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			66987	11/02/22 17:00	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN5_CONT5B

Lab Sample ID: 140-29339-34

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			66987	11/02/22 17:58	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN5_CONT5C

Lab Sample ID: 140-29339-35

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	270 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67055	11/04/22 10:21	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN6_CONT1

Lab Sample ID: 140-29339-36

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5 Instrument ID: NOEQUIP		1			66900	10/31/22 08:53	SJF	EET KNX

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN6_CONT2

Lab Sample ID: 140-29339-37

Matrix: Air

Date Collected: 10/14/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4A-5-29_RUN6_CONT1,2,3

Lab Sample ID: 140-29339-38

Matrix: Air

Date Collected: 10/14/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 15:03	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 17:33	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:41	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4A-5-29_RUN6_CONT4

Lab Sample ID: 140-29339-39

Matrix: Air

Date Collected: 10/14/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 12:55	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:59	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4A-5-29_RUN6_CONT5A

Lab Sample ID: 140-29339-40

Matrix: Air

Date Collected: 10/14/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:02	LAH	EET KNX
Instrument ID: ADT										

Lab Chronicle

Client: TRC Environmental Corporation

Job ID: 140-29339-1

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Client Sample ID: UNIT_4A-5-29_RUN6_CONT5B

Lab Sample ID: 140-29339-41

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 18:01	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN6_CONT5C

Lab Sample ID: 140-29339-42

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	280 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:23	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4A-5-29_RUN7_CONT1

Lab Sample ID: 140-29339-43

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4A-5-29_RUN7_CONT2

Lab Sample ID: 140-29339-44

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4A-5-29_RUN7_CONT1,2,3

Lab Sample ID: 140-29339-45

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 15:08	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 17:38	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:43	LAH	EET KNX
		Instrument ID: ADT								

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN7_CONT4

Lab Sample ID: 140-29339-46

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		1			67294	11/09/22 13:00	KNC	EET KNX
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67055	11/04/22 11:02	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN7_CONT5A

Lab Sample ID: 140-29339-47

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			66987	11/02/22 17:05	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN7_CONT5B

Lab Sample ID: 140-29339-48

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	390 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			66987	11/02/22 18:03	LAH	EET KNX

Client Sample ID: UNIT_4A-5-29_RUN7_CONT5C

Lab Sample ID: 140-29339-49

Matrix: Air

Date Collected: 10/14/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67055	11/04/22 10:26	LAH	EET KNX

Client Sample ID: FTRB-5-29_CONT1

Lab Sample ID: 140-29339-50

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5 Instrument ID: NOEQUIP		1			66900	10/31/22 08:53	SJF	EET KNX

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: FTRB-5-29_CONT2

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-51

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: FTRB-5-29_CONT1,2,3

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-52

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 15:13	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67294	11/09/22 18:02	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:46	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: FTRB-5-29_CONT4

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-53

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 13:05	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:09	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: FTRB-5-29_CONT5A

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-54

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:07	LAH	EET KNX
Instrument ID: ADT										

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: FTRB-5-29_CONT5B
Date Collected: 10/13/22 00:00
Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-55
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 18:06	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: FTRB-5-29_CONT5C
Date Collected: 10/13/22 00:00
Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-56
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	150 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:28	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66815/1-B
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:17	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66818/1-B
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:15	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66821/1-B
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 09:36	LAH	EET KNX
Instrument ID: ADT										

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66892/1-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 10:52	KNC	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66985/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:31	LAH	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-67012/1-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 11:07	KNC	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-67012/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:08	LAH	EET KNX

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-66815/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:19	LAH	EET KNX

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-66818/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:18	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-66821/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 09:38	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-66892/2-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 10:57	KNC	EET KNX
		Instrument ID: DUO								

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-66985/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:39	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-67012/2-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 11:12	KNC	EET KNX
		Instrument ID: DUO								

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: Lab Control Sample

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCS 140-67012/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:10	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCSD 140-66892/3-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66892	11/01/22 08:00	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 11:02	KNC	EET KNX
		Instrument ID:	DUO							

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCSD 140-67012/3-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67294	11/09/22 11:17	KNC	EET KNX
		Instrument ID:	DUO							

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCSD 140-67012/3-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67012	11/04/22 11:43	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67109	11/07/22 09:37	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:13	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Date Collected: 10/13/22 00:00
 Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-18 MS

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:49	LAH	EET KNX
		Instrument ID:	ADT							

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT4

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-18 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:51	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5A

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-19 MS

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:52	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5A

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-19 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66815	10/31/22 09:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	66880	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 16:55	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5B

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-20 MS

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	380 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:51	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5B

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29339-20 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	380 mL	66818	10/31/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	66878	11/01/22 07:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			66987	11/02/22 17:53	LAH	EET KNX
		Instrument ID:	ADT							

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5C**Lab Sample ID: 140-29339-21 MS**

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:13	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4A-5-29_RUN3_CONT5C**Lab Sample ID: 140-29339-21 MSD**

Matrix: Air

Date Collected: 10/13/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	66821	10/31/22 09:35	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	66879	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:16	LAH	EET KNX
Instrument ID: ADT										

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Laboratory: Eurofins Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-16-23
California	State	2423	06-30-22 *
Colorado	State	TN00009	02-28-23
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-23
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-22
Kansas	NELAP	E-10349	10-31-22 *
Kentucky (DW)	State	90101	12-31-22
Louisiana	NELAP	83979	06-30-23
Louisiana (All)	NELAP	83979	06-30-23
Louisiana (DW)	State	LA019	12-31-22
Maryland	State	277	03-31-23
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-23
New Hampshire	NELAP	299919	01-17-23
New Jersey	NELAP	TN001	06-30-23
New York	NELAP	10781	03-31-23
North Carolina (DW)	State	21705	07-31-23
North Carolina (WW/SW)	State	64	12-31-22
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-23
Oregon	NELAP	TNI0189	12-31-22
Pennsylvania	NELAP	68-00576	12-31-22
Tennessee	State	02014	07-27-25
Texas	NELAP	T104704380-22-17	08-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-19-00236	12-31-22
Utah	NELAP	TN00009	07-31-23
Virginia	NELAP	460176	09-14-23
Washington	State	C593	01-19-23
West Virginia (DW)	State	9955C	12-31-22
West Virginia DEP	State	345	04-30-23
Wisconsin	State	998044300	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Method	Method Description	Protocol	Laboratory
29/6010C	Metals (ICP), Stationary Source	EPA	EET KNX
29/7470A	Mercury (CVAA), Stationary Source	EPA	EET KNX
5	Particulates	EPA	EET KNX
Air Train Vol.	Air Train Volume	None	EET KNX
AT Prep (BH)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (BH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (Empty)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (FH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (HCl)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (KMnO4)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep FH	Preparation, Mercury (Stationary Source) FH	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
140-29339-1	UNIT_4A-5-29_RUN1_CONT1	Air	10/12/22 00:00	10/21/22 08:30	1
140-29339-2	UNIT_4A-5-29_RUN1_CONT2	Air	10/12/22 00:00	10/21/22 08:30	2
140-29339-3	UNIT_4A-5-29_RUN1_CONT1,2,3	Air	10/12/22 00:00	10/21/22 08:30	3
140-29339-4	UNIT_4A-5-29_RUN1_CONT4	Air	10/12/22 00:00	10/21/22 08:30	4
140-29339-5	UNIT_4A-5-29_RUN1_CONT5A	Air	10/12/22 00:00	10/21/22 08:30	5
140-29339-6	UNIT_4A-5-29_RUN1_CONT5B	Air	10/12/22 00:00	10/21/22 08:30	6
140-29339-7	UNIT_4A-5-29_RUN1_CONT5C	Air	10/12/22 00:00	10/21/22 08:30	7
140-29339-8	UNIT_4A-5-29_RUN2_CONT1	Air	10/12/22 00:00	10/21/22 08:30	8
140-29339-9	UNIT_4A-5-29_RUN2_CONT2	Air	10/12/22 00:00	10/21/22 08:30	9
140-29339-10	UNIT_4A-5-29_RUN2_CONT1,2,3	Air	10/12/22 00:00	10/21/22 08:30	10
140-29339-11	UNIT_4A-5-29_RUN2_CONT4	Air	10/12/22 00:00	10/21/22 08:30	11
140-29339-12	UNIT_4A-5-29_RUN2_CONT5A	Air	10/12/22 00:00	10/21/22 08:30	12
140-29339-13	UNIT_4A-5-29_RUN2_CONT5B	Air	10/12/22 00:00	10/21/22 08:30	13
140-29339-14	UNIT_4A-5-29_RUN2_CONT5C	Air	10/12/22 00:00	10/21/22 08:30	
140-29339-15	UNIT_4A-5-29_RUN3_CONT1	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-16	UNIT_4A-5-29_RUN3_CONT2	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-17	UNIT_4A-5-29_RUN3_CONT1,2,3	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-18	UNIT_4A-5-29_RUN3_CONT4	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-19	UNIT_4A-5-29_RUN3_CONT5A	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-20	UNIT_4A-5-29_RUN3_CONT5B	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-21	UNIT_4A-5-29_RUN3_CONT5C	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-22	UNIT_4A-5-29_RUN4_CONT1	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-23	UNIT_4A-5-29_RUN4_CONT2	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-24	UNIT_4A-5-29_RUN4_CONT1,2,3	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-25	UNIT_4A-5-29_RUN4_CONT4	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-26	UNIT_4A-5-29_RUN4_CONT5A	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-27	UNIT_4A-5-29_RUN4_CONT5B	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-28	UNIT_4A-5-29_RUN4_CONT5C	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-29	UNIT_4A-5-29_RUN5_CONT1	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-30	UNIT_4A-5-29_RUN5_CONT2	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-31	UNIT_4A-5-29_RUN5_CONT1,2,3	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-32	UNIT_4A-5-29_RUN5_CONT4	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-33	UNIT_4A-5-29_RUN5_CONT5A	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-34	UNIT_4A-5-29_RUN5_CONT5B	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-35	UNIT_4A-5-29_RUN5_CONT5C	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-36	UNIT_4A-5-29_RUN6_CONT1	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-37	UNIT_4A-5-29_RUN6_CONT2	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-38	UNIT_4A-5-29_RUN6_CONT1,2,3	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-39	UNIT_4A-5-29_RUN6_CONT4	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-40	UNIT_4A-5-29_RUN6_CONT5A	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-41	UNIT_4A-5-29_RUN6_CONT5B	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-42	UNIT_4A-5-29_RUN6_CONT5C	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-43	UNIT_4A-5-29_RUN7_CONT1	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-44	UNIT_4A-5-29_RUN7_CONT2	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-45	UNIT_4A-5-29_RUN7_CONT1,2,3	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-46	UNIT_4A-5-29_RUN7_CONT4	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-47	UNIT_4A-5-29_RUN7_CONT5A	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-48	UNIT_4A-5-29_RUN7_CONT5B	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-49	UNIT_4A-5-29_RUN7_CONT5C	Air	10/14/22 00:00	10/21/22 08:30	
140-29339-50	FTRB-5-29_CONT1	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-51	FTRB-5-29_CONT2	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-52	FTRB-5-29_CONT1,2,3	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-53	FTRB-5-29_CONT4	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-54	FTRB-5-29_CONT5A	Air	10/13/22 00:00	10/21/22 08:30	
140-29339-55	FTRB-5-29_CONT5B	Air	10/13/22 00:00	10/21/22 08:30	

Sample Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4A M5/M29

Job ID: 140-29339-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-29339-56	FTRB-5-29_CONT5C	Air	10/13/22 00:00	10/21/22 08:30

1

2

3

4

5

6

7

8

9

10

11

12

13

CHAIN OF CUSTODY RECORD

Project Name: Georgia Power McDonough ICR
 Project No.: 499970
 TRC Sampling Date(s): 10/12/22 to 10/13/22
 Laboratory: Testamerica
 Laboratory P.O.: C499970
 Shipping Date(s): 10/21/22
 Shipper's Name: TRC

Project Manager: Jason Grizzle
 TRC Office: AU4
 Phone No.: (720) 838-3857
 PM Email: jgrizzle@trccompanies.com



140-29339 Chain of Custody

Sample Code	Date Sampled	Container Size	G/P	MATRIX	Description	ANALYSIS	Box No.	Comments
Unit_4A-5-29_Run1_Cont1	10/12/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 1	Method 5		
Unit_4A-5-29_Run1_Cont2	10/12/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 1	Method 5		
Unit_4A-5-29_Run1_Cont3	10/12/22	250 ml	G	AQ	Method 29 FHR - Unit 4A Run 1	Method 29		
Unit_4A-5-29_Run1_Cont4	10/12/22	1000 ml	G	L	Method 29 IMP 1.3 - Unit 4A Run 1	Method 29		
Unit_4A-5-29_Run1_Cont5A	10/12/22	250 ml	G	L	Method 29 IMP 4 - Unit 4A Run 1	Method 29		
Unit_4A-5-29_Run1_Cont5B	10/12/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 1	Method 29		
Unit_4A-5-29_Run1_Cont5C	10/12/22	500 ml	G	AQ	Method 29 IMP 5-6-HCl - Unit 4A Run 1	Method 29		
Unit_4A-5-29_Run2_Cont1	10/12/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 2	Method 5		
Unit_4A-5-29_Run2_Cont2	10/12/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 2	Method 5		
Unit_4A-5-29_Run2_Cont3	10/12/22	250 ml	G	AQ	Method 29 FHR - Unit 4A Run 2	Method 29		
Unit_4A-5-29_Run2_Cont4	10/12/22	1000 ml	G	L	Method 29 IMP 1.3 - Unit 4A Run 2	Method 29		
Unit_4A-5-29_Run2_Cont5A	10/12/22	250 ml	G	L	Method 29 IMP 4 - Unit 4A Run 2	Method 29		
Unit_4A-5-29_Run2_Cont5B	10/12/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 2	Method 29		
Unit_4A-5-29_Run2_Cont5C	10/12/22	500 ml	G	L	Method 29 IMP 5-6-HCl - Unit 4A Run 2	Method 29		
Unit_4A-5-29_Run3_Cont1	10/13/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 3	Method 5		
Unit_4A-5-29_Run3_Cont2	10/13/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 3	Method 5		
Unit_4A-5-29_Run3_Cont3	10/13/22	250 ml	G	AQ	Method 29 FHR - Unit 4A Run 3	Method 29		
Unit_4A-5-29_Run3_Cont4	10/13/22	1000 ml	G	L	Method 29 IMP 1.3 - Unit 4A Run 3	Method 29		
Requisitioned by:	Requisitioned by:	Date/Time: 10/11/22 08:30	Date/Time: 10/21/22 08:30	Relinquished by:	Date/Time:			
Received by:	Received by:	Date/Time: 10/21/22 08:30	Date/Time: 10/21/22 08:30	Received by:	Date/Time:			
Remarks (*):	Testing							

CHAIN OF CUSTODY RECORD

Project Name: Georgia Power McDonough ICR
 Project No.: 499970
 Sampling Date(s): 10/13/22 to 10/14/22
 Laboratory P.O.: Testamerica
 Shipping Date(s): 10/21/22
 Shipper's Name: TRC

Project Manager: Jason Grizzle
 TRC Office: AL4
 Phone No.: (720) 838-3857
 PM Email: jgrizzle@trccompanies.com

Sample Code	Date Sampled	Date Container	Size G/P	MATRIX	Description	ANALYSIS	Box No.	Comments
Unit_4A-5-29_Run3_Cont5A	10/13/22	250 ml	G	L	Method 29 IMP 4 - Unit 4A Run 3	Method 29		
Unit_4A-5-29_Run3_Cont5B	10/13/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 3	Method 29		
Unit_4A-5-29_Run3_Cont5C	10/13/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 3	Method 29		
Unit_4A-5-29_Run4_Cont1	10/13/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 4	Method 5		
Unit_4A-5-29_Run4_Cont2	10/13/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 4	Method 5		
Unit_4A-5-29_Run4_Cont3	10/13/22	250 ml	G	AQ	Method 5 Sample Filter - Unit 4A Run 4	Method 5		
Unit_4A-5-29_Run4_Cont4	10/13/22	1000 ml	G	L	Method 29 IMP 1-3 - Unit 4A Run 4	Method 29		
Unit_4A-5-29_Run4_Cont5A	10/13/22	250 ml	G	L	Method 29 IMP 4 - Unit 4A Run 4	Method 29		
Unit_4A-5-29_Run4_Cont5B	10/13/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 4	Method 29		
Unit_4A-5-29_Run4_Cont5C	10/13/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 4	Method 29		
Unit_4A-5-29_Run5_Cont1	10/13/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 5	Method 5		
Unit_4A-5-29_Run5_Cont2	10/13/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 5	Method 5		
Unit_4A-5-29_Run5_Cont3	10/13/22	250 ml	G	AQ	Method 29 IMP 1-3 - Unit 4A Run 5	Method 29		
Unit_4A-5-29_Run5_Cont4	10/13/22	1000 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 5	Method 29		
Unit_4A-5-29_Run5_Cont5A	10/13/22	250 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 5	Method 29		
Unit_4A-5-29_Run5_Cont5B	10/13/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 5	Method 29		
Unit_4A-5-29_Run5_Cont5C	10/13/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 5	Method 29		
Unit_4A-5-29_Run6_Cont1	10/14/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 6	Method 5		
Relinquished by: <i>John Grizzle</i>	Date/Time: 10/13/22 08:30	Received by:			Date/Time:			
Received by: <i>John Grizzle</i>	Date/Time: 10/13/22 08:30	Received by:			Date/Time:			

CHAIN OF CUSTODY RECORD

Project Name: Georgia Power McDonough ICR
 Project No.: 499970
 Sampling Date(s): 10/13/22 to 10/14/22
 Laboratory: Testamerica
 Laboratory P.O.: C499970
 Shipping Date(s): 10/21/22
 Shipper's Name: TRC
 Shipment Number: 4999970

Project Manager: Jason Grizzle
 TRC Office: AL4
 Phone No.: (720) 838-3857
 PM Email: jgrizzle@trccompanies.com

Sample Code	Date Sampled	Container Size	G/P	MATRIX	Description	ANALYSIS		Box No.	Comments
Unit_4A-5-29_Run6_Cont2	10/14/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 6			Method 5	
Unit_4A-5-29_Run6_Cont3	10/14/22	250 ml	G	AQ	Method 29 FHR - Unit 4A Run 6			Method 29	
Unit_4A-5-29_Run6_Cont4	10/14/22	1000 ml	G	L	Method 29 IMP 1.3 - Unit 4A Run 6			Method 29	
Unit_4A-5-29_Run6_Cont5A	10/14/22	250 ml	G	L	Method 29 IMP 4 - Unit 4A Run 6			Method 29	
Unit_4A-5-29_Run6_Cont5B	10/14/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 6			Method 29	
Unit_4A-5-29_Run6_Cont5C	10/14/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 6			Method 29	
Unit_4A-5-29_Run7_Cont1	10/14/22	Petri	G	S	Method 5 Sample Filter - Unit 4A Run 7			Method 5	
Unit_4A-5-29_Run7_Cont2	10/14/22	250 ml	G	L	Method 5 FHR - Unit 4A Run 7			Method 5	
Unit_4A-5-29_Run7_Cont3	10/14/22	250 ml	G	AQ	Method 29 FHR - Unit 4A Run 7			Method 29	
Unit_4A-5-29_Run7_Cont4	10/14/22	1000 ml	G	L	Method 29 IMP 1.3 - Unit 4A Run 7			Method 29	
Unit_4A-5-29_Run7_Cont5A	10/14/22	250 ml	G	L	Method 29 IMP 2.4 - Unit 4A Run 7			Method 29	
Unit_4A-5-29_Run7_Cont5B	10/14/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4A Run 7			Method 29	
Unit_4A-5-29_Run7_Cont5C	10/14/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4A Run 7			Method 29	
FTRB_5-29_Cont1	10/13/22	Petri	G	S	Method 5 Sample Filter - FTRB			Method 5	
FTRB_5-29_Cont2	10/13/22	250 ml	G	L	Method 5 FHR - FTRB			Method 5	
FTRB_5-29_Cont3	10/13/22	250 ml	G	AQ	Method 29 FHR - FTRB			Method 29	
FTRB_5-29_Cont4	10/13/22	1000 ml	G	L	Method 29 IMP 1.3 - FTRB			Method 29	
FTRB_5-29_Cont5A	10/13/22	250 ml	G	L	Method 29 IMP 4 - FTRB			Method 29	
Relinquished by: <i>John Doe</i>	Date/Time: 10/14/22 08:30	Relinquished by:	Date/Time: 10/14/22 08:30	Received by:	Date/Time:				
Received by: <i>John Doe</i>	Date/Time: 10/14/22 08:30	Received by:	Date/Time:	Received by:	Date/Time:				

CHAIN OF CUSTODY RECORD

<u>Project Name:</u>	<u>Georgia Power McDonough ICR</u>		
<u>Project No.:</u>	499570		
<u>Sampling Date(s):</u>	<u>10/13/22</u>	<u>to</u>	<u>10/13/22</u>
<u>Laboratory:</u>	Testamerica		
<u>Laboratory P.O. #:</u>	C499570		
<u>Shipping Dates(s):</u>	10/14/22		
<u>Shipper's Name:</u>	TRC		

Project Manager: _____
TRC Office: _____
Phone No.: _____
PM Email: _____

Jason Grizzle
AU4
(720) 838-3857
jgrizzle@trcccompanies.com

Page 58 of 59

11/11/2022

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST**Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			<input type="checkbox"/> Containers, Broken	
2. Were ambient air containers received intact?	/			<input type="checkbox"/> Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			<input type="checkbox"/> Yes <input type="checkbox"/> NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : <u>SG73</u> Correction factor: <u>+0.11C</u>	/			<input type="checkbox"/> Cooler Out of Temp, Client Contacted, Proceed/Cancel <input type="checkbox"/> Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			<input type="checkbox"/> Containers, Broken	
6. Were samples received in appropriate containers?	/			<input type="checkbox"/> Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			<input type="checkbox"/> COC & Samples Do Not Match <input type="checkbox"/> COC Incorrect/Incomplete <input type="checkbox"/> COC Not Received	
8. Were all of the samples listed on the COC received?	/			<input type="checkbox"/> Sample Received, Not on COC <input type="checkbox"/> Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			<input type="checkbox"/> COC; No Date/Time; Client Contacted <input type="checkbox"/> Sampler Not Listed on COC	
10. Was the sampler identified on the COC?	/			<input type="checkbox"/> COC Incorrect/Incomplete <input type="checkbox"/> COC No tests on COC <input type="checkbox"/> COC Incorrect/Incomplete	
11. Is the client and project name/# identified?	/			<input type="checkbox"/> pH test strip lot number:	
12. Are tests/parameters listed for each sample?	/				
13. Is the matrix of the samples noted?	/				
14. Was COC relinquished? (Signed/Dated/Timed)	/				
15. Were samples received within holding time?	/			<input type="checkbox"/> Holding Time - Receipt	
16. Were samples received with correct chemical preservative (excluding Encore)?	/			<input type="checkbox"/> pH Adjusted, pH Included (See box 16A) <input type="checkbox"/> Incorrect Preservative	
17. Were VOA samples received without headspace? (e.g. 1613B, 1668)	/			<input type="checkbox"/> Headspace (VOA only) <input type="checkbox"/> Residual Chlorine	
18. Did you check for residual chlorine, if necessary?	/				
19. For 1613B water samples is pH<9?	/			<input type="checkbox"/> If no, notify lab to adjust <input type="checkbox"/> Project missing info	
20. For rad samples was sample activity info. Provided?	/				
Project #:					PM Instructions: <u>10/21/22</u>
Sample Receiving Associate: <u>Ron Johnson</u>					Date: <u>10/21/22</u>

1
2
3
4
5
6
7
8
9
10
11
12
13

Filterable Particulate Sample Analysis Summary	
--	--

Project#: 499970
 Company: Georgia Power
 Plant: McDonough

Unit ID: Unit 4B
 Location: Exhaust
 Test Date(s): 10/17/2022

Filterable PM	Run 1	Run 2	Run 3	Run 4	Blank
Filter material collected in acetone rinse?	N	N	N	N	
Filter final - Filter tare (mg):	-0.92	-0.10	0.945	0.41	
Rinse volume, V_{aw} , (ml):	89.8	86.7	89.8	82.4	99.4
Rinse final - Rinse tare, m_a , (mg):	2.93	2.66	1.13	1.75	0.0
Rinse blank correction, W_a (mg)**:	0.00	0.00	0.00	0.00	
Total rinse mass (mg):	2.93	2.66	1.13	1.75	
*Total Filterable PM, m_n, (milligrams):	3.43	3.16	2.08	2.16	

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is \geq zero, subsequent calculations are performed using that value.

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is $<$ zero, subsequent calculations are performed using a value of 1 mg

* If filter material was not recovered in the acetone rinse, and the result from the lab for either fraction is $<$ zero, subsequent calculations are performed using a value of 0.5 mg for that fraction

** - the maximum allowable blank correction is 0.0079 mg/ml

Method 29 Sample Analysis Summary

Project#: 499970	Unit ID: Unit 4B
Company: Georgia Power	Location: Exhaust
Plant: McDonough	Test Date(s): October 17, 2022

Filter Diameter (mm): **82** (NuTech)

	Gross front-half metals					Reagent Blank
	Run 1	Run 2	Run 3	Run 4		
Ag (ug)	-	-	-	-	-	-
As (ug)	< 1.78	< 1.78	< 1.78	< 1.78	< 1.78	< 0.00
Ba (ug)	-	-	-	-	-	-
Be (ug)	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.000
Cd (ug)	4.09	< 0.28	2.71	< 0.28	< 0.28	< 0.00
Cr (ug)	2.51	2.12	1.57	2.18	1.93	
Co (ug)	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 0.00
Cu (ug)	-	-	-	-	-	-
1B Hg (ug)	< 0.084	< 0.084	< 0.084	< 0.084	< 0.084	< 0.000
Mn (ug)	1.38	1.09	0.90	7.59	< 0.00	
Ni (ug)	1.31	1.73	0.502	0.858	0.65	
P (ug)	-	-	-	-	-	-
Pb (ug)	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.00
Sb (ug)	1.79	1.81	1.79	1.95	1.63	
Se (ug)	< 1.32	< 1.32	< 1.32	< 1.32	< 1.32	< 0.00
Tl (ug)	-	-	-	-	-	-
Zn (ug)	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

	Blank-corrected front-half metals			
	Run 1	Run 2	Run 3	Run 4
Ag (ug)	-	-	-	-
As (ug)	1.78 *	1.78 *	1.78 *	1.78 *
Ba (ug)	-	-	-	-
Be (ug)	0.02 *	0.02 *	0.02 *	0.02 *
Cd (ug)	4.09	0.28 *	2.71	0.28 *
Cr (ug)	0.58	0.19	0.00	0.25
Co (ug)	2.00 *	2.00 *	2.00 *	2.00 *
Cu (ug)	-	-	-	-
1B Hg (ug)	N/A *	N/A *	N/A *	N/A *
Mn (ug)	1.38	1.09	0.90	7.59
Ni (ug)	0.66	1.08	0.00	0.21
P (ug)	-	-	-	-
Pb (ug)	0.94 *	0.94 *	0.94 *	0.94 *
Sb (ug)	0.16	0.18	0.16	0.32
Se (ug)	1.32 *	1.32 *	1.32 *	1.32 *
Tl (ug)	-	-	-	-
Zn (ug)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used
If a Reagent Blank value was below the detection limit, subsequent calculations used

the detection limit
a value of 0.0

Method 29 Sample Analysis Summary

FSR#:	<u>499970</u>	Unit ID:	<u>Unit 4B</u>
Company:	<u>Georgia Power</u>	Location:	<u>Exhaust</u>
Plant:	<u>McDonough</u>	Test Date(s):	<u>October 17, 2022</u>

You must select an option in cell J54 & J55 for this sheet to function

Gross Back-half metals

	<u>Run 1</u>	<u>Run 2</u>	<u>Run 3</u>	<u>Run 4</u>	<u>Reagent Blank</u>
Ag (µg)	-	-	-	-	-
As (µg)	< 0.180	0.265	< 0.180	< 0.180	< 0.000
Ba (µg)	-	-	-	-	-
Be (µg)	< 0.047	< 0.047	< 0.047	< 0.047	< 0.000
Cd (µg)	0.156	0.036	0.035	< 0.018	< 0.000
Cr (µg)	0.414	0.906	0.262	0.401	< 0.000
Co (µg)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.00
Cu (µg)	-	-	-	-	-
2B Hg (µg)	< 0.12	< 0.12	< 0.12	< 0.12	< 0.00
3A Hg (µg)	< 0.12	< 0.12	< 0.12	< 0.114	< 0.00
3B Hg (µg)	< 0.0474	< 0.0480	< 0.0474	< 0.0480	< 0.0000
3C Hg (µg)	< 0.117	< 0.128	< 0.121	< 0.125	< 0.000
Mn (µg)	1.57	1.00	1.78	1.49	< 0.00
Ni (µg)	0.462	0.511	< 0.260	0.296	< 0.000
P (µg)	-	-	-	-	-
Pb (µg)	< 0.48	< 0.48	< 0.48	< 0.48	< 0.00
Sb (µg)	< 0.84	< 0.84	< 0.84	< 0.84	< 0.00
Se (µg)	0.744	0.418	0.440	< 0.390	< 0.000
Tl (µg)	-	-	-	-	-
Zn (µg)	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

Blank-corrected back-half metals

	<u>Run 1</u>	<u>Run 2</u>	<u>Run 3</u>	<u>Run 4</u>
Ag (µg)	-	-	-	-
As (µg)	0.18 *	0.27	0.18 *	0.18 *
Ba (µg)	-	-	-	-
Be (µg)	0.05 *	0.05 *	0.05 *	0.05 *
Cd (µg)	0.16	0.04	0.04	0.02 *
Cr (µg)	0.41	0.91	0.26	0.40
Co (µg)	0.10 *	0.10 *	0.10 *	0.10 *
Cu (µg)	-	-	-	-
Total Hg (front and back) (µg)	0.49	0.50	0.49	0.49
Mn (µg)	1.57	1.00	1.78	1.49
Ni (µg)	0.46	0.51	0.26 *	0.30
P (µg)	-	-	-	-
Pb (µg)	0.48 *	0.48 *	0.48 *	0.48 *
Sb (µg)	0.84 *	0.84 *	0.84 *	0.84 *
Se (µg)	0.74	0.42	0.44	0.39 *
Tl (µg)	-	-	-	-
Zn (µg)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used

the detection limit

Filterable Particulate Sample Analysis Summary	
--	--

Project#: 499970
 Company: Georgia Power
 Plant: McDonough

Unit ID: Unit 4B
 Location: Exhaust
 Test Date(s): 10/19/2022

Filterable PM	Run 5	Run 6	Run 7	Run 8	Blank
Filter material collected in acetone rinse?	N	N	N	N	
Filter final - Filter tare (mg):	0.39	0.17	-3.37	-	
Rinse volume, V_{aw} , (ml):	89.8	5.3	88.7	-	99.4
Rinse final - Rinse tare, m_a , (mg):	1.72	1.24	1.05	-	0.0
Rinse blank correction, W_a (mg)**:	0.00	0.00	0.00	-	
Total rinse mass (mg):	1.72	1.24	1.05	-	
*Total Filterable PM, m_n, (milligrams):	2.10	1.41	1.55	-	

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is \geq zero, subsequent calculations are performed using that value.

* If filter material was recovered in the acetone rinse, and the sum of the filter weight increase and the total rinse mass is $<$ zero, subsequent calculations are performed using a value of 1 mg

* If filter material was not recovered in the acetone rinse, and the result from the lab for either fraction is $<$ zero, subsequent calculations are performed using a value of 0.5 mg for that fraction

** - the maximum allowable blank correction is 0.0079 mg/ml

Method 29 Sample Analysis Summary

Project#:	<u>499970</u>	Unit ID:	<u>Unit 4B</u>
Company:	<u>Georgia Power</u>	Location:	<u>Exhaust</u>
Plant:	<u>McDonough</u>	Test Date(s):	<u>October 19, 2022</u>

Filter Diameter (mm): 82 (NuTech)

	Gross front-half metals					Reagent Blank
	Run 5	Run 6	Run 7	Run 8		
Ag (ug)	-	-	-	-	-	-
As (ug)	< 1.78	< 1.78	< 1.78	-	< 0.00	
Ba (ug)	-	-	-	-	-	
Be (ug)	< 0.016	< 0.016	< 0.016	-	< 0.000	
Cd (ug)	2.12	< 0.28	< 0.28	-	< 0.00	
Cr (ug)	2.13	2.16	2.31	-	1.93	
Co (ug)	< 2.00	< 2.00	< 2.00	-	< 0.00	
Cu (ug)	-	-	-	-	-	
1B Hg (ug)	< 0.084	< 0.084	< 0.084	-	< 0.000	
Mn (ug)	0.98	1.24	1.01	-	< 0.00	
Ni (ug)	0.638	2.14	2.91	-	0.650	
P (ug)	-	-	-	-	-	
Pb (ug)	< 0.94	< 0.94	< 0.94	-	< 0.00	
Sb (ug)	1.89	1.79	1.91	-	1.63	
Se (ug)	< 1.32	< 1.32	< 1.32	-	< 0.00	
Tl (ug)	-	-	-	-	-	
Zn (ug)	-	-	-	-	-	
-	-	-	-	-	-	
-	-	-	-	-	-	

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

	Blank-corrected front-half metals			
	Run 5	Run 6	Run 7	Run 8
Ag (ug)	-	-	-	-
As (ug)	1.78 *	1.78 *	1.78 *	-
Ba (ug)	-	-	-	-
Be (ug)	0.02 *	0.02 *	0.02 *	-
Cd (ug)	2.12	0.28 *	0.28 *	-
Cr (ug)	0.20	0.23	0.38	-
Co (ug)	2.00 *	2.00 *	2.00 *	-
Cu (ug)	-	-	-	-
1B Hg (ug)	N/A *	N/A *	N/A *	N/A
Mn (ug)	0.98	1.24	1.01	-
Ni (ug)	0.00	1.49	2.26	-
P (ug)	-	-	-	-
Pb (ug)	0.94 *	0.94 *	0.94 *	-
Sb (ug)	0.26	0.16	0.28	-
Se (ug)	1.32 *	1.32 *	1.32 *	-
Tl (ug)	-	-	-	-
Zn (ug)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used
If a Reagent Blank value was below the detection limit, subsequent calculations used

the detection limit
a value of 0.0

Method 29 Sample Analysis Summary

FSR#:	<u>499970</u>	Unit ID:	<u>Unit 4B</u>
Company:	<u>Georgia Power</u>	Location:	<u>Exhaust</u>
Plant:	<u>McDonough</u>	Test Date(s):	<u>October 19, 2022</u>

You must select an option in cell J54 & J55 for this sheet to function

Gross Back-half metals

	<u>Run 5</u>	<u>Run 6</u>	<u>Run 7</u>	<u>Run 8</u>	<u>Reagent Blank</u>
Ag (µg)	-	-	-	-	-
As (µg)	<	0.18	< 0.18	< 0.18	< 0.00
Ba (µg)	-	-	-	-	-
Be (µg)	< 0.047	< 0.047	< 0.047	-	< 0.000
Cd (µg)	< 0.018	< 0.018	0.021	-	< 0.000
Cr (µg)	0.732	1.23	0.802	-	< 0.000
Co (µg)	< 0.10	< 0.10	< 0.10	-	< 0.00
Cu (µg)	-	-	-	-	-
2B Hg (µg)	< 0.120	< 0.120	< 0.120	-	< 0.000
3A Hg (µg)	< 0.114	< 0.114	< 0.120	-	< 0.000
3B Hg (µg)	< 0.048	< 0.0486	< 0.048	-	< 0.000
3C Hg (µg)	< 0.119	< 0.121	< 0.125	-	< 0.000
Mn (µg)	1.12	0.57	0.898	-	< 0.00
Ni (µg)	< 0.26	0.269	1.04	-	< 0.00
P (µg)	-	-	-	-	-
Pb (µg)	< 0.48	< 0.48	< 0.48	-	< 0.00
Sb (µg)	< 0.84	< 0.84	< 0.84	-	< 0.00
Se (µg)	0.475	< 0.390	0.583	-	< 0.000
Tl (µg)	-	-	-	-	-
Zn (µg)	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

"<" indicates that the mass of a metal in the sample was below the laboratory analytical detection limit

Blank-corrected back-half metals

	<u>Run 5</u>	<u>Run 6</u>	<u>Run 7</u>	<u>Run 8</u>
Ag (µg)	-	-	-	-
As (µg)	0.18 *	0.18 *	0.18 *	-
Ba (µg)	-	-	-	-
Be (µg)	0.05 *	0.05 *	0.05 *	-
Cd (µg)	0.02 *	0.02 *	0.02	-
Cr (µg)	0.73	1.23	0.80	-
Co (µg)	0.10 *	0.10 *	0.10 *	-
Cu (µg)	-	-	-	-
Total Hg (front and back) (µg)	0.49	0.49	0.50	-
Mn (µg)	1.12	0.57	0.90	-
Ni (µg)	0.26 *	0.27	1.04	-
P (µg)	-	-	-	-
Pb (µg)	0.48 *	0.48 *	0.48 *	-
Sb (µg)	0.84 *	0.84 *	0.84 *	-
Se (µg)	0.48	0.39 *	0.58	-
Tl (µg)	-	-	-	-
Zn (µg)	-	-	-	-
-	-	-	-	-
-	-	-	-	-

* If a "Gross" Run value was below the detection limit, subsequent calculations used

the detection limit

ANALYTICAL REPORT

PREPARED FOR

Attn: Jon Howard
TRC Environmental Corporation
3800 Colonnade
Suite 175
Birmingham Alabama 35243

JOB DESCRIPTION

Georgia Power ICR - Unit 4B M5/M29

JOB NUMBER

140-29341-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Default Detection Limits	20
QC Sample Results	22
QC Association Summary	27
Lab Chronicle	34
Certification Summary	52
Method Summary	53
Sample Summary	54
Chain of Custody	56
Appendix	62

Definitions/Glossary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Job ID: 140-29341-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative

140-29341-1

Receipt

The samples were received on 10/21/2022 8:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 17.6° C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 5-29_CONT12 (140-29341-56). The container labels list 5-29_CONT12, while the COC lists 5-29_CONT11. Logged per container label.

Metals

Multi-Metals Train Preparation and Analysis

These stack gas samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0006 which is based on EPA SW-846 Method 0060, "Determination of Metals in Stack Emissions" and Method 29, "Determination of Metals Emissions from Stationary Sources". SW-846 Methods 6010C and 7470A as incorporated in Eurofins TestAmerica Knoxville standard operating procedures KNOX-MT-0007 and KNOX-MT-0009 were used to perform the final instrument analysis.

Acid digestion was performed on the front half particulate filter and the acetone and nitric acid probe rinse fractions separately using HNO₃ and HF. After digestion, the HF was sequestered using H₃BO₃ followed by another heating cycle. These digestates were combined, adjusted to final volume and analyzed by ICP. A portion of the ICP digestate was prepared for CVAA analysis in order to determine the particle-bound mercury. Results were calculated using the following equations:

$$\text{ICP Analyte, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume ICP Digestate, L})$$

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume ICP Digestate, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume ICP Digestate Used, mL})$$

The 5%HNO₃/10%H₂O₂ impinger samples were reduced in volume to 100 mL. A 20 milliliter portion of the concentrated sample was removed and processed for mercury. The remaining 80 mL of concentrated sample was digested using HNO₃ and H₂O₂, adjusted to a final volume of 80 mL, and analyzed by ICP. Results were calculated using the following equations:

$$\text{ICP Analyte, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume Concentrated Sample, L}) \times (\text{Final Volume ICP Digestate, mL} / \text{Volume Conc. Sample Digested, mL})$$

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Final Volume Concentrated Sample, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume Conc. Sample Digested, mL})$$

For the 0.1N HNO₃ rinse samples (empty impingers), a 2.5 milliliter portion of the sample as received was removed and processed for mercury.

The 4% KMnO₄/10%H₂SO₄ impinger samples were filtered to remove MnO₂, followed by removal of a 25 mL portion of filtrate for mercury processing. The filtered MnO₂ residue was digested in HCl, combined with the HCl rinse sample and analyzed for mercury.

Results for the 0.1N HNO₃ rinse samples and the KMnO₄ filtrate were calculated using the following equation:

$$\text{Hg, } \mu\text{g/sample} = (\text{Raw Sample Concentration, } \mu\text{g/L}) \times (\text{Bench DF}) \times (\text{Total Sample Volume, L}) \times (\text{Final Volume Hg Digestate, mL} / \text{Volume Sample Digested, mL})$$

Results for the combined MnO₂ residue HCl digestates and HCl rinse samples were calculated as follows:

Case Narrative

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Job ID: 140-29341-1 (Continued)

Laboratory: Eurofins Knoxville (Continued)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L + MnO₂ HCl Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Note: The total sample volume for the 5%HNO₃/10%H₂O₂ impinger samples is the final volume of the concentrated sample. The total sample volume for the combined MnO₂ residue HCl digestates and HCl rinse samples is equal to the total sample volume plus the MnO₂ HCl volume.

Method 29/6010C: The following samples were diluted due to the presence of Silicon which interferes with Arsenic, Cobalt, Lead, Nickel and Selenium: UNIT_4B-5-29_RUN1_CONT1,2,3 (140-29341-3), UNIT_4B-5-29_RUN2_CONT1,2,3 (140-29341-10), UNIT_4B-5-29_RUN3_CONT1,2,3 (140-29341-17), UNIT_4B-5-29_RUN5_CONT1,2,3 (140-29341-31), UNIT_4B-5-29_RUN6_CONT1,2,3 (140-29341-38), UNIT_4B-5-29_RUN7_CONT1,2,3 (140-29341-45), 5-29_CONT12 (140-29341-56) and C-1556 M5/M29 MEDIA CHECK FILTER (140-29341-57). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

Total Particulates: The measurement of the mass of particulate matter trapped by the particulate filter and probe rinse derived from an M-5 sampling train was performed using SOP number KNOX-WC-0006 (based on EPA Methods 0050 and 5). Microfiber filters and 150 mL beakers are carefully inspected and tare weighed to constant weight. After sample collection, the filters are dried, and then carefully weighed to constant weight to determine the mass of particulate matter trapped on the filters. The acetone probe rinse solution is evaporated to dryness, and then weighed to constant weight to determine the total particulate mass collected in the rinse. The total particulate mass collected by an M-5 train is the sum of the particulate filter and the acetone probe rinse residue weights.

Method 5: Sample filters UNIT_4B-5-29_RUN1_CONT1 (140-29341-1), UNIT_4B-5-29_RUN5_CONT1 (140-29341-29) and UNIT_4B-5-29_RUN7_CONT1 (140-29341-43) arrived with significant damage. Results may reflect a low bias.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN1_CONT1

Lab Sample ID: 140-29341-1

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT2

Lab Sample ID: 140-29341-2

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	2.93		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT1,2,3

Lab Sample ID: 140-29341-3

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.79 J		6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 12:50	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 16:39	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 12:50	1
Cadmium	4.09		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 12:50	1
Chromium	2.51		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 12:50	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 16:39	2
Lead	ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 16:39	2
Manganese	1.38 J		1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 12:50	1
Nickel	1.31 J		8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 16:39	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 16:39	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:17	1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT4

Lab Sample ID: 140-29341-4

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Cadmium	0.156 J		0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Chromium	0.414 J		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Manganese	1.57		1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Nickel	0.462 J		4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 12:09	1
Selenium	0.744 J		1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 12:09	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN1_CONT4

Lab Sample ID: 140-29341-4

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:12	1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT5A

Lab Sample ID: 140-29341-5

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/07/22 08:33	11/08/22 15:21	1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT5B

Lab Sample ID: 140-29341-6

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.158	0.0474	ug/Sample		11/09/22 08:00	11/10/22 12:45	1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT5C

Lab Sample ID: 140-29341-7

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.265	0.117	ug/Sample		11/09/22 08:00	11/10/22 13:58	1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT1

Lab Sample ID: 140-29341-8

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT2

Lab Sample ID: 140-29341-9

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	2.66		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN2_CONT1,2,3

Lab Sample ID: 140-29341-10

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.81	J	6.00	1.10	ug/Sample	11/04/22 08:25	11/11/22 12:55		1
Arsenic	ND		2.00	1.78	ug/Sample	11/04/22 08:25	11/11/22 16:59		2
Beryllium	ND		0.500	0.0160	ug/Sample	11/04/22 08:25	11/11/22 12:55		1
Cadmium	ND		0.500	0.280	ug/Sample	11/04/22 08:25	11/11/22 12:55		1
Chromium	2.12		1.00	0.190	ug/Sample	11/04/22 08:25	11/11/22 12:55		1
Cobalt	ND		10.0	2.00	ug/Sample	11/04/22 08:25	11/11/22 16:59		2
Lead	ND		2.00	0.940	ug/Sample	11/04/22 08:25	11/11/22 16:59		2
Manganese	1.09	J	1.50	0.120	ug/Sample	11/04/22 08:25	11/11/22 12:55		1
Nickel	1.73	J	8.00	0.500	ug/Sample	11/04/22 08:25	11/11/22 16:59		2
Selenium	ND		2.00	1.32	ug/Sample	11/04/22 08:25	11/11/22 16:59		2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample	11/04/22 08:25	11/10/22 10:19		1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT4

Lab Sample ID: 140-29341-11

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Arsenic	0.265	J	1.00	0.180	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Beryllium	ND		0.500	0.0470	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Cadmium	0.0360	J	0.500	0.0180	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Chromium	0.906	J	1.00	0.180	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Cobalt	ND		5.00	0.100	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Lead	ND		1.00	0.480	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Manganese	1.00	J	1.50	0.180	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Nickel	0.511	J	4.00	0.260	ug/Sample	11/01/22 14:13	11/14/22 12:13		1
Selenium	0.418	J	1.00	0.390	ug/Sample	11/01/22 14:13	11/14/22 12:13		1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample	11/03/22 09:15	11/04/22 11:14		1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT5A

Lab Sample ID: 140-29341-12

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample	11/07/22 08:33	11/08/22 15:24		1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN2_CONT5B

Lab Sample ID: 140-29341-13

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		11/09/22 08:00	11/10/22 12:47	1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT5C

Lab Sample ID: 140-29341-14

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.290	0.128	ug/Sample		11/09/22 08:00	11/10/22 14:01	1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT1

Lab Sample ID: 140-29341-15

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	0.945		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT2

Lab Sample ID: 140-29341-16

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	1.13		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT1,2,3

Lab Sample ID: 140-29341-17

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.79	J	6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:00	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:04	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:00	1
Cadmium	2.71		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:00	1
Chromium	1.57		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:00	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:04	2
Lead	ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:04	2
Manganese	0.900	J	1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:00	1
Nickel	0.502	J	8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:04	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:04	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:22	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN3_CONT4

Lab Sample ID: 140-29341-18

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Arsenic	ND		1.00	0.180	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Beryllium	ND		0.500	0.0470	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Cadmium	0.0350 J		0.500	0.0180	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Chromium	0.262 J		1.00	0.180	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Cobalt	ND		5.00	0.100	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Lead	ND		1.00	0.480	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Manganese	1.78		1.50	0.180	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Nickel	ND		4.00	0.260	ug/Sample	11/01/22 14:13	11/14/22 12:18		1
Selenium	0.440 J		1.00	0.390	ug/Sample	11/01/22 14:13	11/14/22 12:18		1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample	11/03/22 09:15	11/04/22 11:17		1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT5A

Lab Sample ID: 140-29341-19

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample	11/07/22 08:33	11/08/22 15:26		1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT5B

Lab Sample ID: 140-29341-20

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.158	0.0474	ug/Sample	11/09/22 08:00	11/10/22 12:55		1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT5C

Lab Sample ID: 140-29341-21

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample	11/09/22 08:00	11/10/22 14:04		1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT1

Lab Sample ID: 140-29341-22

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample Results

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT2
 Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-23
 Matrix: Air

General Chemistry		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)		1.75		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT1,2,3
 Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-24
 Matrix: Air

Method: EPA 29/6010C - Metals (ICP), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony		1.95 J		6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:15	1
Arsenic		ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:09	2
Beryllium		ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:15	1
Cadmium		ND		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:15	1
Chromium		2.18		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:15	1
Cobalt		ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:09	2
Lead		ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:09	2
Manganese		7.59		1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:15	1
Nickel		0.858 J		8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:09	2
Selenium		ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:09	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury		ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:24	1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT4
 Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-25
 Matrix: Air

Method: EPA 29/6010C - Metals (ICP), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony		ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Arsenic		ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Beryllium		ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Cadmium		ND		0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Chromium		0.401 J		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Cobalt		ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Lead		ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Manganese		1.49 J		1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Nickel		0.296 J		4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 12:23	1
Selenium		ND		1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 12:23	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury		ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:19	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN4_CONT5A

Lab Sample ID: 140-29341-26

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.380	0.114	ug/Sample		11/07/22 08:33	11/08/22 15:29	1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT5B

Lab Sample ID: 140-29341-27

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		11/09/22 08:00	11/10/22 12:57	1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT5C

Lab Sample ID: 140-29341-28

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.285	0.125	ug/Sample		11/09/22 08:00	11/10/22 14:06	1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT1

Lab Sample ID: 140-29341-29

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT2

Lab Sample ID: 140-29341-30

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	1.72		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT1,2,3

Lab Sample ID: 140-29341-31

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.89	J	6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:20	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:14	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:20	1
Cadmium	2.12		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:20	1
Chromium	2.13		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:20	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:14	2

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN5_CONT1,2,3

Lab Sample ID: 140-29341-31

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:14	2
Manganese	0.980 J		1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:20	1
Nickel	0.638 J		8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:14	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:14	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:27	1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT4

Lab Sample ID: 140-29341-32

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Chromium	0.732 J		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Manganese	1.12 J		1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Nickel	ND		4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 12:28	1
Selenium	0.475 J		1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 12:28	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:22	1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5A

Lab Sample ID: 140-29341-33

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.380	0.114	ug/Sample		11/07/22 08:33	11/08/22 15:32	1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5B

Lab Sample ID: 140-29341-34

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		11/09/22 08:00	11/10/22 13:00	1

Client Sample Results

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5C
 Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-35
 Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.270	0.119	ug/Sample		11/09/22 08:00	11/10/22 14:09	1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT1

Lab Sample ID: 140-29341-36
 Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT2

Lab Sample ID: 140-29341-37
 Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	1.24		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT1,2,3

Lab Sample ID: 140-29341-38
 Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.79	J	6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:35	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:28	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:35	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:35	1
Chromium	2.16		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:35	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:28	2
Lead	ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:28	2
Manganese	1.24	J	1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:35	1
Nickel	2.14	J	8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:28	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:28	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:40	1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT4

Lab Sample ID: 140-29341-39
 Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:52	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN6_CONT4

Lab Sample ID: 140-29341-39

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Chromium	1.23		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Manganese	0.570 J		1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Nickel	0.269 J		4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 12:52	1
Selenium	ND		1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 12:52	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:30	1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT5A

Lab Sample ID: 140-29341-40

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.380	0.114	ug/Sample		11/07/22 08:33	11/08/22 15:44	1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT5B

Lab Sample ID: 140-29341-41

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.162	0.0486	ug/Sample		11/09/22 08:00	11/10/22 13:07	1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT5C

Lab Sample ID: 140-29341-42

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.275	0.121	ug/Sample		11/09/22 08:00	11/10/22 14:16	1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT1

Lab Sample ID: 140-29341-43

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample Results

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT2
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-44
 Matrix: Air

General Chemistry		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)		1.05		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT1,2,3
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-45
 Matrix: Air

Method: EPA 29/6010C - Metals (ICP), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony		1.91	J	6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:40	1
Arsenic		ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:33	2
Beryllium		ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:40	1
Cadmium		ND		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:40	1
Chromium		2.31		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:40	1
Cobalt		ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:33	2
Lead		ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:33	2
Manganese		1.01	J	1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:40	1
Nickel		2.91	J	8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:33	2
Selenium		ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:33	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury		ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:42	1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT4
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-46
 Matrix: Air

Method: EPA 29/6010C - Metals (ICP), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony		ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Arsenic		ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Beryllium		ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Cadmium		0.0210	J	0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Chromium		0.802	J	1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Cobalt		ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Lead		ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Manganese		0.898	J	1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Nickel		1.04	J	4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 12:57	1
Selenium		0.583	J	1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 12:57	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury		ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:32	1

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN7_CONT5A

Lab Sample ID: 140-29341-47

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/07/22 08:33	11/08/22 15:47	1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT5B

Lab Sample ID: 140-29341-48

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		11/09/22 08:00	11/10/22 13:10	1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT5C

Lab Sample ID: 140-29341-49

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.285	0.125	ug/Sample		11/09/22 08:00	11/10/22 14:19	1

Client Sample ID: 5-29_CONT7

Lab Sample ID: 140-29341-50

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample		10/31/22 08:53		1

Client Sample ID: 5-29_CONT8A

Lab Sample ID: 140-29341-51

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Arsenic	ND		1.00	0.890	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Chromium	ND		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Cobalt	ND		5.00	1.00	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Lead	ND		1.00	0.470	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Manganese	ND		1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Nickel	ND		4.00	0.250	ug/Sample		11/04/22 08:25	11/11/22 13:45	1
Selenium	ND		1.00	0.660	ug/Sample		11/04/22 08:25	11/11/22 13:45	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:45	1

Client Sample Results

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: 5-29_CONT8B
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-52
 Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		11/09/22 08:00	11/10/22 13:13	1

Client Sample ID: 5-29_CONT9
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-53
 Matrix: Air

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Chromium	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Manganese	ND		1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Nickel	ND		4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 13:02	1
Selenium	ND		1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 13:02	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 11:40	1

Client Sample ID: 5-29_CONT10
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-54
 Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		11/09/22 08:00	11/10/22 13:15	1

Client Sample ID: 5-29_CONT11
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-55
 Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.150	0.0660	ug/Sample		11/09/22 08:00	11/10/22 14:26	1

Client Sample ID: 5-29_CONT12
 Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30
 Sample Container: Air Train

Lab Sample ID: 140-29341-56
 Matrix: Air

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.63	J	6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:50	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:38	2

Client Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: 5-29_CONT12

Lab Sample ID: 140-29341-56

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:50	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:50	1
Chromium	1.93		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:50	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:38	2
Lead	ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:38	2
Manganese	0.650 J		1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:50	1
Nickel	ND		8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:38	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:38	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	1.30		0.500	0.500	mg/sample			10/31/22 08:53	1

Client Sample ID: C-1556 M5/M29 MEDIA CHECK FILTER

Lab Sample ID: 140-29341-57

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.75 J		6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 13:56	1
Arsenic	ND		2.00	1.78	ug/Sample		11/04/22 08:25	11/11/22 17:58	2
Beryllium	ND		0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 13:56	1
Cadmium	ND		0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 13:56	1
Chromium	1.58		1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 13:56	1
Cobalt	ND		10.0	2.00	ug/Sample		11/04/22 08:25	11/11/22 17:58	2
Lead	ND		2.00	0.940	ug/Sample		11/04/22 08:25	11/11/22 17:58	2
Manganese	0.643 J		1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 13:56	1
Nickel	ND		8.00	0.500	ug/Sample		11/04/22 08:25	11/11/22 17:58	2
Selenium	ND		2.00	1.32	ug/Sample		11/04/22 08:25	11/11/22 17:58	2

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Particulates, Total (EPA 5)	ND		0.500	0.500	mg/sample			10/31/22 08:53	1

Default Detection Limits

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Method: 29/6010C - Metals (ICP), Stationary Source

Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Antimony	6.00	0.840	ug/Sample
Arsenic	1.00	0.180	ug/Sample
Beryllium	0.500	0.0470	ug/Sample
Cadmium	0.500	0.0180	ug/Sample
Chromium	1.00	0.180	ug/Sample
Cobalt	5.00	0.100	ug/Sample
Lead	1.00	0.480	ug/Sample
Manganese	1.50	0.180	ug/Sample
Nickel	4.00	0.260	ug/Sample
Selenium	1.00	0.390	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source

Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Antimony	6.00	1.10	ug/Sample
Arsenic	1.00	0.890	ug/Sample
Beryllium	0.500	0.0160	ug/Sample
Cadmium	0.500	0.280	ug/Sample
Chromium	1.00	0.190	ug/Sample
Cobalt	5.00	1.00	ug/Sample
Lead	1.00	0.470	ug/Sample
Manganese	1.50	0.120	ug/Sample
Nickel	4.00	0.250	ug/Sample
Selenium	1.00	0.660	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Mercury	0.400	0.120	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (Empty)

Analyte	RL	MDL	Units
Mercury	0.200	0.0600	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Mercury	0.200	0.0840	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (HCl)

Analyte	RL	MDL	Units
Mercury	0.0500	0.0220	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (KMnO4)

Analyte	RL	MDL	Units
Mercury	0.0200	0.00600	ug/Sample

Default Detection Limits

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

General Chemistry

Analyte	RL	MDL	Units
Particulates, Total	0.500	0.500	mg/sample

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Method: 29/6010C - Metals (ICP), Stationary Source

Lab Sample ID: MB 140-66893/1-A

Matrix: Air

Analysis Batch: 67447

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66893

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Arsenic	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Cadmium	ND		0.500	0.0180	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Chromium	ND		1.00	0.180	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Cobalt	ND		5.00	0.100	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Lead	ND		1.00	0.480	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Manganese	ND		1.50	0.180	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Nickel	ND		4.00	0.260	ug/Sample		11/01/22 14:13	11/14/22 10:56	1
Selenium	ND		1.00	0.390	ug/Sample		11/01/22 14:13	11/14/22 10:56	1

Lab Sample ID: LCS 140-66893/2-A

Matrix: Air

Analysis Batch: 67447

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66893

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Antimony		50.0	47.41		ug/Sample		95	80 - 120	
Arsenic		10.0	9.529		ug/Sample		95	80 - 120	
Beryllium		5.00	5.027		ug/Sample		101	80 - 120	
Cadmium		5.00	4.923		ug/Sample		98	80 - 120	
Chromium		20.0	20.15		ug/Sample		101	80 - 120	
Cobalt		10.0	9.923		ug/Sample		99	80 - 120	
Lead		10.0	9.689		ug/Sample		97	80 - 120	
Manganese		10.0	9.683		ug/Sample		97	80 - 120	
Nickel		50.0	50.24		ug/Sample		100	80 - 120	
Selenium		15.0	13.69		ug/Sample		91	80 - 120	

Lab Sample ID: LCSD 140-66893/3-A

Matrix: Air

Analysis Batch: 67447

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66893

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony		50.0	48.02		ug/Sample		96	80 - 120	1	20
Arsenic		10.0	9.620		ug/Sample		96	80 - 120	1	20
Beryllium		5.00	5.065		ug/Sample		101	80 - 120	1	20
Cadmium		5.00	4.934		ug/Sample		99	80 - 120	0	20
Chromium		20.0	20.17		ug/Sample		101	80 - 120	0	20
Cobalt		10.0	9.983		ug/Sample		100	80 - 120	1	20
Lead		10.0	9.635		ug/Sample		96	80 - 120	1	20
Manganese		10.0	9.824		ug/Sample		98	80 - 120	1	20
Nickel		50.0	50.52		ug/Sample		101	80 - 120	1	20
Selenium		15.0	13.72		ug/Sample		91	80 - 120	0	20

Lab Sample ID: MB 140-67019/1-A

Matrix: Air

Analysis Batch: 67393

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/04/22 08:25	11/11/22 11:25	1

QC Sample Results

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: MB 140-67019/1-A

Matrix: Air

Analysis Batch: 67393

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67019

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer							Prepared	Analyzed	Dil Fac
Arsenic	ND				1.00	0.890	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Beryllium	ND				0.500	0.0160	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Cadmium	ND				0.500	0.280	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Chromium	ND				1.00	0.190	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Cobalt	ND				5.00	1.00	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Lead	ND				1.00	0.470	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Manganese	ND				1.50	0.120	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Nickel	ND				4.00	0.250	ug/Sample		11/04/22 08:25	11/11/22 11:25	1
Selenium	ND				1.00	0.660	ug/Sample		11/04/22 08:25	11/11/22 11:25	1

Lab Sample ID: LCS 140-67019/2-A

Matrix: Air

Analysis Batch: 67393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67019

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec		Limits
	Added	Result	Qualifier					%Rec	Limits	
Antimony	50.0	51.29				ug/Sample		103	80 - 120	
Arsenic	10.0	10.64				ug/Sample		106	80 - 120	
Beryllium	5.00	5.225				ug/Sample		105	80 - 120	
Cadmium	5.00	5.157				ug/Sample		103	80 - 120	
Chromium	20.0	21.42				ug/Sample		107	80 - 120	
Cobalt	10.0	10.48				ug/Sample		105	80 - 120	
Lead	10.0	10.13				ug/Sample		101	80 - 120	
Manganese	10.0	10.41				ug/Sample		104	80 - 120	
Nickel	50.0	53.19				ug/Sample		106	80 - 120	
Selenium	15.0	14.12				ug/Sample		94	80 - 120	

Lab Sample ID: LCSD 140-67019/3-A

Matrix: Air

Analysis Batch: 67393

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67019

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec		RPD	Limit
	Added	Result	Qualifier					%Rec	Limits		
Antimony	50.0	51.19				ug/Sample		102	80 - 120	0	20
Arsenic	10.0	10.56				ug/Sample		106	80 - 120	1	20
Beryllium	5.00	5.050				ug/Sample		101	80 - 120	3	20
Cadmium	5.00	5.046				ug/Sample		101	80 - 120	2	20
Chromium	20.0	20.67				ug/Sample		103	80 - 120	4	20
Cobalt	10.0	10.29				ug/Sample		103	80 - 120	2	20
Lead	10.0	9.604				ug/Sample		96	80 - 120	5	20
Manganese	10.0	10.03				ug/Sample		100	80 - 120	4	20
Nickel	50.0	52.14				ug/Sample		104	80 - 120	2	20
Selenium	15.0	14.20				ug/Sample		95	80 - 120	1	20

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: MB 140-66985/1-B

Matrix: Air

Analysis Batch: 67055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66986

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer							Prepared	Analyzed	Dil Fac
Mercury	ND				0.400	0.120	ug/Sample		11/03/22 09:15	11/04/22 10:31	1

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: LCS 140-66985/2-B

Matrix: Air

Analysis Batch: 67055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	10.0	10.23		ug/Sample	102		80 - 120

Lab Sample ID: 140-29341-32 MS

Matrix: Air

Analysis Batch: 67055

Client Sample ID: UNIT_4B-5-29_RUN5_CONT4

Prep Type: Total/NA

Prep Batch: 66986

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		2.00	2.019		ug/Sample	101		80 - 120

Lab Sample ID: 140-29341-32 MSD

Matrix: Air

Analysis Batch: 67055

Client Sample ID: UNIT_4B-5-29_RUN5_CONT4

Prep Type: Total/NA

Prep Batch: 66986

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Mercury	ND		2.00	1.992		ug/Sample	100		80 - 120	1 20

Lab Sample ID: MB 140-67019/1-B

Matrix: Air

Analysis Batch: 67322

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/04/22 08:25	11/10/22 10:07	1

Lab Sample ID: LCS 140-67019/2-B

Matrix: Air

Analysis Batch: 67322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.095		ug/Sample	102		80 - 120

Lab Sample ID: LCSD 140-67019/3-B

Matrix: Air

Analysis Batch: 67322

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67019

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Mercury	5.00	5.060		ug/Sample	101		80 - 120	1 20

Lab Sample ID: MB 140-67062/1-B

Matrix: Air

Analysis Batch: 67216

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.08437	J	0.200	0.0600	ug/Sample		11/07/22 08:33	11/08/22 14:48	1

Lab Sample ID: LCS 140-67062/2-B

Matrix: Air

Analysis Batch: 67216

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.091		ug/Sample	102		80 - 120

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-29341-33 MS

Matrix: Air

Analysis Batch: 67216

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5A

Prep Type: Total/NA

Prep Batch: 67105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec			
Mercury	ND		1.90	1.913		ug/Sample	101	80 - 120			

Lab Sample ID: 140-29341-33 MSD

Matrix: Air

Analysis Batch: 67216

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5A

Prep Type: Total/NA

Prep Batch: 67105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec		RPD	
Mercury	ND		1.90	1.909		ug/Sample	100	80 - 120		0	20

Lab Sample ID: MB 140-67063/1-B

Matrix: Air

Analysis Batch: 67322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0200	0.00600	ug/Sample		11/09/22 08:00	11/10/22 12:06	1

Lab Sample ID: LCS 140-67063/2-B

Matrix: Air

Analysis Batch: 67322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
Mercury			0.500	0.5040		ug/Sample	101	80 - 120	

Lab Sample ID: 140-29341-34 MS

Matrix: Air

Analysis Batch: 67322

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	
Mercury	ND		0.800	0.7818		ug/Sample	98	80 - 120	

Lab Sample ID: 140-29341-34 MSD

Matrix: Air

Analysis Batch: 67322

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec		RPD	
Mercury	ND		0.800	0.7728		ug/Sample	97	80 - 120		1	20

Lab Sample ID: MB 140-67065/1-B

Matrix: Air

Analysis Batch: 67322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	0.0220	ug/Sample		11/09/22 08:00	11/10/22 13:18	1

Lab Sample ID: LCS 140-67065/2-B

Matrix: Air

Analysis Batch: 67322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
Mercury			1.25	1.251		ug/Sample	100	80 - 120	

QC Sample Results

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-29341-35 MS

Matrix: Air

Analysis Batch: 67322

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5C

Prep Type: Total/NA

Prep Batch: 67205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD	Limit
Mercury	ND		1.35	1.418		ug/Sample	105	80 - 120		

Lab Sample ID: 140-29341-35 MSD

Matrix: Air

Analysis Batch: 67322

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5C

Prep Type: Total/NA

Prep Batch: 67205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Mercury	ND		1.35	1.415		ug/Sample	105	80 - 120	0	20

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Metals

Prep Batch: 66893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-4	UNIT_4B-5-29_RUN1_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-11	UNIT_4B-5-29_RUN2_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-18	UNIT_4B-5-29_RUN3_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-25	UNIT_4B-5-29_RUN4_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-32	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-39	UNIT_4B-5-29_RUN6_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-46	UNIT_4B-5-29_RUN7_CONT4	Total/NA	Air	AT Prep (BH)	
140-29341-53	5-29_CONT9	Total/NA	Air	AT Prep (BH)	
MB 140-66893/1-A	Method Blank	Total/NA	Air	AT Prep (BH)	
LCS 140-66893/2-A	Lab Control Sample	Total/NA	Air	AT Prep (BH)	
LCSD 140-66893/3-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (BH)	

Pre Prep Batch: 66985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-4	UNIT_4B-5-29_RUN1_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-11	UNIT_4B-5-29_RUN2_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-18	UNIT_4B-5-29_RUN3_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-25	UNIT_4B-5-29_RUN4_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-32	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-39	UNIT_4B-5-29_RUN6_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-46	UNIT_4B-5-29_RUN7_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-53	5-29_CONT9	Total/NA	Air	Air Train Vol.	
MB 140-66985/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-66985/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29341-32 MS	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	Air Train Vol.	
140-29341-32 MSD	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	Air Train Vol.	

Prep Batch: 66986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-4	UNIT_4B-5-29_RUN1_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-11	UNIT_4B-5-29_RUN2_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-18	UNIT_4B-5-29_RUN3_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-25	UNIT_4B-5-29_RUN4_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-32	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-39	UNIT_4B-5-29_RUN6_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-46	UNIT_4B-5-29_RUN7_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-53	5-29_CONT9	Total/NA	Air	AT Prep (BH)	66985
MB 140-66985/1-B	Method Blank	Total/NA	Air	AT Prep (BH)	66985
LCS 140-66985/2-B	Lab Control Sample	Total/NA	Air	AT Prep (BH)	66985
140-29341-32 MS	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	AT Prep (BH)	66985
140-29341-32 MSD	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	AT Prep (BH)	66985

Prep Batch: 67019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-3	UNIT_4B-5-29_RUN1_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29341-10	UNIT_4B-5-29_RUN2_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29341-17	UNIT_4B-5-29_RUN3_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29341-24	UNIT_4B-5-29_RUN4_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29341-31	UNIT_4B-5-29_RUN5_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29341-38	UNIT_4B-5-29_RUN6_CONT1,2,3	Total/NA	Air	AT Prep (FH)	
140-29341-45	UNIT_4B-5-29_RUN7_CONT1,2,3	Total/NA	Air	AT Prep (FH)	

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Metals (Continued)

Prep Batch: 67019 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-51	5-29_CONT8A	Total/NA	Air	AT Prep (FH)	
140-29341-56	5-29_CONT12	Total/NA	Air	AT Prep (FH)	
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Total/NA	Air	AT Prep (FH)	
MB 140-67019/1-A	Method Blank	Total/NA	Air	AT Prep (FH)	
MB 140-67019/1-B	Method Blank	Total/NA	Air	AT Prep (FH)	
LCS 140-67019/2-A	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCS 140-67019/2-B	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCSD 140-67019/3-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	
LCSD 140-67019/3-B	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	

Analysis Batch: 67055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-4	UNIT_4B-5-29_RUN1_CONT4	Total/NA	Air	29/7470A	66986
140-29341-11	UNIT_4B-5-29_RUN2_CONT4	Total/NA	Air	29/7470A	66986
140-29341-18	UNIT_4B-5-29_RUN3_CONT4	Total/NA	Air	29/7470A	66986
140-29341-25	UNIT_4B-5-29_RUN4_CONT4	Total/NA	Air	29/7470A	66986
140-29341-32	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	29/7470A	66986
140-29341-39	UNIT_4B-5-29_RUN6_CONT4	Total/NA	Air	29/7470A	66986
140-29341-46	UNIT_4B-5-29_RUN7_CONT4	Total/NA	Air	29/7470A	66986
140-29341-53	5-29_CONT9	Total/NA	Air	29/7470A	66986
MB 140-66985/1-B	Method Blank	Total/NA	Air	29/7470A	66986
LCS 140-66985/2-B	Lab Control Sample	Total/NA	Air	29/7470A	66986
140-29341-32 MS	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	29/7470A	66986
140-29341-32 MSD	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	29/7470A	66986

Pre Prep Batch: 67062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-5	UNIT_4B-5-29_RUN1_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-12	UNIT_4B-5-29_RUN2_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-19	UNIT_4B-5-29_RUN3_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-26	UNIT_4B-5-29_RUN4_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-33	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-40	UNIT_4B-5-29_RUN6_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-47	UNIT_4B-5-29_RUN7_CONT5A	Total/NA	Air	Air Train Vol.	
MB 140-67062/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-67062/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29341-33 MS	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	Air Train Vol.	
140-29341-33 MSD	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 67063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-6	UNIT_4B-5-29_RUN1_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-13	UNIT_4B-5-29_RUN2_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-20	UNIT_4B-5-29_RUN3_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-27	UNIT_4B-5-29_RUN4_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-34	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-41	UNIT_4B-5-29_RUN6_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-48	UNIT_4B-5-29_RUN7_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-52	5-29_CONT8B	Total/NA	Air	Air Train Vol.	
140-29341-54	5-29_CONT10	Total/NA	Air	Air Train Vol.	
MB 140-67063/1-B	Method Blank	Total/NA	Air	Air Train Vol.	

QC Association Summary

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Metals (Continued)

Pre Prep Batch: 67063 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 140-67063/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29341-34 MS	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	Air Train Vol.	
140-29341-34 MSD	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 67065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-7	UNIT_4B-5-29_RUN1_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-14	UNIT_4B-5-29_RUN2_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-21	UNIT_4B-5-29_RUN3_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-28	UNIT_4B-5-29_RUN4_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-35	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-42	UNIT_4B-5-29_RUN6_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-49	UNIT_4B-5-29_RUN7_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-55	5-29_CONT11	Total/NA	Air	Air Train Vol.	
MB 140-67065/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-67065/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-29341-35 MS	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	Air Train Vol.	
140-29341-35 MSD	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	Air Train Vol.	

Prep Batch: 67105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-5	UNIT_4B-5-29_RUN1_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-12	UNIT_4B-5-29_RUN2_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-19	UNIT_4B-5-29_RUN3_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-26	UNIT_4B-5-29_RUN4_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-33	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-40	UNIT_4B-5-29_RUN6_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-47	UNIT_4B-5-29_RUN7_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
MB 140-67062/1-B	Method Blank	Total/NA	Air	AT Prep (Empty)	67062
LCS 140-67062/2-B	Lab Control Sample	Total/NA	Air	AT Prep (Empty)	67062
140-29341-33 MS	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	AT Prep (Empty)	67062
140-29341-33 MSD	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	AT Prep (Empty)	67062

Prep Batch: 67197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-6	UNIT_4B-5-29_RUN1_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-13	UNIT_4B-5-29_RUN2_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-20	UNIT_4B-5-29_RUN3_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-27	UNIT_4B-5-29_RUN4_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-34	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-41	UNIT_4B-5-29_RUN6_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-48	UNIT_4B-5-29_RUN7_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-52	5-29_CONT8B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-54	5-29_CONT10	Total/NA	Air	AT Prep (KMnO4)	67063

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Metals (Continued)

Prep Batch: 67197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 140-67063/1-B	Method Blank	Total/NA	Air	AT Prep (KMnO4)	67063
LCS 140-67063/2-B	Lab Control Sample	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-34 MS	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063
140-29341-34 MSD	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	AT Prep (KMnO4)	67063

Prep Batch: 67205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-7	UNIT_4B-5-29_RUN1_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-14	UNIT_4B-5-29_RUN2_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-21	UNIT_4B-5-29_RUN3_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-28	UNIT_4B-5-29_RUN4_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-35	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-42	UNIT_4B-5-29_RUN6_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-49	UNIT_4B-5-29_RUN7_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-55	5-29_CONT11	Total/NA	Air	AT Prep (HCl)	67065
MB 140-67065/1-B	Method Blank	Total/NA	Air	AT Prep (HCl)	67065
LCS 140-67065/2-B	Lab Control Sample	Total/NA	Air	AT Prep (HCl)	67065
140-29341-35 MS	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	AT Prep (HCl)	67065
140-29341-35 MSD	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	AT Prep (HCl)	67065

Cleanup Batch: 67206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-3	UNIT_4B-5-29_RUN1_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-10	UNIT_4B-5-29_RUN2_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-17	UNIT_4B-5-29_RUN3_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-24	UNIT_4B-5-29_RUN4_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-31	UNIT_4B-5-29_RUN5_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-38	UNIT_4B-5-29_RUN6_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-45	UNIT_4B-5-29_RUN7_CONT1,2,3	Total/NA	Air	AT Prep FH	67019
140-29341-51	5-29_CONT8A	Total/NA	Air	AT Prep FH	67019
140-29341-56	5-29_CONT12	Total/NA	Air	AT Prep FH	67019
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Total/NA	Air	AT Prep FH	67019
MB 140-67019/1-B	Method Blank	Total/NA	Air	AT Prep FH	67019
LCS 140-67019/2-B	Lab Control Sample	Total/NA	Air	AT Prep FH	67019
LCSD 140-67019/3-B	Lab Control Sample Dup	Total/NA	Air	AT Prep FH	67019

Analysis Batch: 67216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-5	UNIT_4B-5-29_RUN1_CONT5A	Total/NA	Air	29/7470A	67105
140-29341-12	UNIT_4B-5-29_RUN2_CONT5A	Total/NA	Air	29/7470A	67105
140-29341-19	UNIT_4B-5-29_RUN3_CONT5A	Total/NA	Air	29/7470A	67105
140-29341-26	UNIT_4B-5-29_RUN4_CONT5A	Total/NA	Air	29/7470A	67105
140-29341-33	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	29/7470A	67105
140-29341-40	UNIT_4B-5-29_RUN6_CONT5A	Total/NA	Air	29/7470A	67105
140-29341-47	UNIT_4B-5-29_RUN7_CONT5A	Total/NA	Air	29/7470A	67105
MB 140-67062/1-B	Method Blank	Total/NA	Air	29/7470A	67105
LCS 140-67062/2-B	Lab Control Sample	Total/NA	Air	29/7470A	67105
140-29341-33 MS	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	29/7470A	67105

Eurofins Knoxville

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Metals (Continued)

Analysis Batch: 67216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-33 MSD	UNIT_4B-5-29_RUN5_CONT5A	Total/NA	Air	29/7470A	67105

Analysis Batch: 67322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-3	UNIT_4B-5-29_RUN1_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-6	UNIT_4B-5-29_RUN1_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-7	UNIT_4B-5-29_RUN1_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-10	UNIT_4B-5-29_RUN2_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-13	UNIT_4B-5-29_RUN2_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-14	UNIT_4B-5-29_RUN2_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-17	UNIT_4B-5-29_RUN3_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-20	UNIT_4B-5-29_RUN3_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-21	UNIT_4B-5-29_RUN3_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-24	UNIT_4B-5-29_RUN4_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-27	UNIT_4B-5-29_RUN4_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-28	UNIT_4B-5-29_RUN4_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-31	UNIT_4B-5-29_RUN5_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-34	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-35	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-38	UNIT_4B-5-29_RUN6_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-41	UNIT_4B-5-29_RUN6_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-42	UNIT_4B-5-29_RUN6_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-45	UNIT_4B-5-29_RUN7_CONT1,2,3	Total/NA	Air	29/7470A	67206
140-29341-48	UNIT_4B-5-29_RUN7_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-49	UNIT_4B-5-29_RUN7_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-51	5-29_CONT8A	Total/NA	Air	29/7470A	67206
140-29341-52	5-29_CONT8B	Total/NA	Air	29/7470A	67197
140-29341-54	5-29_CONT10	Total/NA	Air	29/7470A	67197
140-29341-55	5-29_CONT11	Total/NA	Air	29/7470A	67205
140-29341-56	5-29_CONT12	Total/NA	Air	29/7470A	67206
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Total/NA	Air	29/7470A	67206
MB 140-67019/1-B	Method Blank	Total/NA	Air	29/7470A	67206
MB 140-67063/1-B	Method Blank	Total/NA	Air	29/7470A	67197
MB 140-67065/1-B	Method Blank	Total/NA	Air	29/7470A	67205
LCS 140-67019/2-B	Lab Control Sample	Total/NA	Air	29/7470A	67206
LCS 140-67063/2-B	Lab Control Sample	Total/NA	Air	29/7470A	67197
LCS 140-67065/2-B	Lab Control Sample	Total/NA	Air	29/7470A	67205
LCSD 140-67019/3-B	Lab Control Sample Dup	Total/NA	Air	29/7470A	67206
140-29341-34 MS	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-34 MSD	UNIT_4B-5-29_RUN5_CONT5B	Total/NA	Air	29/7470A	67197
140-29341-35 MS	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	29/7470A	67205
140-29341-35 MSD	UNIT_4B-5-29_RUN5_CONT5C	Total/NA	Air	29/7470A	67205

Analysis Batch: 67393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-3	UNIT_4B-5-29_RUN1_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-3	UNIT_4B-5-29_RUN1_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-10	UNIT_4B-5-29_RUN2_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-10	UNIT_4B-5-29_RUN2_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-17	UNIT_4B-5-29_RUN3_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-17	UNIT_4B-5-29_RUN3_CONT1,2,3	Total/NA	Air	29/6010C	67019

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Metals (Continued)

Analysis Batch: 67393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-24	UNIT_4B-5-29_RUN4_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-24	UNIT_4B-5-29_RUN4_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-31	UNIT_4B-5-29_RUN5_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-31	UNIT_4B-5-29_RUN5_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-38	UNIT_4B-5-29_RUN6_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-38	UNIT_4B-5-29_RUN6_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-45	UNIT_4B-5-29_RUN7_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-45	UNIT_4B-5-29_RUN7_CONT1,2,3	Total/NA	Air	29/6010C	67019
140-29341-51	5-29_CONT8A	Total/NA	Air	29/6010C	67019
140-29341-56	5-29_CONT12	Total/NA	Air	29/6010C	67019
140-29341-56	5-29_CONT12	Total/NA	Air	29/6010C	67019
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Total/NA	Air	29/6010C	67019
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Total/NA	Air	29/6010C	67019
MB 140-67019/1-A	Method Blank	Total/NA	Air	29/6010C	67019
LCS 140-67019/2-A	Lab Control Sample	Total/NA	Air	29/6010C	67019
LCSD 140-67019/3-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	67019

Analysis Batch: 67447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-4	UNIT_4B-5-29_RUN1_CONT4	Total/NA	Air	29/6010C	66893
140-29341-11	UNIT_4B-5-29_RUN2_CONT4	Total/NA	Air	29/6010C	66893
140-29341-18	UNIT_4B-5-29_RUN3_CONT4	Total/NA	Air	29/6010C	66893
140-29341-25	UNIT_4B-5-29_RUN4_CONT4	Total/NA	Air	29/6010C	66893
140-29341-32	UNIT_4B-5-29_RUN5_CONT4	Total/NA	Air	29/6010C	66893
140-29341-39	UNIT_4B-5-29_RUN6_CONT4	Total/NA	Air	29/6010C	66893
140-29341-46	UNIT_4B-5-29_RUN7_CONT4	Total/NA	Air	29/6010C	66893
140-29341-53	5-29_CONT9	Total/NA	Air	29/6010C	66893
MB 140-66893/1-A	Method Blank	Total/NA	Air	29/6010C	66893
LCS 140-66893/2-A	Lab Control Sample	Total/NA	Air	29/6010C	66893
LCSD 140-66893/3-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	66893

General Chemistry

Analysis Batch: 66900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-1	UNIT_4B-5-29_RUN1_CONT1	Total/NA	Air	5	
140-29341-2	UNIT_4B-5-29_RUN1_CONT2	Total/NA	Air	5	
140-29341-8	UNIT_4B-5-29_RUN2_CONT1	Total/NA	Air	5	
140-29341-9	UNIT_4B-5-29_RUN2_CONT2	Total/NA	Air	5	
140-29341-15	UNIT_4B-5-29_RUN3_CONT1	Total/NA	Air	5	
140-29341-16	UNIT_4B-5-29_RUN3_CONT2	Total/NA	Air	5	
140-29341-22	UNIT_4B-5-29_RUN4_CONT1	Total/NA	Air	5	
140-29341-23	UNIT_4B-5-29_RUN4_CONT2	Total/NA	Air	5	
140-29341-29	UNIT_4B-5-29_RUN5_CONT1	Total/NA	Air	5	
140-29341-30	UNIT_4B-5-29_RUN5_CONT2	Total/NA	Air	5	
140-29341-36	UNIT_4B-5-29_RUN6_CONT1	Total/NA	Air	5	
140-29341-37	UNIT_4B-5-29_RUN6_CONT2	Total/NA	Air	5	
140-29341-43	UNIT_4B-5-29_RUN7_CONT1	Total/NA	Air	5	
140-29341-44	UNIT_4B-5-29_RUN7_CONT2	Total/NA	Air	5	
140-29341-50	5-29_CONT7	Total/NA	Air	5	
140-29341-56	5-29_CONT12	Total/NA	Air	5	

QC Association Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

General Chemistry (Continued)

Analysis Batch: 66900 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Total/NA	Air	5	

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT1

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-1

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4B-5-29_RUN1_CONT2

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-2

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4B-5-29_RUN1_CONT1,2,3

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-3

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 12:50	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 16:39	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:17	LAH	EET KNX
	Instrument ID: ADT									

Client Sample ID: UNIT_4B-5-29_RUN1_CONT4

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-4

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 12:09	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:12	LAH	EET KNX
	Instrument ID: ADT									

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN1_CONT5A

Lab Sample ID: 140-29341-5

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:21	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN1_CONT5B

Lab Sample ID: 140-29341-6

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 12:45	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN1_CONT5C

Lab Sample ID: 140-29341-7

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	265 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:58	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN2_CONT1

Lab Sample ID: 140-29341-8

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4B-5-29_RUN2_CONT2

Lab Sample ID: 140-29341-9

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT1,2,3

Lab Sample ID: 140-29341-10

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		1			67393	11/11/22 12:55	KNC	EET KNX
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		2			67393	11/11/22 16:59	KNC	EET KNX
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67322	11/10/22 10:19	LAH	EET KNX

Client Sample ID: UNIT_4B-5-29_RUN2_CONT4

Lab Sample ID: 140-29341-11

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C Instrument ID: DUO		1			67447	11/14/22 12:13	KNC	EET KNX
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67055	11/04/22 11:14	LAH	EET KNX

Client Sample ID: UNIT_4B-5-29_RUN2_CONT5A

Lab Sample ID: 140-29341-12

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67216	11/08/22 15:24	LAH	EET KNX

Client Sample ID: UNIT_4B-5-29_RUN2_CONT5B

Lab Sample ID: 140-29341-13

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A Instrument ID: ADT		1			67322	11/10/22 12:47	LAH	EET KNX

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN2_CONT5C

Lab Sample ID: 140-29341-14

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	290 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:01	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4B-5-29_RUN3_CONT1

Lab Sample ID: 140-29341-15

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4B-5-29_RUN3_CONT2

Lab Sample ID: 140-29341-16

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4B-5-29_RUN3_CONT1,2,3

Lab Sample ID: 140-29341-17

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:00	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:04	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:22	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4B-5-29_RUN3_CONT4

Lab Sample ID: 140-29341-18

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 12:18	KNC	EET KNX
Instrument ID: DUO										

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN3_CONT4

Lab Sample ID: 140-29341-18

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:17	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4B-5-29_RUN3_CONT5A

Lab Sample ID: 140-29341-19

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:26	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4B-5-29_RUN3_CONT5B

Lab Sample ID: 140-29341-20

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 12:55	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4B-5-29_RUN3_CONT5C

Lab Sample ID: 140-29341-21

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:04	LAH	EET KNX
		Instrument ID:	ADT							

Client Sample ID: UNIT_4B-5-29_RUN4_CONT1

Lab Sample ID: 140-29341-22

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID:	NOEQUIP							

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN4_CONT2

Lab Sample ID: 140-29341-23

Matrix: Air

Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4B-5-29_RUN4_CONT1,2,3

Lab Sample ID: 140-29341-24

Matrix: Air

Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:15	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:09	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:24	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4B-5-29_RUN4_CONT4

Lab Sample ID: 140-29341-25

Matrix: Air

Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 12:23	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:19	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4B-5-29_RUN4_CONT5A

Lab Sample ID: 140-29341-26

Matrix: Air

Date Collected: 10/18/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:29	LAH	EET KNX
Instrument ID: ADT										

Lab Chronicle

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN4_CONT5B

Lab Sample ID: 140-29341-27

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 12:57	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN4_CONT5C

Lab Sample ID: 140-29341-28

Matrix: Air

Date Collected: 10/18/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	285 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:06	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT1

Lab Sample ID: 140-29341-29

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT2

Lab Sample ID: 140-29341-30

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT1,2,3

Lab Sample ID: 140-29341-31

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:20	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:14	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:27	LAH	EET KNX
		Instrument ID: ADT								

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT4

Lab Sample ID: 140-29341-32

Matrix: Air

Date Collected: 10/19/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 12:28	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:22	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5A

Lab Sample ID: 140-29341-33

Matrix: Air

Date Collected: 10/19/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:32	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5B

Lab Sample ID: 140-29341-34

Matrix: Air

Date Collected: 10/19/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:00	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5C

Lab Sample ID: 140-29341-35

Matrix: Air

Date Collected: 10/19/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	270 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:09	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN6_CONT1

Lab Sample ID: 140-29341-36

Matrix: Air

Date Collected: 10/19/22 00:00
Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN6_CONT2

Lab Sample ID: 140-29341-37

Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
Instrument ID: NOEQUIP										

Client Sample ID: UNIT_4B-5-29_RUN6_CONT1,2,3

Lab Sample ID: 140-29341-38

Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:35	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:28	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:40	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4B-5-29_RUN6_CONT4

Lab Sample ID: 140-29341-39

Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 12:52	KNC	EET KNX
Instrument ID: DUO										
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:30	LAH	EET KNX
Instrument ID: ADT										

Client Sample ID: UNIT_4B-5-29_RUN6_CONT5A

Lab Sample ID: 140-29341-40

Matrix: Air

Date Collected: 10/19/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:44	LAH	EET KNX
Instrument ID: ADT										

Lab Chronicle

Client: TRC Environmental Corporation

Job ID: 140-29341-1

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Client Sample ID: UNIT_4B-5-29_RUN6_CONT5B

Lab Sample ID: 140-29341-41

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	405 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:07	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN6_CONT5C

Lab Sample ID: 140-29341-42

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:16	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN7_CONT1

Lab Sample ID: 140-29341-43

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4B-5-29_RUN7_CONT2

Lab Sample ID: 140-29341-44

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: UNIT_4B-5-29_RUN7_CONT1,2,3

Lab Sample ID: 140-29341-45

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:40	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:33	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:42	LAH	EET KNX
		Instrument ID: ADT								

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN7_CONT4

Lab Sample ID: 140-29341-46

Matrix: Air

Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 12:57	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:32	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN7_CONT5A

Lab Sample ID: 140-29341-47

Matrix: Air

Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:47	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN7_CONT5B

Lab Sample ID: 140-29341-48

Matrix: Air

Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:10	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN7_CONT5C

Lab Sample ID: 140-29341-49

Matrix: Air

Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	285 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:19	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: 5-29_CONT7

Lab Sample ID: 140-29341-50

Matrix: Air

Date Collected: 10/20/22 00:00
 Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: 5-29_CONT8A

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-51

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:45	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:45	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: 5-29_CONT8B

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-52

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:13	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: 5-29_CONT9

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-53

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 13:02	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:40	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: 5-29_CONT10

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-54

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:15	LAH	EET KNX
		Instrument ID: ADT								

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: 5-29_CONT11

Lab Sample ID: 140-29341-55

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	150 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:26	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: 5-29_CONT12

Lab Sample ID: 140-29341-56

Matrix: Air

Date Collected: 10/20/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:50	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:38	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:47	LAH	EET KNX
		Instrument ID: ADT								
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Client Sample ID: C-1556 M5/M29 MEDIA CHECK FILTER

Lab Sample ID: 140-29341-57

Matrix: Air

Date Collected: 10/17/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 13:56	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		2			67393	11/11/22 17:58	KNC	EET KNX
		Instrument ID: DUO								
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:50	LAH	EET KNX
		Instrument ID: ADT								
Total/NA	Analysis	5		1			66900	10/31/22 08:53	SJF	EET KNX
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66893/1-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 10:56	KNC	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-66985/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:31	LAH	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-67019/1-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 11:25	KNC	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-67019/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:07	LAH	EET KNX

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-67062/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:48	LAH	EET KNX

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: Method Blank

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: MB 140-67063/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 12:06	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Method Blank

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: MB 140-67065/1-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:18	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCS 140-66893/2-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 11:01	KNC	EET KNX
		Instrument ID: DUO								

Client Sample ID: Lab Control Sample

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCS 140-66985/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 10:39	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A
 Date Received: N/A

Lab Sample ID: LCS 140-67019/2-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 11:30	KNC	EET KNX
		Instrument ID: DUO								

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-67019/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:09	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-67062/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 14:51	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-67063/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 12:09	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-67065/2-B

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:25	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 140-66893/3-A

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	66893	11/01/22 14:13	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67447	11/14/22 11:05	KNC	EET KNX
		Instrument ID: DUO								

Lab Chronicle

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 140-67019/3-A

Matrix: Air

Date Collected: N/A

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Analysis	29/6010C		1			67393	11/11/22 11:35	KNC	EET KNX

Instrument ID: DUO

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 140-67019/3-B

Matrix: Air

Date Collected: N/A

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	67019	11/04/22 08:25	WRL	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	67206	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 10:12	LAH	EET KNX

Instrument ID: ADT

Client Sample ID: UNIT_4B-5-29_RUN5_CONT4

Lab Sample ID: 140-29341-32 MS

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:24	LAH	EET KNX

Instrument ID: ADT

Client Sample ID: UNIT_4B-5-29_RUN5_CONT4

Lab Sample ID: 140-29341-32 MSD

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	66985	11/02/22 18:04	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	66986	11/03/22 09:15	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67055	11/04/22 11:27	LAH	EET KNX

Instrument ID: ADT

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5A

Lab Sample ID: 140-29341-33 MS

Matrix: Air

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:39	LAH	EET KNX

Instrument ID: ADT

Lab Chronicle

Client: TRC Environmental Corporation
 Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5A

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-33 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	67062	11/07/22 07:45	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	67105	11/07/22 08:33	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67216	11/08/22 15:42	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5B

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-34 MS

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:02	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5B

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-34 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	67063	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	67197	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 13:05	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5C

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-35 MS

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	270 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:11	LAH	EET KNX
		Instrument ID: ADT								

Client Sample ID: UNIT_4B-5-29_RUN5_CONT5C

Date Collected: 10/19/22 00:00

Date Received: 10/21/22 08:30

Lab Sample ID: 140-29341-35 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	270 mL	67065	11/08/22 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	67205	11/09/22 08:00	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			67322	11/10/22 14:14	LAH	EET KNX
		Instrument ID: ADT								

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Laboratory: Eurofins Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-16-23
California	State	2423	06-30-22 *
Colorado	State	TN00009	02-28-23
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-23
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-22
Kansas	NELAP	E-10349	10-31-23
Kentucky (DW)	State	90101	12-31-22
Louisiana	NELAP	83979	06-30-23
Louisiana (All)	NELAP	83979	06-30-23
Louisiana (DW)	State	LA019	12-31-22
Maryland	State	277	03-31-23
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-23
New Hampshire	NELAP	299919	01-17-23
New Jersey	NELAP	TN001	06-30-23
New York	NELAP	10781	03-31-23
North Carolina (DW)	State	21705	07-31-23
North Carolina (WW/SW)	State	64	12-31-22
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-23
Oregon	NELAP	TNI0189	12-31-22
Pennsylvania	NELAP	68-00576	12-31-22
Tennessee	State	02014	07-27-25
Texas	NELAP	T104704380-22-17	08-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-19-00236	12-31-22
Utah	NELAP	TN00009	07-31-23
Virginia	NELAP	460176	09-14-23
Washington	State	C593	01-19-23
West Virginia (DW)	State	9955C	12-31-22
West Virginia DEP	State	345	04-30-23
Wisconsin	State	998044300	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Method	Method Description	Protocol	Laboratory
29/6010C	Metals (ICP), Stationary Source	EPA	EET KNX
29/7470A	Mercury (CVAA), Stationary Source	EPA	EET KNX
5	Particulates	EPA	EET KNX
Air Train Vol.	Air Train Volume	None	EET KNX
AT Prep (BH)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (BH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (Empty)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (FH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (HCl)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (KMnO4)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep FH	Preparation, Mercury (Stationary Source) FH	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
140-29341-1	UNIT_4B-5-29_RUN1_CONT1	Air	10/17/22 00:00	10/21/22 08:30	1
140-29341-2	UNIT_4B-5-29_RUN1_CONT2	Air	10/17/22 00:00	10/21/22 08:30	2
140-29341-3	UNIT_4B-5-29_RUN1_CONT1,2,3	Air	10/17/22 00:00	10/21/22 08:30	3
140-29341-4	UNIT_4B-5-29_RUN1_CONT4	Air	10/17/22 00:00	10/21/22 08:30	4
140-29341-5	UNIT_4B-5-29_RUN1_CONT5A	Air	10/17/22 00:00	10/21/22 08:30	5
140-29341-6	UNIT_4B-5-29_RUN1_CONT5B	Air	10/17/22 00:00	10/21/22 08:30	6
140-29341-7	UNIT_4B-5-29_RUN1_CONT5C	Air	10/17/22 00:00	10/21/22 08:30	7
140-29341-8	UNIT_4B-5-29_RUN2_CONT1	Air	10/17/22 00:00	10/21/22 08:30	8
140-29341-9	UNIT_4B-5-29_RUN2_CONT2	Air	10/17/22 00:00	10/21/22 08:30	9
140-29341-10	UNIT_4B-5-29_RUN2_CONT1,2,3	Air	10/17/22 00:00	10/21/22 08:30	10
140-29341-11	UNIT_4B-5-29_RUN2_CONT4	Air	10/17/22 00:00	10/21/22 08:30	11
140-29341-12	UNIT_4B-5-29_RUN2_CONT5A	Air	10/17/22 00:00	10/21/22 08:30	12
140-29341-13	UNIT_4B-5-29_RUN2_CONT5B	Air	10/17/22 00:00	10/21/22 08:30	13
140-29341-14	UNIT_4B-5-29_RUN2_CONT5C	Air	10/17/22 00:00	10/21/22 08:30	14
140-29341-15	UNIT_4B-5-29_RUN3_CONT1	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-16	UNIT_4B-5-29_RUN3_CONT2	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-17	UNIT_4B-5-29_RUN3_CONT1,2,3	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-18	UNIT_4B-5-29_RUN3_CONT4	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-19	UNIT_4B-5-29_RUN3_CONT5A	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-20	UNIT_4B-5-29_RUN3_CONT5B	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-21	UNIT_4B-5-29_RUN3_CONT5C	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-22	UNIT_4B-5-29_RUN4_CONT1	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-23	UNIT_4B-5-29_RUN4_CONT2	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-24	UNIT_4B-5-29_RUN4_CONT1,2,3	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-25	UNIT_4B-5-29_RUN4_CONT4	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-26	UNIT_4B-5-29_RUN4_CONT5A	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-27	UNIT_4B-5-29_RUN4_CONT5B	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-28	UNIT_4B-5-29_RUN4_CONT5C	Air	10/18/22 00:00	10/21/22 08:30	
140-29341-29	UNIT_4B-5-29_RUN5_CONT1	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-30	UNIT_4B-5-29_RUN5_CONT2	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-31	UNIT_4B-5-29_RUN5_CONT1,2,3	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-32	UNIT_4B-5-29_RUN5_CONT4	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-33	UNIT_4B-5-29_RUN5_CONT5A	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-34	UNIT_4B-5-29_RUN5_CONT5B	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-35	UNIT_4B-5-29_RUN5_CONT5C	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-36	UNIT_4B-5-29_RUN6_CONT1	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-37	UNIT_4B-5-29_RUN6_CONT2	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-38	UNIT_4B-5-29_RUN6_CONT1,2,3	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-39	UNIT_4B-5-29_RUN6_CONT4	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-40	UNIT_4B-5-29_RUN6_CONT5A	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-41	UNIT_4B-5-29_RUN6_CONT5B	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-42	UNIT_4B-5-29_RUN6_CONT5C	Air	10/19/22 00:00	10/21/22 08:30	
140-29341-43	UNIT_4B-5-29_RUN7_CONT1	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-44	UNIT_4B-5-29_RUN7_CONT2	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-45	UNIT_4B-5-29_RUN7_CONT1,2,3	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-46	UNIT_4B-5-29_RUN7_CONT4	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-47	UNIT_4B-5-29_RUN7_CONT5A	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-48	UNIT_4B-5-29_RUN7_CONT5B	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-49	UNIT_4B-5-29_RUN7_CONT5C	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-50	5-29_CONT7	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-51	5-29_CONT8A	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-52	5-29_CONT8B	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-53	5-29_CONT9	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-54	5-29_CONT10	Air	10/20/22 00:00	10/21/22 08:30	
140-29341-55	5-29_CONT11	Air	10/20/22 00:00	10/21/22 08:30	

Sample Summary

Client: TRC Environmental Corporation

Project/Site: Georgia Power ICR - Unit 4B M5/M29

Job ID: 140-29341-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-29341-56	5-29_CONT12	Air	10/20/22 00:00	10/21/22 08:30
140-29341-57	C-1556 M5/M29 MEDIA CHECK FILTER	Air	10/17/22 00:00	10/21/22 08:30

1

2

3

4

5

6

7

8

9

10

11

12

13

14

CHAIN OF CUSTODY RECORD

Project Name: TRC
 Project No.: 499970
 Sampling Date(s): 10/17/22 to 10/18/22
 Laboratory: Testamerica
 Laboratory P.O.: C499970
 Shipping Date(s): 10/21/22
 Shipper's Name: TRC

Georgia Power McDonough ICR

Project Manager: Jason Grizzle
 TRC Office: AU4
 Phone No.: (720) 838-3857
 PM Email: jgrizzle@trccompanies.com



140-29341 Chain of Custody

Sample Code: 499970
 Sampled: 10/17/22
 Container: Date: 10/17/22
 Size: G/P
 Matrix: Description: S
 Method 5 Sample Filter - Unit 4B Run 1

Sample Code	Date	Container	G/P	Matrix	Description	Analysis	Box No.	Comments
Unit_4B-5-29_Run1_Cont1	10/17/22	Petri	G	S	Method 5 Sample Filter - Unit 4B Run 1	Method 5		
Unit_4B-5-29_Run1_Cont2	10/17/22	250 ml	G	L	Method 5 FHR - Unit 4B Run 1	Method 5		
Unit_4B-5-29_Run1_Cont3	10/17/22	250 ml	G	AQ	Method 29 FHR - Unit 4B Run 1	Method 29	HAND DELIVERED	
Unit_4B-5-29_Run1_Cont4	10/17/22	1000 ml	G	L	Method 29 IMP 1-3 - Unit 4B Run 1	Method 29	NO CUSTOM SHIPS	
Unit_4B-5-29_Run1_Cont5A	10/17/22	250 ml	G	L	Method 29 IMP 4 - Unit 4B Run 1	Method 29	RECEIVED AND INTEGRITY CHECKED AT 17:50 10/21/22	
Unit_4B-5-29_Run1_Cont5B	10/17/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4B Run 1	Method 29		
Unit_4B-5-29_Run1_Cont5C	10/17/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4B Run 1	Method 29		
Unit_4B-5-29_Run2_Cont1	10/17/22	Petri	G	S	Method 5 Sample Filter - Unit 4B Run 2	Method 5		
Unit_4B-5-29_Run2_Cont2	10/17/22	250 ml	G	L	Method 5 FHR - Unit 4B Run 2	Method 5		
Unit_4B-5-29_Run2_Cont3	10/17/22	250 ml	G	AQ	Method 29 FHR - Unit 4B Run 2	Method 29		
Unit_4B-5-29_Run2_Cont4	10/17/22	1000 ml	G	L	Method 29 IMP 1-3 - Unit 4B Run 2	Method 29		
Unit_4B-5-29_Run2_Cont5A	10/17/22	250 ml	G	L	Method 29 IMP 4 - Unit 4B Run 2	Method 29		
Unit_4B-5-29_Run2_Cont5B	10/17/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4B Run 2	Method 29		
Unit_4B-5-29_Run2_Cont5C	10/17/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4B Run 2	Method 29		
Unit_4B-5-29_Run3_Cont1	10/18/22	Petri	G	S	Method 5 Sample Filter - Unit 4B Run 3	Method 5		
Unit_4B-5-29_Run3_Cont2	10/18/22	250 ml	G	L	Method 5 FHR - Unit 4B Run 3	Method 5		
Unit_4B-5-29_Run3_Cont3	10/18/22	250 ml	G	AQ	Method 29 FHR - Unit 4B Run 3	Method 29		
Unit_4B-5-29_Run3_Cont4	10/18/22	1000 ml	G	L	Method 29 IMP 1-3 - Unit 4B Run 3	Method 29		
Relinquished by: <i>[Signature]</i>	Date/Time: 10/21/22 08:30	Received by: <i>[Signature]</i>	Date/Time: 10/21/22 08:30	Relinquished by:	Date/Time:			
Reacquired by: <i>[Signature]</i>	Date/Time: 10/21/22 08:30	Received by: <i>[Signature]</i>	Date/Time: 10/21/22 08:30	Reacquired by:	Date/Time:			
Remarks (*): Requesting								

CHAIN OF CUSTODY RECORD

Project Name:	Georgia Power McDonough ICR		
Project No.:	499970		
Report Sampling Date(s):	10/18/22	to	10/19/22
Laboratory:	Testamerica		
Laboratory P.O.:	C499970		
Shipping Date(s):	10/21/22		
Shipper's Name:	TRC		

Project Manager: Jason Grizzle
TRC Office: AU4
Phone No.: (720) 838-3857
PM Email: jgrizzle@trccompanies.com

Page 57 of 62

11/15/2022

CHAIN OF CUSTODY RECORD

Project Name:	Georgia Power McDonough ICR		
Project No.:	499970		
Sampling Dates:	10/19/22	to	10/20/22
Laboratory:	Testamerica		
Laboratory P.O.:	C499970		
Shipping Date(s):	10/21/22		
Shipper's Name:	TRC		
Sample Number:	499970		

Sample Code	Date Sampled	Container Size	G/P	MATRIX	Description	ANALYSIS		Box No.	Comments
						Method	Method		
Unit_4B-5-29_Run6_Cont2	10/19/22	250 ml	G	L	Method 5 FHR - Unit 4B Run 6	Method 5			
Unit_4B-5-29_Run6_Cont3	10/19/22	250 ml	G	AQ	Method 29 FHR - Unit 4B Run 6	Method 29			
Unit_4B-5-29_Run6_Cont4	10/19/22	1000 ml	G	L	Method 29 IMP 1-3 - Unit 4B Run 6	Method 29			
Unit_4B-5-29_Run5A	10/19/22	250 ml	G	L	Method 29 IMP 4 - Unit 4B Run 6	Method 29			
Unit_4B-5-29_Run5B	10/19/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4B Run 6	Method 29			
Unit_4B-5-29_Run5C	10/19/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4B Run 6	Method 29			
Unit_4B-5-29_Run7_Cont1	10/20/22	Petri	G	S	Method 5 Sample Filter - Unit 4B Run 7	Method 5			
Unit_4B-5-29_Run7_Cont2	10/20/22	250 ml	G	L	Method 5 FHR - Unit 4B Run 7	Method 5			
Unit_4B-5-29_Run7_Cont3	10/20/22	250 ml	G	AQ	Method 29 FHR - Unit 4B Run 7	Method 29			
Unit_4B-5-29_Run7_Cont4	10/20/22	1000 ml	G	L	Method 29 IMP 1-3 - Unit 4B Run 7	Method 29			
Unit_4B-5-29_Run7_Cont5A	10/20/22	250 ml	G	L	Method 29 IMP 4 - Unit 4B Run 7	Method 29			
Unit_4B-5-29_Run7_Cont5B	10/20/22	500 ml	G	L	Method 29 IMP 5-6 - Unit 4B Run 7	Method 29			
Unit_4B-5-29_Run7_Cont5C	10/20/22	500 ml	G	L	Method 29 IMP 5-6 HCl - Unit 4B Run 7	Method 29			
Unit_4B-5-29_Run7_Cont6	10/20/22	250 ml	G	L	Acetone Blank	Method 5			
Unit_4B-5-29_Run7_Cont7	10/20/22	500 ml	G	L	0.1N HNO3 Blank	Method 29			
Unit_4B-5-29_Run7_Cont8	10/20/22	250 ml	G	L	DH2O Blank	Method 29			
Unit_4B-5-29_Run7_Cont9	10/20/22	250 ml	G	L	HNO3-H2O2 Blank	Method 29			
5-29_Cont10	10/20/22	250 ml	G	L	KMnO4-H2SO4 Blank	Method 29			
Requisitioned by: <i>John Grizzile</i>	Date/Time: 10/19/22 08:30	Relinquished by: <i>John Grizzile</i>	Date/Time: 10/20/22 08:30						
Received by: <i>John Grizzile</i>	Date/Time: 10/20/22 08:30	Received by: <i>John Grizzile</i>	Date/Time: 10/20/22 08:30						
Remarks (*): Requesting									

CHAIN OF CUSTODY RECORD

Project Name:	Georgia Power McDonough ICR		
Project No.:	499970		
Sampling Date(s):	10/20/22	to	10/20/22
TRC Laboratory:	Testamerica		
Repository P.O.:	C499970		
Mapping Date(s):	10/14/22		
Mapper's Name:	TRC		

XAD Source Sampling Media Request Form



Environment Testing
TestAmerica

Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
865-291-3000

Form Number: **0823322-3**
-scan completed document and save on the
public drive under Media/PDFs; filename should
be the form number. **Send a copy to PM.**

Date of Request: August 23, 2022

Company: TRC Companies

Client Project: ICR Project #2

Client PO#: Pending

Quantity
21

Media Type
90mm TARED Quartz

Spiked for Method
M5/M29

Comments:

Loc: 140
29137
#22 A
WETCHE|

Method	Color Code	Amt. Spiked	Conc. And Units	Spike Sol'n ID	Exp. Date	Spiked By / Date	Verified BY
8270C							
Dioxin							
1668 mod.							
CARB 429							
8081A							
TCO/Grav		NA	NA	NA	NA	NA	NA

Method	Color Code	Amt. Spiked	Conc. And Units	Spike Sol'n ID	Exp. Date	Spiked By / Date	Verified BY
8270C							
Dioxin							
1668 mod.							
CARB 429							
8081A							
TCO/Grav		NA	NA	NA	NA	NA	NA

Shipping (include blank COCs and Custody Seals with this shipment. Send temperature blanks where applicable)

Attn: Jon Howard

Company: TRC Companies

Address 1: 400 Hilltop Avenue

Address 2:

City, State, Zip: Opelika, AL 36801

Phone: 334-704-4706

Fax:

FedEx Email: JHoward@trcccompanies.com

Lot Number:

Invoice #:

Rush Order? No

Quantimis Quote:

Media Needed By: 10/5/2022

Project Manager: Courtney Atkins

Shipping Courier:

Tracking Number

Invoice #:

EUROFIN/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			<input type="checkbox"/> Containers, Broken <input type="checkbox"/> Checked in lab	7-5-29-CONT11 F1511, S1W1D 86 7-29-CONT12
2. Were ambient air containers received intact?	/			<input type="checkbox"/> Yes <input type="checkbox"/> NA	
3. The coolers/containers custody seal if present, is it intact?	/			<input type="checkbox"/> Cooler Out of Temp, Client Contacted; Proceed/Cancel <input type="checkbox"/> Cooler Out of Temp, Same Day Receipt	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : <u>5C73</u> Correction factor: <u>+0.12</u>	/			<input type="checkbox"/> Containers, Broken <input type="checkbox"/> Containers, Improper; Client Contacted; Proceed/Cancel <input checked="" type="checkbox"/> COC & Samples Do Not Match <input type="checkbox"/> COC Incorrect/Incomplete <input type="checkbox"/> COC Not Received	
5. Were all of the sample containers received intact?	/			<input type="checkbox"/> Sample Received, Not on COC <input type="checkbox"/> Sample on COC, Not Received	
6. Were samples received in appropriate containers?	/			<input type="checkbox"/> COC; No Date/Time; Client Contacted <input type="checkbox"/> Sampler Not Listed on COC <input type="checkbox"/> COC Incorrect/Incomplete <input type="checkbox"/> COC No tests on COC <input type="checkbox"/> COC Incorrect/Incomplete	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			<input type="checkbox"/> pH test strip lot number:	
8. Were all of the samples listed on the COC received?	/			<input type="checkbox"/> Holding Time - Receipt <input type="checkbox"/> pH Adjusted, pH Included (See box 16A)	
9. Is the date/time of sample collection noted?	/			<input type="checkbox"/> Incorrect Preservative <input type="checkbox"/> Headspace (VOA only) <input type="checkbox"/> Residual Chlorine	
10. Was the sampler identified on the COC?	/			<input type="checkbox"/> Box 16A: pH Preservation Preservative: _____ Lot Number: _____ Exp Date: _____ Analyst: _____ Date: _____ Time: _____	
11. Is the client and project name/# identified?	/			<input type="checkbox"/> If no, notify lab to adjust <input type="checkbox"/> Project missing info	
12. Are tests/parameters listed for each sample?	/				
13. Is the matrix of the samples noted?	/				
14. Was COC relinquished? (Signed/Dated/Timed)	/				
15. Were samples received within holding time?	/				
16. Were samples received with correct chemical preservative (excluding Encore)?	/				
17. Were VOA samples received without headspace?	/				
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:	/				
19. For 1613B water samples is pH<9?	/				
20. For rad samples was sample activity info. Provided?	/				
Project #: _____	PM Instructions: _____				
Sample Receiving Associate: _____					Date: 10-22-22

 1
2
3
4
5
6
7
8
9
10
11
12
13
14

Eurofins Knoxville

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



Generated
11/15/2022 3:36:14 PM

Authorized for release by
Courtney Adkins, Project Manager II
Courtney.Adkins@et.eurofinsus.com
(865)291-3019

Processed Field Data and Results

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project #: 499970
 Test Method(s): 5/29
 Test Run #: 1
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: dscf/MMBtu
F_c Factor: scf/MMBtu
F_w Factor: wscf/MMBtu
 Fuel heat content: Btu /
 Process/fuel flow rate:
 Soot blown? N/A Fuel Type:
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.25 in Hg
 Stack Static Pressure (P_g): -0.23 in H2O
 Stack Pressure (P_s): 29.23 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	Empty	<u>649.9</u>	<u>906.8</u>
	<u>2</u>	HNO ₃ /H ₂ O ₂	<u>770.4</u>	<u>807.6</u>
	<u>3</u>	HNO ₃ /H ₂ O ₂	<u>731.0</u>	<u>735.9</u>
	<u>4</u>	Empty	<u>635.4</u>	<u>637.7</u>
	<u>5</u>	KMnO ₄ /H ₂ SO ₄	<u>752.9</u>	<u>747.6</u>
	<u>6</u>	KMnO ₄ /H ₂ SO ₄	<u>757.6</u>	<u>756.0</u>
	<u>7</u>	SiGel	<u>1012.1</u>	<u>1049.0</u>

Leak Checks

Pre-Test Train Leak Check: 0.010 CFM @ 14 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.010 CFM @ 14 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID:
 Tare Weight: grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 4.52 % vol dry
 % O₂: 13.12 % vol dry
 % Nitrogen + % CO : 82.36 % vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 1

Test Date: 10/12/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 2
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8A
 Cal. coefficient (C_p): 0.827
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.25 in Hg
 Stack Static Pressure (P_g): -0.23 in H₂O
 Stack Pressure (P_s): 29.23 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>638.1</u>	<u>903.0</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>749.9</u>	<u>781.5</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>738.6</u>	<u>742.1</u>
	<u>4</u>	<u>Empty</u>	<u>646.9</u>	<u>649.4</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>754.6</u>	<u>751.4</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>748.7</u>	<u>746.1</u>
	<u>7</u>	<u>SiGel</u>	<u>933.2</u>	<u>971.8</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 13 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 13 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 4.53 %vol dry
 % O₂: 13.15 %vol dry
 % Nitrogen + % CO : 82.33 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 2

Test Date: 10/12/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 3
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.00 in Hg
 Stack Static Pressure (P_g): -0.23 in H2O
 Stack Pressure (P_s): 28.98 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>651.1</u>	<u>916.9</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>773.2</u>	<u>784.1</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>732.4</u>	<u>734.7</u>
	<u>4</u>	<u>Empty</u>	<u>636.9</u>	<u>638.0</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>756.3</u>	<u>753.1</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>749.9</u>	<u>748.5</u>
	<u>7</u>	<u>SiGel</u>	<u>1018.3</u>	<u>1053.1</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 16 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 20 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.54 %vol dry
 % O₂ : 13.09 %vol dry
 % Nitrogen + % CO : 82.36 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 3

Test Date: 10/12/2022
K-Factor: 2.650
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 4
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8A
 Cal. coefficient (C_p): 0.827
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.00 in Hg
 Stack Static Pressure (P_g): -0.23 in H2O
 Stack Pressure (P_s): 28.98 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>638.7</u>	<u>917.9</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>752.5</u>	<u>793.0</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>740.9</u>	<u>745.0</u>
	<u>4</u>	<u>Empty</u>	<u>648.9</u>	<u>650.2</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>757.3</u>	<u>753.3</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>761.2</u>	<u>759.8</u>
	<u>7</u>	<u>SiGel</u>	<u>947.0</u>	<u>983.6</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 13 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 10 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.47 %vol dry
 % O₂ : 13.12 %vol dry
 % Nitrogen + % CO : 82.41 %vol dry
 M_d - dry basis : 29.24 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 4

Test Date: 10/12/2022
K-Factor: 2.650
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project #: 499970
 Test Method(s): 5/29
 Test Run #: 5
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: dscf/MMBtu
F_c Factor: scf/MMBtu
F_w Factor: wscf/MMBtu
 Fuel heat content: Btu /
 Process/fuel flow rate:
 Soot blown? N/A Fuel Type:
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.05 in Hg
 Stack Static Pressure (P_g): -0.23 in H2O
 Stack Pressure (P_s): 29.03 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>651.3</u>	<u>895.4</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>774.4</u>	<u>790.2</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>732.4</u>	<u>735.5</u>
	<u>4</u>	<u>Empty</u>	<u>637.7</u>	<u>638.8</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>756.9</u>	<u>757.2</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>751.5</u>	<u>749.7</u>
	<u>7</u>	<u>SiGel</u>	<u>1000.9</u>	<u>1035.3</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 10 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 11 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.52 % vol dry
 % O₂ : 13.13 % vol dry
 % Nitrogen + % CO : 82.35 % vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 5

Test Date: 10/12/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 6
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8A
 Cal. coefficient (C_p): 0.827
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.10 in Hg
 Stack Static Pressure (P_g): -0.23 in H2O
 Stack Pressure (P_s): 29.08 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>638.6</u>	<u>917.3</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>751.8</u>	<u>779.8</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>741.5</u>	<u>747.6</u>
	<u>4</u>	<u>Empty</u>	<u>649.6</u>	<u>649.9</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>760.0</u>	<u>759.3</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>755.2</u>	<u>754.1</u>
	<u>7</u>	<u>SiGel</u>	<u>928.5</u>	<u>962.5</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 11 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 15 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.54 %vol dry
 % O₂ : 13.01 %vol dry
 % Nitrogen + % CO : 82.46 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 6

Test Date: 10/12/2022
K-Factor: 2.950
Minutes/pt: 8

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4A
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 7
 Test Date(s): 10/12/2022

Console Operator: M. Lawrie
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.20 in Hg
 Stack Static Pressure (P_g): -0.23 in H2O
 Stack Pressure (P_s): 29.18 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>651.0</u>	<u>910.0</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>772.9</u>	<u>793.8</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>733.2</u>	<u>737.7</u>
	<u>4</u>	<u>Empty</u>	<u>637.5</u>	<u>637.4</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>759.1</u>	<u>759.2</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>750.6</u>	<u>748.8</u>
	<u>7</u>	<u>SiGel</u>	<u>1020.5</u>	<u>1051.8</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 12 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 12 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 4.51 %vol dry
 % O₂: 13.07 %vol dry
 % Nitrogen + % CO : 82.43 %vol dry
 M_d - dry basis : 29.24 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4A
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 7

Test Date: 10/12/2022
K-Factor: 2.950
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project #: 499970
 Test Method(s): 5/29
 Test Run #: 1
 Test Date(s): 10/17/2022

Console Operator: M. Lawrie
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8A
 Cal. coefficient (C_p): 0.827
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
 F_d Factor: dscf/MMBtu
 F_c Factor: scf/MMBtu
 F_w Factor: wscf/MMBtu
 Fuel heat content: Btu / _____
 Process/fuel flow rate:
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.00 in Hg
 Stack Static Pressure (P_g): -0.32 in H₂O
 Stack Pressure (P_s): 28.98 in Hg

		Tare wt.	Final wt:
		(grams)	(grams)
	1 Empty	639.3	900.7
	2 HNO ₃ /H ₂ O ₂	751.8	762.9
	3 HNO ₃ /H ₂ O ₂	740.8	742.2
	4 Empty	650.4	650.5
	5 KMnO ₄ /H ₂ SO ₄	755.2	752.6
	6 KMnO ₄ /H ₂ SO ₄	749.6	747.5
	7 SiGel	957.9	996.2

Leak Checks

Pre-Test Train Leak Check: 0.010 CFM @ 10 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.010 CFM @ 10 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.52 % vol dry
 % O₂ : 13.05 % vol dry
 % Nitrogen + % CO : 82.43 % vol dry
 M_d - dry basis : 29.24 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 1

Test Date: 10/17/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 2
 Test Date(s): 10/17/2022

Console Operator: M. Lawrie
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
 F_d Factor: dscf/MMBtu
 F_c Factor: scf/MMBtu
 F_w Factor: wscf/MMBtu
 Fuel heat content: Btu / _____
 Process/fuel flow rate:
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 28.95 in Hg
 Stack Static Pressure (P_g): -0.23 in H₂O
 Stack Pressure (P_s): 28.93 in Hg

		Tare wt.	Final wt:
		(grams)	(grams)
	1 Empty	651.2	892.2
	2 HNO ₃ /H ₂ O ₂	773.3	787.8
	3 HNO ₃ /H ₂ O ₂	733.9	737.0
	4 Empty	637.1	638.1
	5 KMnO ₄ /H ₂ SO ₄	759.9	756.6
	6 KMnO ₄ /H ₂ SO ₄	755.3	755.8
	7 SiGel	1015.2	1050.8

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 11 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 10.5 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.51 %vol dry
 % O₂ : 13.08 %vol dry
 % Nitrogen + % CO : 82.41 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 2

Test Date: 10/17/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 3
 Test Date(s): 10/18/2022

Console Operator: S. Macleod
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8A
 Cal. coefficient (C_p): 0.827
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.05 in Hg
 Stack Static Pressure (P_g): -0.32 in H2O
 Stack Pressure (P_s): 29.03 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>638.9</u>	<u>887.5</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>752.4</u>	<u>754.8</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>741.5</u>	<u>741.6</u>
	<u>4</u>	<u>Empty</u>	<u>649.2</u>	<u>648.8</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>757.8</u>	<u>756.6</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>753.5</u>	<u>752.9</u>
	<u>7</u>	<u>SiGel</u>	<u>945.0</u>	<u>979.4</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 11 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 11 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 4.52 %vol dry
 % O₂: 13.11 %vol dry
 % Nitrogen + % CO : 82.38 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 3

Test Date: 10/18/2022
K-Factor: 2.650
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 4
 Test Date(s): 10/18/2022

Console Operator: M. Lawrie
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
 F_d Factor: dscf/MMBtu
 F_c Factor: scf/MMBtu
 F_w Factor: wscf/MMBtu
 Fuel heat content: Btu / _____
 Process/fuel flow rate:
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.10 in Hg
 Stack Static Pressure (P_g): -0.32 in H₂O
 Stack Pressure (P_s): 29.08 in Hg

		Tare wt.	Final wt:
		(grams)	(grams)
	1 Empty	650.2	898.2
	2 HNO ₃ /H ₂ O ₂	771.9	776.5
	3 HNO ₃ /H ₂ O ₂	732.7	732.0
	4 Empty	636.6	636.1
	5 KMnO ₄ /H ₂ SO ₄	755.7	753.8
	6 KMnO ₄ /H ₂ SO ₄	749.9	748.9
	7 SiGel	1010.9	1051.1

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 12 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 14 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂ : 4.52 %vol dry
 % O₂ : 13.12 %vol dry
 % Nitrogen + % CO : 82.35 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 4

Test Date: 10/18/2022
K-Factor: 2.650
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project #: 499970
 Test Method(s): 5/29
 Test Run #: 5
 Test Date(s): 10/19/2022

Console Operator: S. MaCleod
 Console ID: E13
 Meter Y: 0.9941
 Orifice ΔH_{g} : 1.739
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: dscf/MMBtu
F_c Factor: scf/MMBtu
F_w Factor: wscf/MMBtu
 Fuel heat content: Btu /
 Process/fuel flow rate:
 Soot blown? N/A Fuel Type:
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.20 in Hg
 Stack Static Pressure (P_g): -0.32 in H2O
 Stack Pressure (P_s): 29.18 in Hg

	Imp #	Contents	Tare wt. (grams)	Final wt. (grams)
	1	Empty	638.5	925.1
	2	HNO ₃ /H ₂ O ₂	751.5	766.5
	3	HNO ₃ /H ₂ O ₂	740.1	740.6
	4	Empty	649.2	648.6
	5	KMnO ₄ /H ₂ SO ₄	759.3	757.7
	6	KMnO ₄ /H ₂ SO ₄	755.1	755.0
	7	SiGel	967.3	993.4

Leak Checks

Pre-Test Train Leak Check: 0.010 CFM @ 11 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.010 CFM @ 12 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID:
 Tare Weight: grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 4.52 % vol dry
 % O₂: 13.19 % vol dry
 % Nitrogen + % CO : 82.29 % vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 5

Test Date: 10/19/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 6
 Test Date(s): 10/19/2022

Console Operator: M. Lawrie
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8A
 Cal. coefficient (C_p): 0.827
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.25 in Hg
 Stack Static Pressure (P_g): -0.32 in H₂O
 Stack Pressure (P_s): 29.23 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>650.9</u>	<u>901.5</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>772.8</u>	<u>779.2</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>732.4</u>	<u>732.1</u>
	<u>4</u>	<u>Empty</u>	<u>637.6</u>	<u>637.3</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>756.8</u>	<u>756.2</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>751.1</u>	<u>750.5</u>
	<u>7</u>	<u>SiGel</u>	<u>1033.4</u>	<u>1061.2</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 11 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 15 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 4.51 %vol dry
 % O₂: 13.14 %vol dry
 % Nitrogen + % CO : 82.36 %vol dry
 M_d - dry basis : 29.25 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 6

Test Date: 10/19/2022
K-Factor: 2.666
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Isokinetic Test Support Data

Company: Georgia Power
 Plant: McDonough
 Unit ID: Unit 4B
 Location: Exhaust

Project#: 499970
 Test Method(s): 5/29
 Test Run #: 7
 Test Date(s): 10/20/2022

Console Operator: M. Lawrie
 Console ID: M16
 Meter Y: 1.0105
 Orifice ΔH_{g} : 1.899
 Pitot Tube ID: RIPT-8B
 Cal. coefficient (C_p): 0.825
 Probe Liner Material: Glass
 Nozzle Material: Glass
 Nozzle Diameter (D_n): 0.249 in

Unit Operating Mode: Max
 Duct Shape/Area: Round / 443.01 ft²
F_d Factor: _____ dscf/MMBtu
F_c Factor: _____ scf/MMBtu
F_w Factor: _____ wscf/MMBtu
 Fuel heat content: _____ Btu / _____
 Process/fuel flow rate: _____
 Soot blown? N/A Fuel Type: _____
 Duration: N/A min

Sample collection time

Total # of points: 24
 Target Sample time/point: 8.0 min
 Target run duration: 192.0 min
 Barometric Pressure (P_{bar}): 29.25 in Hg
 Stack Static Pressure (P_g): -0.32 in H2O
 Stack Pressure (P_s): 29.23 in Hg

			Tare wt.	Final wt:
			(grams)	(grams)
	<u>1</u>	<u>Empty</u>	<u>639.0</u>	<u>929.6</u>
	<u>2</u>	<u>HNO₃/H₂O₂</u>	<u>752.7</u>	<u>794.9</u>
	<u>3</u>	<u>HNO₃/H₂O₂</u>	<u>741.3</u>	<u>743.8</u>
	<u>4</u>	<u>Empty</u>	<u>650.9</u>	<u>650.7</u>
	<u>5</u>	<u>KMnO₄/H₂SO₄</u>	<u>760.5</u>	<u>760.6</u>
	<u>6</u>	<u>KMnO₄/H₂SO₄</u>	<u>756.4</u>	<u>756.2</u>
	<u>7</u>	<u>SiGel</u>	<u>949.8</u>	<u>973.7</u>

Leak Checks

Pre-Test Train Leak Check: 0.001 CFM @ 10 "Hg
 Pre-Test Pitot Leak Check: Pass (Pass or Fail)
 Post-Test Train Leak Rate: 0.001 CFM @ 10 "Hg
 Post-Test Pitot Leak Check: Pass (Pass or Fail)
 Pump/Orifice Leak Check: Pass (Pass or Fail)
 Filter/Thimble ID: _____
 Tare Weight: _____ grams

Gas Molecular Weight Method:
 Method 3A, Instrumental % CO₂: 5.17 %vol dry
 % O₂: 11.86 %vol dry
 % Nitrogen + % CO : 82.98 %vol dry
 M_d - dry basis : 29.30 lb/lb-mole

Description of Filter and Front Half Rinses:
Description of Impinger liquid:
General Comments:

Isokinetic Test - Processed Traverse Data

Company: Georgia Power
Plant: McDonough
Unit: Unit 4B
Location: Exhaust

Project #: 499970
Method(s): 5/29
Run #: 7

Test Date: 10/20/2022
K-Factor: 2.650
Minutes/pt: 8

© 2021 TBC Environmental Corp

AM-EMT-15 Rev. 45
Revised 4/6/21

Raw Field Data Sheets



SAMPLING TRAIN SET UP AND RECOVERY

Page () of

Project No.	499970.0000.0000	Reagent Type	5% HNO ₃ 10% H ₂ O ₂	→	0.1M HNO ₃	→	10% H ₂ SO ₄	KN04
Client	Georgia Power	Lot No.	RIB-031-B/C + RIB-033-A	RIB-020-A, BLG-021-A/B	69157241 61005237/13	TIS 017		
Facility	McDonough Power Plant	Daily Field Balance Calibration Verification Check:						
Source	UNIT 4A	Documentation found in Logbook:						
Condition	MAX - NORMAL	Documentation found on field balance check data sheet from AM-EMT-52:						X

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.	522695	
	Sample ID	UNIT 4A - 5/29 - 121				Thimble No.	(NA, unless noted)	
1	IMPINGERS							

Impinger No.	#1	#2	#3	#4	#5	#6	
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
Vol. Added (ml)	---	100	100	---	100	100	
Final Weight (g)	906.8	807.6	735.9	637.7	747.6	758.0	
Initial Weight (g)	649.9	770.4	731.0	635.4	752.9	757.6	
Net Collected (g)	256.9	37.2	4.9	2.3	-5.3	-1.6	

Setup	
Date	Person
10/12/22	WM

Silica Gel Imp. No.	#7			TOTAL MOISTURE (Impingers and Silica gel) (g)		
Final Weight (g)	1049.0					
Initial Weight (g)	1012.1					
Net Collected (g)	36.9					

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.	522696	
	Sample ID	UNIT 4A - 5/29 - 122				Thimble No.	(NA, unless noted)	
2	IMPINGERS							

Impinger No.	#1	#2	#3	#4	#5	#6	
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
Vol. Added (ml)	---	100	100	---	100	100	
Final Weight (g)	903.0	781.5	742.1	649.5	751.4	746.1	
Initial Weight (g)	638.1	749.9	738.6	646.9	754.6	748.7	
Net Collected (g)	264.9	31.6	3.5	2.5	-3.2	-2.6	

Setup	
Date	Person
10/12/22	WM

Silica Gel Imp. No.	#7			TOTAL MOISTURE (Impingers and Silica gel) (g)		
Final Weight (g)	971.8					
Initial Weight (g)	933.2					
Net Collected (g)	38.6					

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.	522694	
	Sample ID	UNIT 4A - 5/29 - 123				Thimble No.	(NA, unless noted)	
3	IMPINGERS							

Impinger No.	#1	#2	#3	#4	#5	#6	
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
Vol. Added (ml)	---	100	100	---	100	100	
Final Weight (g)	916.9	784.1	734.7	638.0	753.1	748.5	
Initial Weight (g)	651.1	773.2	732.4	636.9	756.3	749.9	
Net Collected (g)	265.8	10.9	2.3	1.1	-3.2	-1.4	

Setup	
Date	Person
10/12/22	WM

Silica Gel Imp. No.	#7			TOTAL MOISTURE (Impingers and Silica gel) (g)		
Final Weight (g)	1053.1					
Initial Weight (g)	1018.3					
Net Collected (g)	34.8					

* Except for 4% KMnO₄ / 10% H₂SO₄
NA = Not Applicable

Checked By: Jeff 11/14/22
(sign and date)

GPC Plant McDonough ICP Testing
AM-FD-499970 Rev D 12/12/2019

Project No.	499970.0000.0000	Reagent Type	<i>See Page 1</i>			
Client	Georgia Power	Lot No.				
Facility	McDonough Power Plant					
Source	UNIT 4A					
Condition	MAX - NORMAL					

Daily Field Balance Calibration Verification Check:

Documentation found in Logbook:

Run No.	Train Type	5 / 29	FRONT HALF	Filter No.	522697	<i>Z</i>
	Sample ID	UNIT 4A - 5/29 - R4		Thimble No. (NA, unless noted)	<i>-</i>	

IMPINGERS

Impinger No.	#1	#2	#3	#4	#5	#6
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄	
Vol. Added (ml)	---	100	100	---	100	100
Final Weight (g)	917.9	793.0	745.0	650.2	753.3	759.8
Initial Weight (g)	638.7	752.5	740.9	648.9	757.3	761.2
Net Collected (g)	279.2	40.5	4.1	1.3	-4.0	-1.4

Setup

Date	Person
10/13/22	WM

Recovery

Silica Gel Imp. No.	#7
Date	1033.6
Initial Weight (g)	917.0
Net Collected (g)	36.6

TOTAL MOISTURE (Impingers and Silica gel) (g)

356.3

Run No.	Train Type	5 / 29	FRONT HALF	Filter No.	522693	<i>Z</i>
	Sample ID	UNIT 4A - 5/29 - R5		Thimble No. (NA, unless noted)	<i>-</i>	

IMPINGERS

Impinger No.	#1	#2	#3	#4	#5	#6
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄	
Vol. Added (ml)	---	100	100	---	100	100
Final Weight (g)	895.4	790.2	735.5	638.8	757.2	749.7
Initial Weight (g)	651.3	774.4	732.4	637.7	756.9	751.5
Net Collected (g)	244.1	16.8	3.1	1.1	0.3	-1.8

Setup

Date	Person
10/13/22	WM

Recovery

Silica Gel Imp. No.	#7
Date	1035.3
Initial Weight (g)	1000.9
Net Collected (g)	34.4

TOTAL MOISTURE (Impingers and Silica gel) (g)

297.0

Run No.	Train Type	5 / 29	FRONT HALF	Filter No.	522693	<i>Z</i>
	Sample ID	UNIT 4A - 5/29 - R6		Thimble No. (NA, unless noted)	<i>-</i>	

IMPINGERS

Impinger No.	#1	#2	#3	#4	#5	#6
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄	
Vol. Added (ml)	---	100	100	---	100	100
Final Weight (g)	917.3	779.8	747.6	649.9	759.3	754.1
Initial Weight (g)	638.6	751.8	741.5	649.4	760.0	755.2
Net Collected (g)	278.7	28.0	6.1	0.5	-0.7	-1.1

Setup

Date	Person
10/13/22	WM

Recovery

Silica Gel Imp. No.	#7
Date	962.5
Initial Weight (g)	928.5
Net Collected (g)	34.0

TOTAL MOISTURE (Impingers and Silica gel) (g)

345.5

* Except for 4% KMnO₄ / 10% H₂SO₄
NA = Not Applicable Report Number 499970

Checked By: *Jeffrey J. Miller* (Signature)
(Sign and Date) 10/14/22

GPC Plant McDonough NC Testing 10/12/2019



SAMPLING TRAIN SET UP AND RECOVERY

Page of

Project No.	499970.0000.0000	Reagent Type	<i>See Page 1</i>			
Client	Georgia Power	Lot No.				
Facility	McDonough Power Plant	Daily Field Balance Calibration Verification Check: Documentation found in Logbook: Documentation found on field balance check data sheet from AM-EMT-52: X				
Source	UNIT 4A					
Condition	MAX - Normal					

Run No.	Train Type 5 / 29	FRONT HALF			Filter No. 522692	<i>Z</i>	
	Sample ID UNIT 4A - 5/29 - 127				Thimble No. (NA, unless noted)	<i>Z</i>	
IMPINGERS							
<i>7</i>	Impinger No.	#1	#2	#3	#4	#5	#6
	Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂	Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
	Vol. Added (ml)	---	100	100	---	100	100
	Final Weight (g)	910.0	793.8	737.7	637.4	759.2	748.8
	Initial Weight (g)	651.0	772.7	733.2	637.5	759.1	750.6
	Net Collected (g)	259.0	20.9	4.5	-0.1	0.1	-1.8

Setup		#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	10/14/22 WM	<i>313.9</i>				
Recovery		Silica Gel Imp. No.					
Date	Person	10/14/22 WM	Final Weight (g)				
			1057.8				
			1020.5				
			31.3				

Run No.	Train Type 5 / 29	FRONT HALF			Filter No.			
	Sample ID				Thimble No. (NA, unless noted)			
IMPINGERS								
<i>—</i>	Impinger No.	#1	#2	#3	#4	#5	#6	
	Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂	Empty	4% KMnO ₄ / 10% H ₂ SO ₄			
	Vol. Added (ml)	---	100	100	---	100	100	
	Final Weight (g)							
	Initial Weight (g)							
	Net Collected (g)							
Recovery		Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person			<i>—</i>				

Run No.	Train Type 5 / 29	FRONT HALF			Filter No.			
	Sample ID				Thimble No. (NA, unless noted)			
IMPINGERS								
<i>—</i>	Impinger No.	#1	#2	#3	#4	#5	#6	
	Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂	Empty	4% KMnO ₄ / 10% H ₂ SO ₄			
	Vol. Added (ml)	---	100	100	---	100	100	
	Final Weight (g)							
	Initial Weight (g)							
	Net Collected (g)							
Recovery		Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person			<i>—</i>				

ISOKINETIC FIELD DATA SHEET

Method: 5 & 29

Project No. 499970.0000.0000								Date 10/12/2022					
Client Georgia Power								Operator Name Michael Lawrence					
Facility McDonough Power Plant								Stack Diameter (in.) 285	Barometer ID 14900524				
Source Unit 4A								Condition Max	Barometric Pressure (in. Hg) 29.25				
Sampling Location Stack								Run No. 1	Static Pressure (in. H ₂ O) -0.23				
Assumed Moisture (%) 12.5	Ambient Temp. (°F)	Filter No. 522695	Probe			Post-Test Positive Orifice/Meter Leak Check Pass? X Y N			Nozzle ID No. G-5-24B				
			Liner Material Quartz		Setting (°F) 248					Length (ft) 12			
K Factor 2.60													
Pitot Tube								DGM - Meter Box					
Pitot Pre-test: Pass?	+ ✓ Y N	ID No.	PTCF or Cp	Console No.		Meter No.	ΔH @	DGMCF or Y	Diameter (in.)				
Pitot Post-test: Pass?	+ ✓ Y N	RPT-BB	0.825	—		E13	1.739	0.9941	.249				
Traverse Point	Time Clock (24 hr)	Elapsed (min)	DGM Volume (ft ³)	Pitot ΔP (in. H ₂ O)	Orifice, ΔH Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Impingers Exit	DGM Meter In	DGM Meter Out	Pump Vacuum (in. Hg)	
1	7:34	0	721.520	0.41	1.06	1.40	218	247	241	64	73	73	3.5
—	7:38	4	729.78	0.41	1.06	1.10	218	247	241	64	73	73	3.5
2	7:42	8	732.17	0.32	0.832	0.83	216	234	257	62	74	74	3.0
—	7:46	12	734.31	0.32	0.832	0.83	216	234	257	62	74	74	3.0
3	7:50	16	736.42	0.36	0.936	0.93	215	238	263	59	75	75	3.5
—	7:54	20	738.65	0.36	0.936	0.93	215	238	263	59	75	75	3.5
4	7:58	24	740.84	0.54	1.40	1.40	214	239	259	60	75	75	4.0
—	8:02	28	743.39	0.54	1.40	1.40	214	239	259	60	75	75	4.0
5	8:06	32	746.01	0.78	2.02	2.02	214	218	266	61	76	76	5.0
—	8:10	36	748.97	0.78	2.02	2.0	214	218	266	61	76	76	5.0
6	8:14	40	752.26	0.76	1.97	2.0	210	221	266	62	76	76	5.0
—	8:18	44	755.49	0.76	1.97	2.0	210	221	266	67	76	76	5.0
End	8:22	48	758.644										
B	8:30	48	758.644	1.1	2.86	2.9	219	244	244	65	76	76	6.5
—	8:34	52	762.96	1.1	2.86	2.9	219	244	241	65	76	76	6.5
2	8:38	56	766.15	1.1	2.86	2.9	219	248	265	61	76	76	6.5
—	8:42	60	769.91	1.1	2.86	2.9	219	248	265	61	76	76	6.5
3	8:46	64	773.83	1.2	3.12	3.1	217	252	244	62	77	77	7.5
—	8:50	68	777.78	1.2	3.12	3.1	217	252	244	62	77	77	7.5
4	8:54	72	781.74	1.2	3.12	3.1	218	251	245	64	77	77	7.5
—	8:58	76	785.77	1.2	3.12	3.1	218	251	245	64	77	77	7.5
5	9:02	80	789.71	1.2	3.12	3.1	218	252	243	66	77	77	7.5
—	9:06	84	793.74	1.2	3.12	3.1	218	252	243	66	77	77	7.5
6	9:10	88	796.33	1.0	2.60	2.6	216	249	241	66	77	77	7.0
—	9:14	92	801.62	1.0	2.60	2.6	216	249	241	66	77	77	7.0
End	9:18	96	805.261										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft ³)		Leak Rate (cfm)					
		Start	Stop		Time (sec.)	Vacuum (in Hg)			
Port:	Before	—	—	60	14	0.001			
	After	—	—	60	13	0.001			
Port:	Before								
	After								

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.	499970.0000,0000	Date	10/12/2022
Client	Georgia Power	Operator	
Facility	McDonough Power Plant	Name	Michael Lawrie
Source	Unit 4A	Condition	Max
Sampling Location	Stack	Run No.	1

Traverse Point	Time		DGM Volume (ft³)	Pilot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Impingers Exit	Temperature (°F)		Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)					DGM Meter In	DGM Meter Out	
1	9:28	96	805.26	0.90	2.08	2.1	219	221	241	66	77	77	5.0
-	9:32	100	808.65	0.90	2.08	2.1	219	221	241	66	77	77	5.0
2	9:36	104	811.78	0.46	1.19	1.2	218	231	247	63	77	77	3.5
-	9:40	108	814.51	0.46	1.19	1.2	218	231	247	63	77	77	3.5
3	9:44	112	817.42	0.37	0.96	0.96	217	243	242	64	77	77	3.0
-	9:48	116	819.55	0.37	0.96	0.96	217	243	242	64	77	77	3.0
4	9:52	120	821.78	0.36	0.936	0.94	217	255	232	65	78	78	3.5
-	9:56	124	823.86	0.36	0.936	0.94	217	255	232	65	78	78	3.5
5	10:00	128	826.09	0.47	1.222	1.2	214	255	243	60	77	77	4.0
-	10:04	132	828.62	0.47	1.22	1.2	214	255	243	60	77	77	4.0
6	10:08	136	831.17	0.41	1.06	1.1	212	243	242	59	78	78	4.0
-	10:12	140	833.72	0.41	1.06	1.1	212	243	242	59	78	78	4.0
End	10:16	140	835.930										
1	10:22	144	835.930	0.51	1.48	1.5	220	255	241	65	78	78	4.5
-	10:26	148	838.75	0.57	1.48	1.5	220	255	241	65	78	78	4.5
2	10:30	152	841.58	0.62	1.61	1.6	219	249	243	58	78	78	4.5
-	10:34	156	844.29	0.62	1.61	1.6	219	249	243	58	78	78	4.5
3	10:38	160	847.14	0.86	2.23	2.2	218	252	246	58	78	78	5.5
-	10:42	164	850.38	0.86	2.23	2.2	218	252	246	58	78	78	5.5
4	10:46	168	853.66	1.2	3.12	3.1	217	245	250	58	78	78	7.5
-	10:50	172	857.42	1.2	3.12	3.1	217	245	250	58	78	78	7.5
5	10:54	176	861.91	1.6	4.16	4.2	216	220	256	60	78	78	10.0
-	10:58	180	865.87	1.6	4.16	4.2	216	220	256	60	78	78	10.0
6	11:02	184	870.81	1.6	4.16	4.2	210	245	262	63	79	79	10.0
-	11:06	188	875.26	1.6	4.16	4.2	210	245	262	63	79	79	10.0
End	11:10	192	879.758										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft³)		Vacuum (in. Hg)	Leak Rate (cfm)
	Start	Stop		
Port:	Before			
	After			
Port:	Before			
	After			
Port:	Before			
	After			

Checked By: JL 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

537 of 628

GPC Plant McDonough ICR Testing

AMPPDS 25 Rev 1_04/11/2019

ISOKINETIC FIELD DATA SHEET

Method: 5 & 29

Page 1 of 2

Project No. 499970.0000.0000								Date 10/12/2022				
Client Georgia Power								Operator Name Malca Lawrence				
Facility McDonough Power Plant								Stack Diameter (in.) 285				
Source Unit 4A								Condition Max Barometric Pressure (in. Hg) 29.25				
Sampling Location Stack								Run No. 2 Static Pressure (in. H ₂ O) -0.23				
Assumed Moisture (%) 12.5	Ambient Temp. (°F)	Filter No. 522696	Probe			Post-Test Positive Orifice/Meter Leak Check Pass? XY N		Nozzle ID No. G-5-254				
K Factor 2.60		Liner Material Quartz		Setting (°F) 248	Length (ft) 12							
Pilot + Y N Pre-test: Pass? Y		ID No. RP11-8A	PTCF or Cp 0.817	Console No. —		Meter No. M16	ΔH @ 1.899	DGMCF or Y 1.0105				
Pilot + Y N Post-test: Pass? Y								Diameter (in.) .249				
Traverse Point	Time	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice ΔH		Temperature (°F)				Pump Vacuum (in. Hg)		
	Clock (24 hr)	Elapsed (min)		Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Impingers Exit	DGM Meter In	DGM Meter Out		
1	11:58	0	885.815	0.41	1.06	1.1	216	246	66	79	79	3.0
—	12:02	4	888.26	0.41	1.06	1.1	216	246	66	79	79	3.0
2	12:06	8	890.78	0.28	0.72	0.72	214	240	254	67	79	3.0
—	12:10	12	892.71	0.28	0.72	0.72	214	240	254	67	79	3.0
3	12:14	16	894.75	0.32	0.83	0.83	214	239	260	63	80	3.0
—	12:18	20	896.74	0.32	0.83	0.83	214	239	260	63	80	3.0
4	12:22	24	898.93	0.50	1.3	1.3	214	241	251	59	81	3.0
—	12:26	28	901.49	0.50	1.3	1.3	214	241	251	59	81	4.0
5	12:30	32	903.91	0.76	1.97	2.0	213	233	265	58	81	4.0
—	12:34	36	906.05	0.76	1.97	2.0	213	233	265	58	81	4.5
6	12:38	40	910.12	0.74	1.92	1.9	209	238	244	57	81	4.5
—	12:42	44	913.49	0.74	1.92	1.9	209	238	244	57	81	4.5
End	12:46	48	916.285									
1	12:52	48	916.285	1.0	2.6	2.6	219	249	250	61	81	5.5
—	12:56	52	919.93	1.0	2.6	2.6	219	249	250	61	81	5.5
2	13:00	56	923.71	1.0	2.6	2.6	219	236	249	57	81	5.5
—	13:04	60	926.67	1.0	2.6	2.6	219	236	249	57	81	5.5
3	13:08	64	930.59	1.1	2.86	2.9	219	238	252	59	82	6.5
—	13:12	68	934.26	1.1	2.86	2.9	219	238	252	59	82	6.5
4	13:16	72	938.21	1.1	2.86	2.9	219	241	244	64	82	6.5
—	13:20	76	942.03	1.1	2.86	2.9	219	241	244	64	82	6.5
5	13:24	80	946.16	1.1	2.86	2.9	219	245	240	63	83	6.5
—	13:28	84	950.01	1.1	2.86	2.9	219	245	240	63	83	6.5
6	13:32	88	954.19	0.96	2.49	2.5	215	242	238	64	84	6.5
—	13:36	92	957.71	0.96	2.49	2.5	215	242	238	64	84	5.5
End	13:40	96	960.936									

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:		
Port / AWFCO		Volume (ft ³)		Vacuum (in Hg)	Leak Rate (cfm)		
Port:		Start	Stop	Time (sec.)			
Before	—	—	60	13	0.891		
	After	—	—	60	13	0.001	
Port:	Before						
	After						

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

NA = Not Applicable

Checked By:

11/14/22

(Project Manager or QA Manager - sign and date)

TRC Report Number 499970

538 of 628

GPC Plant McDonough ICR Testing

Project No.	499970.0000.0000	Date	10/12/2022
Client	Georgia Power	Operator Name	Mike Lawrence
Facility	McDonough Power Plant		
Source	Unit 4A	Condition	Max
Sampling Location	Stack	Run No.	2

Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Temperature (°F)					Pump Vacuum (in. Hg)	
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In	DGM Meter Out	
1	13:47	96	960.98	0.74	1.93	1.9	220	237	250	66	84	84	5.0
-	13:51	100	964.04	0.74	1.92	1.9	220	237	250	66	84	84	5.0
2	13:55	104	966.93	0.44	1.14	1.1	219	235	257	64	84	84	4.0
-	13:59	108	969.68	0.44	1.14	1.1	219	235	257	64	84	84	4.0
3	14:03	112	972.13	0.41	1.06	1.1	217	240	259	65	84	84	4.0
-	14:07	116	974.47	0.41	1.06	1.1	217	240	259	65	84	84	4.0
4	14:11	120	976.87	0.44	1.14	1.1	216	241	264	66	84	84	4.0
-	14:15	124	979.25	0.44	1.14	1.1	216	241	264	66	84	84	4.0
5	14:19	128	981.62	0.49	1.27	1.3	216	240	266	66	84	84	4.0
-	14:23	132	984.50	0.49	1.27	1.3	216	240	266	66	84	84	4.0
6	14:27	136	987.19	0.41	1.06	1.1	213	237	269	65	84	84	4.0
-	14:31	140	989.54	0.41	1.06	1.1	213	237	269	65	84	84	4.0
End	14:35	140	991.639										
1	14:41	144	991.639	0.53	1.37	1.4	226	238	238	67	87	87	4.0
-	14:45	148	994.31	0.53	1.37	1.4	226	238	238	67	87	87	4.0
2	14:49	152	996.91	0.64	1.66	1.7	220	242	258	65	82	82	4.5
-	14:53	156	999.74	0.64	1.66	1.7	220	242	258	65	82	82	4.5
3	14:57	160	1002.24	0.88	2.28	2.3	219	238	264	65	80	80	5.5
-	15:01	164	1005.45	0.88	2.28	2.3	219	238	264	65	80	80	5.5
4	15:05	168	1009.12	1.2	3.12	3.1	218	240	264	65	79	79	7.0
-	15:09	172	1012.51	1.2	3.12	3.1	218	240	264	65	79	79	7.0
5	15:13	176	1016.40	1.6	4.16	4.2	217	243	259	66	79	79	8.5
-	15:17	180	1020.89	1.6	4.16	4.2	217	243	259	66	79	79	8.5
6	15:21	184	1025.40	1.7	4.42	4.4	213	241	244	67	79	79	9.0
-	15:25	188	1030.16	1.7	4.42	4.4	213	241	244	67	79	79	9.0
End	15:29	192	1034.898										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)
	Start	Stop		
Port:	Before			
	After			
Port:	Before			
	After			
Port:	Before			
	After			

Checked By: *JMF* 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

539 of 628

GPC Plant McDonough ICR Testing

TAP9145 Rev 1_04/11/2019

Project No.		499970.0000.0000				Date	10/13/2022					
Client		Georgia Power				Operator Name	Mike Lawrence					
Facility		McDonough Power Plant		Stack Diameter (in.)	285	Barometer ID	14900524					
Source		Unit 4A		Condition	Max	Barometric Pressure (in. Hg)	29.05					
Sampling Location		Stack		Run No.	3	Static Pressure (in. H ₂ O)	-0.23					
Assumed Moisture (%)	Ambient Temp. (°F)	Filter No.	Probe		Post-Test Positive Orifice/Meter Leak Check Pass?			Nozzle ID No.				
12.5	63	522694	Liner Material	Setting (°F)	Length (ft)	<input checked="" type="checkbox"/> Y N						
K Factor	2.65		Quartz	248	12				G-5-248			
Pilot Tube				DGM - Meter Box								
Pilot Pre-test: Pass?	+ <input checked="" type="checkbox"/> Y N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)				
Pilot Post-test: Pass?	+ <input checked="" type="checkbox"/> Y N	RPTI-88	0.825	—	M16	1.899	1.0105	.249				
Traverse Point	Time	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice, ΔH	Stack Flue Gas	Probe	Impingers Exit	DGM Meter In	DGM Meter Out	Pump Vacuum (in. Hg)		
1	7:30	0	116.225	0.38 1.00	1.0	219	261	245	62	65	65	4.5
—	7:34	4	118.37	0.38 1.00	1.0	219	261	245	62	65	65	4.5
2	7:38	8	120.55	0.30 0.795	0.80	217	263	262	51	66	66	3.5
—	7:42	12	122.54	0.30 0.795	0.80	217	263	262	51	66	66	3.5
3	7:46	16	124.53	0.34 0.901	0.90	216	237	263	53	66	66	4.0
—	7:50	20	126.59	0.34 0.901	0.90	216	237	263	53	66	66	4.0
4	7:54	24	128.600	0.53 1.40	1.4	215	246	249	51	66	66	5.0
—	7:58	28	131.05	0.53 1.40	1.4	215	246	249	51	66	66	5.0
5	8:02	32	133.58	0.76 2.01	2.0	215	248	263	50	66	66	7.0
—	8:06	36	136.43	0.76 2.01	2.0	215	248	263	50	66	66	7.0
6	8:10	40	139.39	0.70 1.85	1.9	212	249	260	50	66	66	7.0
—	8:14	44	141.41	0.70 1.85	1.9	212	249	260	50	66	66	7.0
End	8:18	48	145.223									
A												
1	8:24	48	145.223	0.98 2.59	2.6	221	239	235	53	66	66	9.5
—	8:28	52	148.85	0.98 2.59	2.6	221	239	235	53	66	66	9.5
2	8:32	56	151.57	1.0 2.65	^{2.7} _{2.65}	220	235	244	52	66	66	9.5
—	8:36	60	154.95	1.0 2.65	^{2.7} _{2.65}	220	235	244	52	66	66	9.5
3	8:40	64	158.48	1.2 3.18	3.2	220	241	232	54	66	66	11.0
—	8:44	68	162.56	1.2 3.18	3.2	220	241	232	54	66	66	11.0
4	8:48	72	165.79	1.2 3.18	3.2	220	246	240	55	66	66	11.0
—	8:52	76	169.50	1.2 3.18	3.2	220	246	240	55	66	66	11.0
5	8:56	80	173.21	1.1 2.91	2.9	221	246	241	57	66	66	11.0
—	9:00	84	176.89	1.1 2.91	2.9	221	246	241	57	66	66	11.0
6	9:04	88	180.53	1.0 2.65	2.7	218	246	239	58	coco	coco	10.5
—	9:08	92	184.17	1.0 2.65	2.7	218	246	239	58	coco	66	
End	9:12	96	187.630									

Sample Train Leak Checks (e.g. pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft ³)		Vacuum (in Hg)	Leak Rate (cfm)				
Port:	Before	Start	Stop	Time (sec.)					
	Before	~	—	60	16	0.001			
	After	—	—	60	20	0.001			
Port:	Before								
	After								

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.	499970.0000.0000										Date	10/13/2022	
Client	Georgia Power										Operator Name	Mike Lawrence	
Facility	McDonough Power Plant												
Source	Unit 4A										Condition	Max	
Sampling Location	Stack										Run No.	3	
Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Impingers Exit	Temperature (°F)		Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)					DGM Meter In	DGM Meter Out	

C

1	9:18	96	187.636	0.66	1.74	1.7	221	245	261	59	66	66	6.0
	9:22	100	190.42	0.66	1.74	1.7	221	245	261	59	66	66	6.0
2	9:26	104	192.96	0.48	1.21	1.3	219	263	230	55	66	66	6.0
	9:30	108	195.51	0.48	1.21	1.3	219	263	230	55	66	66	6.0
3	9:34	112	198.03	0.46	1.21	1.2	217	266	250	57	66	66	6.0
	9:38	116	200.61	0.46	1.21	1.2	217	266	250	57	66	66	6.0
4	9:42	120	203.23	0.49	1.29	1.3	216	247	236	58	67	67	6.0
	9:46	124	205.46	0.49	1.29	1.3	216	247	236	58	67	67	6.0
5	9:50	128	207.94	0.51	1.35	1.4	215	234	266	59	68	68	6.0
	9:54	132	210.41	0.51	1.35	1.4	215	234	266	59	68	68	6.0
6	9:58	136	212.71	0.37	0.98	0.98	212	229	264	61	68	68	5.0
	10:02	140	214.93	0.37	0.98	0.98	212	229	264	61	68	68	5.0
End	10:06	140	217.172										
1	11:15	144	217.172	0.61	1.61	1.6	220	230	249	63	68	68	6.5
-	11:19	148	219.76	0.61	1.61	1.6	220	230	249	63	68	68	6.5
2	11:23	152	222.38	0.65	1.72	1.7	219	229	255	58	69	69	6.5
-	11:27	156	225.07	0.65	1.72	1.7	219	229	255	58	69	69	6.5
3	11:31	160	227.78	0.84	2.22	2.2	219	243	248	59	69	69	8.0
-	11:35	164	230.77	0.84	2.22	2.2	219	243	248	59	69	69	8.0
4	11:39	168	232.92	1.1	2.91	2.9	218	248	246	61	68	68	10.5
-	11:43	172	237.35	1.1	2.91	2.9	218	248	246	61	68	68	10.5
5	11:47	176	241.11	1.5	3.97	4.0	216	245	244	63	68	68	16.0
-	11:51	180	245.55	1.5	3.97	4.0	216	245	244	63	68	68	16.0
6	11:55	184	248.99	1.5	3.97	4.0	210	243	250	66	68	68	16.0
-	11:59	188	253.23	1.5	3.97	4.0	210	243	250	66	68	68	16.0
End	12:03	192	257.505										

D

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:					
Port / AWFCO		Volume (ft³)	Start	Stop	Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)			
Port:	Before									
	After									
Port:	Before									
	After									
Port:	Before									
	After									

Checked By: *[Signature]* 01/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

541 of 628

GPC Plant McDonough ICR Testing Rev 1_04/11/2019

Project No. 499970.0000.0000										Date 10/13/22	
Client Georgia Power										Operator Name Sean MacLeod	
Facility McDonough Power Plant										Stack Diameter (in.) 285	
Source Unit 4A										Condition Max	
Sampling Location Stack										Run No. 4	
Assumed Moisture (%) 12.5	Ambient Temp. (°F) _____	Filter No. 522697	Probe	Liner Material Quartz	Setting (°F) 248	Length (ft) 12	Post-Test Positive Orifice/Meter Leak Check Pass? Y N		Nozzle ID No. G-5-254		
K Factor 2.65											
Pilot Tube										DGM - Meter Box	
Pilot Pre-test: Pass? + Y N	- Y N	ID No.	PTCF or Cp 0.827	Console No. —	Meter No. E13	ΔH @ 1.739	DGMCF or Y 0.9941	Diameter (in.) 0.249			
Pilot Post-test: Pass? + Y N	- Y N										
Traverse Point	Time	DGM Volume (ft³)	DGM ΔP (in. H₂O)	Orifice, ΔH	Stack Flue Gas	Probe	Impingers Exit	Temperature (°F)	DGM Meter In	DGM Meter Out	Pump Vacum (in. Hg)
1	11:10	0	38.707	0.39 1.03	220	234	252	63	67	67	2.5
	11:14	4	41.18	0.39 1.03	220	234	252	63	67	67	2.5
2	11:18	8	43.32	0.31 0.82	216	250	262	60	68	68	2.0
	11:22	12	45.49	0.31 0.82	216	250	262	60	68	68	2.0
3	11:26	16	47.62	0.36 0.95	214	242	262	59	69	69	2.0
	11:30	20	49.79	0.36 0.95	214	242	262	59	69	69	2.0
4	11:34	24	52.06	0.55 1.46	213	246	263	59	69	69	3.0
	11:38	28	54.73	0.55 1.46	213	246	262	59	69	69	3.0
5	11:42	32	57.56	0.77 2.04	213	244	261	58	70	70	5.0
	11:46	36	60.56	0.77 2.04	213	244	261	58	70	70	5.0
6	11:50	40	63.78	0.79 2.09	211	246	263	55	71	71	5.0
	11:54	44	67.00	0.79 2.09	211	246	262	55	71	71	5.0
End	11:58	48	70.189								
B	12:03	48	70.189	1.3 3.44	218	233	258	59	71	71	7.0
	12:07	52	74.38	1.3 3.44	218	233	258	59	71	71	7.0
2	12:11	56	77.91	1.3 3.44	217	235	255	57	71	71	7.0
	12:15	60	82.41	1.3 3.44	217	235	255	57	71	71	7.0
3	12:19	64	86.58	1.4 3.71	217	230	252	59	73	73	7.5
	12:23	68	90.84	1.4 3.71	217	230	252	59	73	73	7.5
4	12:27	72	94.18	1.4 3.71	217	236	250	61	72	72	7.5
	12:31	76	99.48	1.4 3.71	217	236	250	61	72	72	7.5
5	12:35	80	103.82	1.4 3.71	217	237	244	58	74	74	7.5
	12:39	84	108.31	1.4 3.71	217	237	244	58	74	74	7.5
6	12:43	88	112.76	1.3 3.44	217	236	246	58	74	74	7.0
	12:47	92	116.77	1.3 3.44	217	236	246	58	74	74	7.0
End	12:51	96	120.925								

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO	Volume (ft³)		Comments:						
	Start	Stop	Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)				
Port:	Before	—	60	13	0.000				
	After	—	60	10	0.001				
Port:	Before	/	/	/	/				
	After	/	/	/	/				

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No. 499970.0000.0000

Date 10/13/20
Operator Name Sean MacLean

Georgia Power

McDonough Power Plant

Unit 4A

Condition

Jean MacLeod

Sampling Location

1

Max

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO		Volume (ft ³)		Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)
		Start	Stop			
Port:	Before					
	After					
Port:	Before					
	After					
Port:	Before					
	After					

K-Factor switched from 2.65 to 2.75 @ Port D

Checked By:

(Project Manager or QA Manager - sign and date)

NA = Not Applicable

Project No. 499970.0000.0000								Date 10/13/2022					
Client Georgia Power								Operator Name Mike Lawrie					
Facility	McDonough Power Plant				Stack Diameter (in.)	285		Barometer ID 14900524					
Source	Unit 4A				Condition	Max		Barometric Pressure (in. Hg) 29.05					
Sampling Location	Stack				Run No.	5		Static Pressure (in. H ₂ O) -0.23					
Assumed Moisture (%)	Ambient Temp. (°F)	Filter No.	Probe			Post-Test Positive Orifice/Meter Leak Check Pass?		Nozzle ID No.					
K Factor	2.75	512 689	Liner Material	Setting (°F)	Length (ft)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		G-5-248					
Pilot Tube								DGM - Meter Box					
Pilot Pre-test: Pass?	+ <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)					
Pilot Post-test: Pass?	+ <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	RPTT-88	0.825	—	M16	1.899	10105	.249					
Traverse Point	Clock (24 hr)	Time	DGM Elapsed (min)	Orifice, ΔH		Temperature (°F)				Pump Vacuum (in. Hg)			
				Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe		Filter Exit	Impingers Exit	DGM Meter In
1	214:44	0	258.443	0.40	1.1	1.1	217	259	261	66	76	76	3.0
—	14:48	4	261.09	0.40	1.1	1.1	217	259	261	66	76	76	3.0
2	14:52	8	263.06	0.29	0.797	0.80	216	246	268	64	77	77	2.5
—	14:56	12	265.21	0.29	0.797	0.80	216	246	268	64	77	77	2.5
3	15:00	16	267.11	0.32	0.88	0.88	215	249	262	65	77	77	3.0
—	15:04	20	269.23	0.32	0.88	0.88	215	249	262	65	77	77	3.0
4	15:08	24	271.26	0.45	1.23	1.2	214	247	256	66	78	78	3.5
—	15:12	28	273.61	0.45	1.23	1.2	214	247	256	66	78	78	3.5
5	15:16	32	275.97	0.79	2.17	2.2	213	252	236	57	79	79	5.0
—	15:20	36	279.08	0.79	2.17	2.2	213	252	236	57	79	79	5.0
6	15:24	40	282.26	0.72	1.98	2.0	209	244	247	55	79	79	5.0
—	15:28	44	285.85	0.72	1.98	2.0	209	244	247	55	79	79	5.0
End	15:32	48	288.363										
1	15:38	48	288.363	0.91	2.50	2.50	219	246	243	64	80	80	6.0
—	15:42	52	291.62	0.91	2.50	2.50	219	246	243	64	80	80	6.0
2	15:46	56	295.11	1.0	2.75	2.8	218	241	250	52	80	80	6.0
—	15:50	60	298.62	1.0	2.75	2.8	218	241	250	52	80	80	6.0
3	15:54	64	302.02	1.1	3.02	3.0	218	238	250	55	79	79	6.5
—	15:58	68	305.63	1.1	3.02	3.0	218	238	250	55	79	79	6.5
4	16:02	72	309.26	1.2	3.30	3.3	217	229	247	56	80	80	7.0
—	16:06	76	313.09	1.2	3.30	3.3	217	229	247	56	80	80	7.0
5	16:10	80	317.11	1.2	3.30	3.3	217	229	247	56	80	80	7.0
—	16:14	84	321.14	1.2	3.30	3.3	217	229	247	56	80	80	7.0
6	16:18	88	324.95	1.1	3.02	3.0	218	233	250	59	80	80	7.0
—	16:22	92	328.76	1.1	3.02	3.0	218	233	250	59	80	80	7.0
End	16:26	96	332.649										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:					
Port / AWFCO		Volume (ft ³)								
		Start	Stop	Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)				
Port:	Before	-	-	60	10	0.001				
	After	-	-	60	11	0.001				
Port:	Before									
	After									

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.		499970.0000.0000										Date	10/13/2022	
Client	Georgia Power										Operator Name	Mike Lourie		
Facility	McDonough Power Plant										Run No.	5		
Source	Unit 4A										Condition	Max		
Sampling Location	Stack										Run No.			
Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice ΔH		Temperature (°F)						Pump Vacuum (in. Hg)	
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In	DGM Meter Out		
1	16:34	96	332.649	0.66	1.81	1.8	219	258	249	62	80	80	5.0	
-	16:38	100	336.12	0.66	1.81	1.8	219	258	249	62	80	80	5.0	
2	16:42	104	338.61	0.49	1.34	1.3	217	260	251	57	80	80	4.0	
-	16:46	108	341.27	0.49	1.34	1.3	217	260	251	57	80	80	4.0	
3	16:50	112	343.77	0.50	1.37	1.4	217	257	252	61	80	80	4.0	
-	16:54	116	346.38	0.50	1.37	1.4	217	257	252	61	80	80	4.0	
4	16:58	120	349.03	0.51	1.56	1.6	216	255	253	62	80	80	4.5	
-	17:02	124	351.75	0.51	1.56	1.6	216	255	253	62	80	80	4.5	
5	17:06	128	355.09	0.55	1.51	1.5	215	244	253	64	80	80	4.5	
-	17:10	132	357.76	0.55	1.51	1.5	215	244	253	64	80	80	4.5	
6	17:14	136	360.02	0.44	1.21	1.2	212	243	250	66	79	79	4.0	
-	17:18	140	362.68	0.44	1.21	1.2	212	243	250	66	79	79	4.0	
End	17:22	140	365.435	-	-	-	-	-	-	-	-	-	-	
1	17:30	144	365.435	0.55	1.51	1.5	220	247	248	66	78	78	4.5	
-	17:34	148	368.10	0.55	1.51	1.5	220	247	248	66	78	78	4.5	
2	17:38	152	371.49	0.64	1.76	1.8	219	244	250	56	78	78	5.0	
-	17:42	156	373.65	0.64	1.76	1.8	219	244	250	56	78	78	5.0	
3	17:46	160	376.61	0.85	2.38	2.4	219	238	244	55	78	78	5.5	
-	17:50	164	379.56	0.85	2.38	2.4	219	238	244	55	78	78	5.5	
4	17:54	168	382.90	1.1	3.08	3.0	218	242	248	55	77	77	6.5	
-	17:58	172	386.47	1.1	3.08	3.0	218	242	248	55	77	77	6.5	
5	18:02	176	389.99	1.5	4.2	4.2	216	245	249	56	76	76	9.0	
-	18:06	180	394.26	1.5	4.2	4.2	216	245	249	56	76	76	9.0	
6	18:10	184	398.57	1.6	4.48	4.5	210	243	240	57	76	76	10.0	
-	18:14	188	403.06	1.6	4.48	4.5	210	243	240	57	76	76	10.0	
End	18:18	192	407.521	-	-	-	-	-	-	-	-	-	-	

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Change
2.80 K factor port D-point 3

Port / AWFCO		Volume (ft³)		Time (sec.)	Vacuum (In Hg)	Leak Rate (cfm)
Start	Stop					
Port:	Before	/	/			
	After	/	/			
Port:	Before	/	/			
	After	/	/			
Port:	Before	/	/			
	After	/	/			

Checked By:

11/14/22

(Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

545 of 628

GPC Plant McDonough ICR Testing v1_04/11/2019

Project No. 499970.0000.0000								Date 10/4/2022					
Client Georgia Power								Operator Name Mike Lawrence					
Facility McDonough Power Plant								Stack Diameter (in.) 285					
Source Unit 4A								Condition Max					
Sampling Location Stack								Run No. 6					
Assumed Moisture (%) 12.5		Ambient Temp. (°F) 56	Filter No. 522693	Probe		Post-Test Positive Orifice/Meter Leak Check Pass?		Nozzle ID No.					
K Factor 2.95			Liner Material Quartz	Setting (°F)	Length (ft)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	G-5-254					
Pilot Tube								DGM - Meter Box					
Pilot Pre-test: Pass? + Y - N		ID No. 80118A	PTCF or Cp 0.817	Console No. —	Meter No. E13	ΔH @ 1.739	DGMCF or Y 0.9941	Diameter (in.) 0.249					
Traverse Point	Time	DGM Volume (ft³)	Pilot ΔP (in. H₂O)	Orifice, ΔH	Temperature (°F)				Pump Vacuum (in. Hg)				
	Clock (24 hr)	Elapsed (min)	Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Impingers Exit	DGM Meter In		DGM Meter Out			
1	7:17	0	204.418	0.31	0.91	0.91	218	225	241	53	52	52	3.5
-	7:21	4	206.58	0.31	0.91	0.91	218	225	241	53	52	52	3.5
2	7:25	8	208.78	0.29	0.85	0.85	216	257	240	53	53	53	3.5
-	7:29	12	210.90	0.29	0.85	0.85	216	257	240	53	53	53	3.5
3	7:33	16	213.01	0.15	0.44	0.44	215	253	242	50	55	55	1.5
-	7:37	20	214.66	0.15	0.44	0.44	215	253	242	50	55	55	1.5
4	7:41	24	216.19	0.33	0.97	0.97	214	246	233	50	56	56	3.5
-	7:45	28	218.28	0.33	0.97	0.97	214	246	233	50	56	56	3.5
5	7:49	32	220.52	0.62	1.82	1.8	213	248	241	50	57	57	5.5
-	7:53	36	223.43	0.62	1.82	1.8	213	248	241	50	57	57	5.5
6	7:57	40	226.49	0.71	2.09	2.1	210	247	239	50	58	58	6.0
-	8:01	44	229.67	0.71	2.09	2.1	210	247	239	50	58	58	6.0
End	8:05	48	232.914										
B	8:10	48	232.914	1.0	2.95	3.0	210	245	240	60	60	60	8.0
-	8:14	52	236.84	1.0	2.95	3.0	220	245	240	60	60	60	8.0
2	8:18	56	240.61	1.4	4.13	4.1	219	248	241	55	61	61	11.0
-	8:22	60	245.03	1.4	4.13	4.1	219	248	241	55	61	61	11.0
3	8:26	64	249.54	1.4	4.13	4.1	219	250	249	62	62	62	11.0
-	8:30	68	253.98	1.4	4.13	4.1	219	250	249	62	62	62	11.0
4	8:34	72	258.52	1.2	3.54	3.5	218	249	240	62	62	62	10.0
-	8:38	76	262.77	1.2	3.54	3.5	218	249	240	62	62	62	10.0
5	8:42	80	266.96	1.2	3.54	3.5	218	252	246	57	63	63	10.0
-	8:46	84	271.15	1.2	3.54	3.5	218	252	246	57	63	63	10.0
6	8:50	88	275.26	1.3	3.80	3.8	217	251	241	55	64	64	9.5
-	8:54	92	279.51	1.3	3.80	3.8	217	251	241	55	64	64	9.5
End	8:58	96	283.958										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:			
Port / AWFCO		Volume (ft³)	Start	Stop	Vacuum (in Hg)	Leak Rate (cfm)	Notes: Test Location Schematic is presented separately. additional leak checks here or on a separate sheet.	Document
Port:	Before	-	-	60	11	0.002		
Port:	After	-	-	60	15	0.002		
Port:	Before							
	After							

Checked By:

11/14/22

(Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

546 of 628

GPC Plant McDonough ICR Testing

AM-FOS-24 Rev 1_04/11/2019

Project No.	499970.0000.0000								Date	10/14/2022			
Client	Georgia Power								Operator Name	Mike Lawrie			
Facility	McDonough Power Plant												
Source	Unit 4A								Condition	Max			
Sampling Location	Stack								Run No.	6			
Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Temperature (°F)			Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)				DGM Meter In	DGM Meter Out		
1	9:02	96	283.958 0.95	2.80	2.8	220	247	241	59	64	64	64	7.5
-	9:06	100	287.55 0.95	2.80	2.8	220	247	241	59	64	64	64	7.5
2	9:10	104	291.37 0.89	2.62	2.6	218	247	236	55	64	64	64	7.5
-	9:14	108	294.92 0.89	2.62	2.6	218	247	236	55	64	64	64	7.5
3	9:18	112	298.62 0.81	2.38	2.4	217	247	249	57	65	65	65	7.0
-	9:22	116	302.12 0.81	2.38	2.4	217	247	249	57	65	65	65	7.0
4	9:26	120	305.65 0.81	2.38	2.4	216	252	240	58	66	66	66	7.0
-	9:30	124	308.98 0.81	2.38	2.4	216	252	240	58	66	66	66	7.0
5	9:34	128	312.77 0.79	2.33	2.3	214	248	239	58	68	68	68	7.0
-	9:38	132	316.16 0.79	2.33	2.3	214	248	239	58	68	68	68	7.0
6	9:42	136	319.58 0.62	1.82	1.8	211	250	241	60	69	69	69	6.0
-	9:46	140	322.71 0.62	1.82	1.8	211	250	241	60	69	69	69	6.0
End	9:50	140	325.835										
1	9:56	144	325.835 0.59	1.74	1.7	219	243	237	66	72	72	72	5.0
-	10:00	148	328.76 0.59	1.74	1.7	219	243	237	66	72	72	72	5.0
2	10:04	152	331.65 0.64	1.88	1.9	219	248	239	57	72	72	72	5.5
-	10:08	156	334.78 0.64	1.88	1.9	219	248	239	57	72	72	72	5.5
3	10:12	160	337.84 0.82	2.41	2.4	218	247	257	59	73	73	73	7.0
-	10:16	164	341.29 0.82	2.41	2.4	218	247	257	59	73	73	73	7.0
4	10:20	168	344.82	1.1	3.25	3.3	218	242	240	61	74	74	9.0
-	10:24	172	348.78	1.1	2.25	3.3	218	242	240	61	74	74	9.0
5	10:28	176	352.89	1.6	4.72	4.7	216	248	237	63	75	75	13.5
-	10:32	180	357.68	1.6	4.72	4.7	216	248	237	63	75	75	13.5
6	10:36	184	362.56	1.6	4.72	4.7	212	250	239	65	75	75	13.5
-	10:40	188	367.45	1.6	4.72	4.7	212	250	239	65	75	75	13.5
End	10:44	192	372.284										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)
	Start	Stop		
Port:	Before	/	/	/
	After	/	/	/
Port:	Before	/	/	/
	After	/	/	/
Port:	Before	/	/	/
	After	/	/	/

Checked By: Jeff 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

547 of 628

GPC Plant McDonough ICR Testing

AMFS 2018 Rev 1_04/11/2019

Project No. 499970.0000.0000								Date 10/14/22					
Client Georgia Power								Operator Name Sean MacLeod					
Facility McDonough Power Plant				Stack Diameter (in.) 285		Barometer ID 14900524							
Source Unit 4A				Condition Max		Barometric Pressure (in. Hg) 29.20							
Sampling Location Stack				Run No. 7		Static Pressure (in. H ₂ O) -0.23							
Assumed Moisture (%) 12.5	Ambient Temp. (°F) 72	Filter No. 522692	Probe			Post-Test Positive Orifice/Meter Leak Check Pass?		Nozzle ID No. G-5-248					
			Liner Material Quartz		Setting (°F) 248	Length (ft) 12	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N						
K Factor 2.95													
Pilot Tube								DGM - Meter Box					
Pilot Pre-test: Pass?	+ ✓ <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)					
Pilot Post-test: Pass?	+ ✓ <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	RPTI-8B	0.825	-	M-16	1.899	1,0105	.249					
Traverse Point	Time	DGM Volume (ft ³)	Pilot ΔP	Orifice ΔH	Temperature (°F)				Pump Vacuum (in. Hg)				
	Clock (24 hr)		Elapsed (min)	Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Filter Exit		Impingers Exit	DGM Meter In	DGM Meter Out	
A 1	10:40	0	407.945	.41	1.21	1.2	219	247	247	66	70	70	3.5
	10:52	4	410.18	.41	1.21	1.2	219	247	247	66	70	70	3.5
2	10:56	8	412.76	.31	.91	.91	217	246	256	63	69	69	3.0
	11:00	12	414.64	.31	.91	.91	217	246	256	63	69	69	3.0
3	11:04	16	416.73	.36	1.06	1.1	216	240	265	58	69	69	3.5
	11:08	20	419.00	.36	1.06	1.1	216	240	265	58	69	69	3.5
4	11:12	24	421.33	.55	1.62	1.6	216	240	264	57	70	70	4.0
	11:16	28	423.95	.55	1.62	1.6	216	240	264	57	70	70	4.0
5	11:20	32	426.81	.81	2.39	2.4	219	244	245	58	71	71	5.5
	11:24	36	429.88	.81	2.39	2.4	219	244	245	58	71	71	5.5
6	11:28	40	433.18	.78	2.30	2.3	212	254	240	59	72	72	5.5
	11:32	44	436.44	.78	2.30	2.3	212	254	240	59	72	72	5.5
End	11:36	48	439.558	-	-	-	-	-	-	-	-	-	-
B 1	11:42	48	439.558	1.0	2.95	3.0	220	248	241	61	72	72	7.0
	11:46	52	443.00	1.0	2.95	3.0	220	248	241	61	72	72	7.0
2	11:50	56	446.71	1.1	3.24	3.2	219	253	244	50	72	72	7.5
	11:54	60	450.33	1.1	3.24	3.2	219	253	244	50	72	72	7.5
3	11:58	64	454.32	1.2	3.54	3.5	219	246	240	51	73	73	8.0
	12:02	68	458.22	1.2	3.54	3.5	219	246	240	51	73	73	8.0
4	12:06	72	462.67	1.3	3.84	3.8	219	251	241	50	73	73	8.0
	12:10	76	466.29	1.3	3.84	3.8	219	251	241	50	73	73	8.0
5	12:14	80	470.50	1.3	3.84	3.8	219	243	245	51	74	74	9.0
	12:18	84	474.54	1.3	3.84	3.8	219	243	245	51	74	74	9.0
6	12:22	88	478.87	1.2	3.54	3.5	218	247	248	53	75	75	8.5
	12:26	92	482.89	1.2	3.54	3.5	218	247	248	53	75	75	8.5
End	12:30	96	486.870	-	-	-	-	-	-	-	-	-	-

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft ³)		Vacuum (in Hg)	Leak Rate (cfm)				
		Start	Stop	Time (sec.)					
Port:	Before	-	-	60	12	.001			
	After	-	-	60	12	.001			
Port:	Before								
	After								

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.	499970.0000.0000	Date	10/14/22
Client	Georgia Power	Operator Name	Sean MacLeod
Facility	McDonough Power Plant		
Source	Unit 4A	Condition	Max
Sampling Location	Stack	Run No.	7

Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Temperature (°F)					Pump Vacuum (in. Hg)	
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In	DGM Meter Out	
1	12:36	96	486,870	.68	2.01	2.0	221	248	240	65	75	75	5.0
	12:40	100	489,76	.68	2.01	2.0	221	248	240	65	75	75	5.0
2	12:44	104	492,68	.53	1.56	1.6	219	250	250	53	75	75	5.0
	12:48	108	495,62	.53	1.56	1.6	219	250	250	53	75	75	5.0
3	12:52	112	498,38	.50	1.48	1.5	217	250	250	54	75	75	4.5
	12:56	116	501,02	.50	1.48	1.5	217	250	250	54	75	75	4.5
4	13:00	120	503,62	.59	1.74	1.7	216	246	250	55	76	76	5.0
	13:04	124	506,42	.59	1.74	1.7	216	246	250	55	76	76	5.0
5	13:08	128	509,39	.58	1.71	1.7	215	249	249	56	76	76	5.0
	13:12	132	512,07	.58	1.71	1.7	215	249	249	56	76	76	5.0
6	13:16	136	514,09	.48	1.42	1.4	215	250	252	58	76	76	4.5
	13:20	140	517,50	.48	1.42	1.4	215	250	252	58	76	76	4.5
End	13:24	140	519,976										
1	13:31	144	519,976	.55	1.62	1.6	221	246	250	58	77	77	4.5
	13:35	148	522,04	.55	1.62	1.6	221	246	250	58	77	77	4.5
2	13:39	152	525,38	.65	1.92	1.9	219	241	249	53	77	77	5.5
	13:43	156	528,18	.65	1.92	1.9	219	241	249	53	77	77	5.5
3	13:47	160	531,20	.87	2.57	2.6	220	243	244	53	77	77	6.5
	13:51	164	534,53	.87	2.57	2.6	220	243	244	53	77	77	6.5
4	13:55	168	538,08	1.3	3.84	3.8	218	240	255	55	78	78	9.0
	13:59	172	542,05	1.3	3.84	3.8	218	240	255	55	78	78	9.0
5	14:03	176	546,38	1.6	4.72	4.7	216	242	256	57	78	78	11.0
	14:07	180	550,84	1.6	4.72	4.7	216	242	256	57	78	78	11.0
6	14:11	184	555,91	1.6	4.72	4.7	217	244	246	59	78	78	11.0
	14:15	188	560,77	1.6	4.72	4.7	217	244	246	59	78	78	11.0
End	14:19	192	564,745										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)
	Start	Stop		
Port:	Before			
	After	/	/	/
Port:	Before			
	After	/	/	/
Port:	Before			
	After	/	/	/

Checked By: MM 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

549 of 628

GPC Plant McDonough ICR Testing

VAM-1026 Rev 1_04/11/2019

Project No.	499970.0000.0000	Reagent Type	<i>See UNIT 4A Page 1</i>				
Client	Georgia Power	Lot No.					
Facility	McDonough Power Plant			Daily Field Balance Calibration Verification Check:			
Source	UNIT 4B						
Condition	MAX - Normal			Documentation found on field balance check data sheet from AM-EMT-52:		X	
Run No.	Train Type	5 / 29	FRONT HALF		Filter No.	522686	<i>Z</i>
1	Sample ID UNIT 4B - 5/29 - R1			Thimble No. (NA, unless noted)	<i>—</i>		
IMPIGNERS							
Impinger No.	#1	#2	#3	#4	#5	#6	<i>—</i>
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		<i>—</i>
Vol. Added (ml)	---	100	100	---	100	100	<i>—</i>
Final Weight (g)	900.7	762.9	742.2	650.5	752.6	747.5	<i>—</i>
Initial Weight (g)	639.3	751.8	740.8	650.4	755.2	749.6	<i>—</i>
Net Collected (g)	261.4	11.1	1.4	0.1	-2.6	-2.1	<i>—</i>
Setup	Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	<i>—</i>	307.6				
10/17/22	WM	<i>—</i>	<i>—</i>				
Recovery	Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	<i>—</i>	307.6				
10/17/22	WM	<i>—</i>	<i>—</i>				
Run No.	Train Type	5 / 29	FRONT HALF		Filter No.	522691	<i>Z</i>
2	Sample ID UNIT 4B - 5/29 - R2			Thimble No. (NA, unless noted)	<i>—</i>		
IMPIGNERS							
Impinger No.	#1	#2	#3	#4	#5	#6	<i>—</i>
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		<i>—</i>
Vol. Added (ml)	---	100	100	---	100	100	<i>—</i>
Final Weight (g)	892.2	787.8	737.0	638.1	756.6	755.8	<i>—</i>
Initial Weight (g)	651.2	773.3	733.9	637.1	759.4	755.3	<i>—</i>
Net Collected (g)	241.0	14.5	3.1	1.0	-2.8	0.5	<i>—</i>
Setup	Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	<i>—</i>	292.9				
10/17/22	WM	<i>—</i>	<i>—</i>				
Recovery	Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	<i>—</i>	292.9				
10/17/22	WM	<i>—</i>	<i>—</i>				
Run No.	Train Type	5 / 29	FRONT HALF		Filter No.	522683	<i>Z</i>
3	Sample ID UNIT 4B - 5/29 - R3			Thimble No. (NA, unless noted)	<i>—</i>		
IMPIGNERS							
Impinger No.	#1	#2	#3	#4	#5	#6	<i>—</i>
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		<i>—</i>
Vol. Added (ml)	---	100	100	---	100	100	<i>—</i>
Final Weight (g)	887.5	754.8	741.6	648.8	756.6	752.9	<i>—</i>
Initial Weight (g)	638.9	752.4	741.5	649.2	757.8	753.5	<i>—</i>
Net Collected (g)	248.6	2.4	0.1	-0.4	-1.2	-0.6	<i>—</i>
Setup	Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	<i>—</i>	283.3				
10/18/22*	WM	<i>—</i>	<i>—</i>				
Recovery	Silica Gel Imp. No.	#7	TOTAL MOISTURE (Impingers and Silica gel) (g)				
Date	Person	<i>—</i>	283.3				
10/18/22	WM	<i>—</i>	<i>—</i>				

* Except for 4% KMnO₄/10% H₂SO₄
NA = Not Applicable Prepared by [Signature]

Checked By:

11/14/22
(Sign and Date)

GPC Plant McDonough AF Testing 04/12/2019

Project No.	499970.0000.0000	Reagent Type					
Client	Georgia Power	Lot No.					
Facility	McDonough Power Plant						
Source	UNIT 4B						
Condition	MAX - NORMAL						

Daily Field Balance Calibration Verification Check:

Documentation found in Logbook:

Documentation found on field balance check data sheet from AM-EMT-52:

X

Run No.	Train Type	5 / 29	FRONT HALF	Filter No.	522685		
	Sample ID	UNIT 4B - 5/29 - R4		Thimble No. (NA, unless noted)	—	—	

IMPINGERS

Impinger No.

Reagent

Vol. Added (ml)

Final Weight (g)

Initial Weight (g)

Net Collected (g)

#1	#2	#3	#4	#5	#6	
Empty	5% HNO ₃ / 10% H ₂ O ₂	Empty	4% KMnO ₄ / 10% H ₂ SO ₄			
---	100	100	---	100	100	
888.2	776.5	732.0	636.1	753.8	748.9	
680.2	771.9	732.7	636.6	755.7	749.9	
288.0	4.6	-0.7	-0.5	-1.9	-1.0	

Setup	
Date	Person
10/18/22	WM

Recovery	
Date	Person
10/18/22	WM

Silica Gel Imp. No.

#7	
1051.1	
1010.9	
40.2	

TOTAL MOISTURE (Impingers and Silica gel) (g)

288.7

Run No.	Train Type	5 / 29	FRONT HALF	Filter No.	522688		
	Sample ID	UNIT 4B - 5/29 - R5		Thimble No. (NA, unless noted)	—	—	

IMPINGERS

Impinger No.

Reagent

Vol. Added (ml)

Final Weight (g)

Initial Weight (g)

Net Collected (g)

#1	#2	#3	#4	#5	#6	
Empty	5% HNO ₃ / 10% H ₂ O ₂	Empty	4% KMnO ₄ / 10% H ₂ SO ₄			
---	100	100	---	100	100	
925.1	766.5	740.6	648.6	757.7	755.0	
638.5	751.5	740.1	649.2	759.3	755.1	
286.6	15.0	0.5	-0.6	-1.6	-0.1	

Setup	
Date	Person
10/18/22*	WM

Recovery	
Date	Person
10/19/22	WM

Silica Gel Imp. No.

#7	
993.4	
967.3	
26.1	

TOTAL MOISTURE (Impingers and Silica gel) (g)

325.9

Run No.	Train Type	5 / 29	FRONT HALF	Filter No.	522679		
	Sample ID	UNIT 4B - 5/29 - R6		Thimble No. (NA, unless noted)	—	—	

IMPINGERS

Impinger No.

Reagent

Vol. Added (ml)

Final Weight (g)

Initial Weight (g)

Net Collected (g)

#1	#2	#3	#4	#5	#6	
Empty	5% HNO ₃ / 10% H ₂ O ₂	Empty	4% KMnO ₄ / 10% H ₂ SO ₄			
---	100	100	---	100	100	
901.5	779.2	732.1	637.3	756.2	750.5	
650.9	772.8	732.4	637.6	756.8	751.5	10/19/22
250.6	6.4	-0.3	-0.3	-0.6	-0.6	

Setup	
Date	Person
10/18/22*	WM

Recovery	
Date	Person
10/19/22	WM

Silica Gel Imp. No.

#7	
1061.2	
1033.4	
27.8	

TOTAL MOISTURE (Impingers and Silica gel) (g)

283.0

* Except for 4% KMnO₄ / 10% H₂SO₄
TRC Report Number 499970
NA = Not Applicable Prepared by [Signature]

Checked By: *[Signature]* 11/14/22
(Signature and Date)

GPC Plant McDonough 10/19/22 Testing 04/12/2019

Project No.	499970.0000.0000	Reagent Type	See	UNIT 4A	Page 1		
Client	Georgia Power	Lot No.					
Facility	McDonough Power Plant						Daily Field Balance Calibration Verification Check:
Source	UNIT 4B						Documentation found in Logbook:
Condition	MAX - NORMAL						Documentation found on field balance check data sheet from AM-EMT-52:

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.	522680	
	Sample ID	UNIT 4B - 5/29 - R7				Thimble No. (NA, unless noted)	—	

IMPIGNERS

Impinger No.	#1	#2	#3	#4	#5	#6	
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
Vol. Added (ml)	—	100	100	—	100	100	
Final Weight (g)	929.6	794.9	741.8	650.7	760.6	756.2	
Initial Weight (g)	639.0	752.7	741.3	650.9	760.5	756.4	
Net Collected (g)	290.6	42.2	2.5	-0.2	0.1	-0.2	

Setup

Date	Person
10/19/22 *	WM

Recovery

Date	Person
10/20/22	WM

TOTAL MOISTURE (Impingers and Silica gel) (g)

358.9

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.		
	Sample ID	—				Thimble No. (NA, unless noted)	—	

IMPIGNERS

Impinger No.	#1	#2	#3	#4	#5	#6	
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
Vol. Added (ml)	—	100	100	—	100	100	
Final Weight (g)	—						
Initial Weight (g)	—						
Net Collected (g)	—						

Setup

Date	Person
—	—

Recovery

Date	Person
—	—

TOTAL MOISTURE (Impingers and Silica gel) (g)

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.		
	Sample ID	—				Thimble No. (NA, unless noted)	—	

IMPIGNERS

Impinger No.	#1	#2	#3	#4	#5	#6	
Reagent	Empty	5% HNO ₃ / 10% H ₂ O ₂		Empty	4% KMnO ₄ / 10% H ₂ SO ₄		
Vol. Added (ml)	—	100	100	—	100	100	
Final Weight (g)	—						
Initial Weight (g)	—						
Net Collected (g)	—						

Setup

Date	Person
—	—

Recovery

Date	Person
—	—

TOTAL MOISTURE (Impingers and Silica gel) (g)

Run No.	Train Type	5 / 29	FRONT HALF			Filter No.		
	Sample ID	—				Thimble No. (NA, unless noted)	—	

Checked By:

Signature _____ Date _____

* Except for 4% KMnO₄ / 10% H₂SO₄
 TRC Report Number 499970
 NA = Not Applicable

GPC Plant McDonough KRF Testing 04/12/2019

Project No.	499970.0000.0000							Date	10/17/2022			
Client	Georgia Power							Operator Name	Mike Lawrie			
Facility	McDonough Power Plant				Stack Diameter (in.)	265		Barometer ID	14900524			
Source	Unit 4B				Condition	Max		Barometric Pressure (in. Hg)	29.00			
Sampling Location	Stack				Run No.	1		Static Pressure (in. H ₂ O)	-0.32			
Assumed Moisture (%)	Ambient Temp. (°F)	Filter No.	Probe			Post-Test Positive Orifice/Meter Leak Check Pass?			Nozzle ID No.			
K Factor	2.65	522686	Liner Material	Setting (°F)	Length (ft)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			G-5-248			
	Pilot Tube		Quartz	248	12				G-5-254			
Pilot Pre-test: Pass?	+ V Y N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)				
Pilot Post-test: Pass?	+ V Y N	RPTIBA	0.919	—	M16	1.899	1.0105	0.249				
Traverse Point	Time	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice, ΔH	Stack Flue Gas	Probe	Temperature (°F)	Pump Vacuum (in. Hg)				
1	8:43	0	572.48	0.46	1.21	222	246	258	58	67	67	3.0
—	8:47	4	574.84	0.46	1.21	1.2	222	246	258	58	67	67
2	8:51	8	576.98	0.53	1.40	1.4	220	245	250	54	68	68
—	8:55	12	578.52	0.53	1.40	1.4	220	245	250	54	68	68
3	8:59	16	582.06	0.47	1.11	1.1	220	246	250	51	68	68
—	9:03	20	584.39	0.42	1.11	1.1	220	246	256	51	68	68
4	9:07	24	586.78	0.60	1.59	1.6	220	250	251	52	69	69
—	9:11	28	589.57	0.60	1.59	1.6	220	250	251	52	69	69
5	9:15	32	592.28	0.64	1.69	1.7	219	251	249	53	69	69
—	9:19	36	595.01	0.64	1.69	1.7	219	251	249	53	69	69
6	9:23	40	598.44	0.51	1.35	1.4	215	252	246	56	70	70
—	9:27	44	600.56	0.51	1.35	1.4	215	252	246	56	70	70
End	9:31	48	602.912									
1	9:36	48	602.912	0.44	1.21	1.2	222	241	240	60	70	70
—	9:40	52	605.350	0.44	1.21	1.2	222	241	240	60	70	70
2	9:44	56	607.69	0.97	2.66	2.7	221	246	261	57	71	71
—	9:48	60	610.88	0.97	2.66	2.7	221	246	261	57	71	71
3	9:52	64	614.42	1.1	3.02	3.0	221	246	247	57	72	72
—	9:56	68	619.16	1.1	3.02	3.0	221	246	247	57	72	72
4	10:00	72	621.42	1.0	2.75	2.8	221	230	249	60	72	72
—	10:04	76	625.67				221	230	244	60	72	72
5	10:08	80	629.35	1.1	3.02	3.0	220	243	248	62	73	73
—	10:12	84	633.83	1.1	3.02	3.0	220	243	248	62	73	73
6	10:16	88	636.84	0.92	2.53	2.5	219	231	247	66	74	74
—	10:20	92	640.32	0.92	2.53	2.5	219	231	247	66	74	74
End	10:24	96	643.730									

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft ³)		Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)	K Factor 2.75 on Port B		
Port:	Before	Start	Stop						
	Before	—	—	60	10	0.001			
	After	—	—	60	10	0.001			
Port:	Before								
	After								

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Page 2 of 2

Project No.	499970.0000.0000								Date	10/17/2022			
Client	Georgia Power								Operator				
Facility	McDonough Power Plant								Name	Mike Lawrence			
Source	Unit 4B								Condition	Max			
Sampling Location	Stack								Run No.	1			
Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Temperature (°F)			Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)				DGM Meter In	DGM Meter Out		

Handwritten Data:

1	10:30	98	643.73	0.70	1.92	1.9	223	239	258	600	73	73	4.0
-	10:34	100	646.01	0.70	1.92	1.9	223	234	258	66	73	73	4.0
2	10:38	104	649.74	0.51	1.40	1.4	222	240	256	64	74	74	3.5
-	10:42	108	652.42	0.51	1.40	1.4	222	240	256	64	74	74	3.5
3	10:46	112	655.09	0.53	1.45	1.5	220	237	257	64	74	74	4.0
-	10:50	116	657.79	0.53	1.45	1.5	220	237	257	64	74	74	4.0
4	10:54	120	660.53	0.59	1.62	1.6	220	238	251	600	74	74	4.0
-	10:58	124	663.35	0.59	1.62	1.6	220	238	251	600	74	74	4.0
5	11:02	128	666.11	0.69	1.89	1.9	219	240	256	58	74	74	4.0
-	11:06	132	668.91	0.69	1.89	1.9	219	240	256	58	74	74	4.0
6	11:10	136	671.78	0.44	1.21	1.2	215	249	244	56	74	74	3.5
-	11:14	140	674.31	0.44	1.21	1.2	215	249	244	56	74	74	3.5
End	11:18	140	676.73										
1	11:24	144	676.73	0.59	1.62	1.6	224	244	250	59	74	74	4.0
-	11:28	148	679.49	0.59	1.62	1.6	224	244	250	59	74	74	4.0
2	11:32	152	682.23	0.73	2.00	2.0	223	249	247	53	74	74	4.0
-	11:36	156	685.18	0.73	2.00	2.0	223	249	247	53	74	74	4.0
3	11:40	160	688.08	1.0	2.75	2.8	222	232	240	53	74	74	5.0
-	11:44	164	691.72	1.0	2.75	2.8	222	232	240	53	74	74	5.0
4	11:48	168	695.25	1.4	3.85	3.9	220	231	248	56	74	74	6.0
-	11:52	172	699.10	1.4	3.85	3.9	220	232	248	56	74	74	6.0
5	11:56	176	703.36	1.5	4.12	4.1	218	247	255	59	75	75	6.5
-	12:00	180	708.59	1.5	4.12	4.1	218	247	255	59	75	75	6.5
6	12:04	184	712.58	1.3	3.57	3.6	210	229	260	60	76	76	6.0
-	12:08	188	716.31	1.3	3.57	3.6	210	229	260	60	76	76	6.0
End	12:12	192	720.115										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO		Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)	Comments:
Port:	Before	Start	Stop			
Port:	After					
	Before					
Port:	After					
	Before					
Port:	After					

Checked By: JL 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

Project No. 499970.0000.0000								Date 10/13/22					
Client Georgia Power								Operator Name Sean MacLeod					
Facility McDonough Power Plant								Stack Diameter (in.) 285					
Source Unit 4B								Max Condition Barometric Pressure (in. Hg) 28.95					
Sampling Location Stack								Run No. 2 Static Pressure (in. H ₂ O) -0.32					
Assumed Moisture (%) 12.5		Ambient Temp. (°F)	Filter No. 522691	Probe			Post-Test Positive Orifice/Meter Leak Check Pass? Y N		Nozzle ID No. G-5-251				
K Factor 2.75				Liner Material Quartz	Setting (°F) 248	Length (ft) 12							
Pilot Tube								DGM - Meter Box					
Pilot Pre-test: Pass?	+ Y	- Y	N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)			
Pilot Post-test: Pass?	+ Y	- Y	N	RPTI-8B	1825	-	E13	1.739	.9941	.249			
Traverse Point	Time	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice, ΔH		Temperature (°F)					Pump Vacuum (in. Hg)		
				Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In		DGM Meter Out	
1	12:34	0	378.670	.52	1.43	1.4	221	244	253	66	75	75	4.80
	12:38	4	381.37	.52	1.43	1.4	221	244	253	66	75	75	4.50
2	12:42	8	384.04	.50	1.38	1.4	220	254	245	64	76	76	4.0
	12:46	12	386.80	.50	1.38	1.4	220	254	245	64	76	76	4.0
3	12:50	16	389.56	.52	1.43	1.4	219	259	253	61	76	76	4.0
	12:54	20	392.21	.52	1.43	1.4	219	259	253	61	76	76	4.0
4	12:58	24	394.93	.55	1.51	1.5	217	258	248	60	76	76	4.0
	13:02	28	397.77	.55	1.51	1.5	217	258	248	60	76	76	4.0
5	13:06	32	400.66	.54	1.49	1.5	217	258	250	61	77	77	4.0
	13:10	36	403.35	.54	1.49	1.5	217	258	250	61	77	77	4.0
6	13:14	40	406.26	.47	1.29	1.3	215	256	255	60	77	77	3.5
	13:18	44	408.80	.47	1.29	1.3	215	255	255	60	77	77	3.5
End	13:22	48	411.348										
A	13:33	48	411.348	.95	2.61	2.6	220	256	254	63	77	77	5.5
B	13:37	52	414.93	.95	2.61	2.6	220	256	254	63	77	77	5.5
2	13:41	56	418.66	.95	2.61	2.6	219	245	252	54	77	77	5.5
	13:45	60	422.71	.95	2.61	2.6	219	245	252	54	77	77	5.5
3	13:49	64	425.95	1.1	3.03	3.0	219	240	244	55	77	77	6.0
	13:53	68	429.89	1.1	3.03	3.0	219	240	244	55	77	77	6.0
4	13:57	72	434.07	1.1	3.03	3.0	219	239	243	57	76	76	6.0
	14:01	76	437.81	1.1	3.03	3.0	219	239	243	57	76	76	6.0
5	14:05	80	441.92	1.1	3.03	3.0	222	249	251	59	77	77	6.0
	14:09	84	445.83	1.1	3.03	3.0	222	249	251	59	77	77	6.0
6	14:13	88	449.84	.92	2.53	2.5	217	254	242	62	77	77	5.5
	14:17	92	453.38	.92	2.53	2.5	217	254	242	62	77	77	5.5
End	14:21	96	456.93										
Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)								Comments:					
Port / AWFCO		Volume (ft ³)		Time (sec.)		Vacuum (in Hg)	Leak Rate (cfm)						
Port:	Before	—	—	60	11	.001							
	After	—	—	60	10.5	.001							
Port:	Before												
	After												
								Notes: Test Location Schematic is presented separately. additional leak checks here or on a separate sheet.					
								Document					

Project No.	499970.0000.0000										Date	10/17/22	
Client	Georgia Power										Operator Name	Sean MacLeod	
Facility	McDonough Power Plant												
Source	Unit 4B					Condition					Max		
Sampling Location	Stack					Run No.	2						
Traverse Point	Time		DGM Volume (ft³)	Pilot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In	DGM Meter Out	Pump Vacuum (in. Hg)
1	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)							
1	14:29	96	456.933	.77	2.12	2.1	221	255	241	65	78	78	6.0
	14:33	100	460.24	.77	2.12	2.1	221	255	241	65	78	78	6.0
2	14:37	104	463.89	.54	1.49	1.5	219	257	254	60	78	78	5.0
	14:41	108	466.52	.54	1.49	1.5	219	252	254	60	78	78	5.0
3	14:45	112	469.20	.50	1.38	1.4	220	256	254	58	78	78	5.0
	14:49	116	471.04	.50	1.38	1.4	220	256	254	58	78	78	5.0
4	14:53	120	474.73	.56	1.54	1.5	218	251	253	53	79	79	5.0
	14:57	124	477.46	.56	1.54	1.5	218	251	253	53	79	79	5.0
5	15:01	128	480.25	.68	1.87	1.9	217	248	259	52	79	79	5.5
	15:05	132	483.31	.68	1.87	1.9	217	248	259	52	79	79	5.5
6	15:09	136	486.57	.45	1.24	1.2	213	254	241	51	79	79	5.0
	15:13	140	489.21	.45	1.24	1.2	213	254	241	51	79	79	5.0
End	15:17	140	491.780										
1	15:23	144	491.780	.58	1.60	1.6	221	243	249	59	78	78	4.0
	15:27	148	494.68	.38	1.60	1.6	221	243	249	59	78	78	4.0
2	15:31	152	497.50	.58	1.60	1.6	221	244	249	54	79	79	4.5
	15:35	156	500.35	.58	1.60	1.6	221	244	249	54	79	79	4.5
3	15:39	160	503.37	1.1	3.03	3.0	219	242	255	53	79	79	6.5
	15:43	164	507.41	1.1	3.03	3.0	219	242	255	53	79	79	6.5
4	15:47	168	511.29	1.5	4.13	4.1	217	241	256	56	79	79	8.5
	15:51	172	515.68	1.5	4.13	4.1	217	241	256	56	79	79	8.5
5	15:55	176	520.36	1.6	4.40	4.4	214	249	246	57	79	79	8.5-9.0
	15:59	180	525.25	1.6	4.40	4.4	214	249	246	57	79	79	9.0
6	16:03	184	529.76	1.5	4.13	4.1	209	247	254	57	79	79	9.0
	16:07	188	534.52	1.5	4.13	4.1	209	247	254	57	79	79	9.0
End	16:11	192	538.876										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft³)			Leak Rate (cfm)
	Start	Stop	Time (sec.)	
Port:	Before			
	After			
Port:	Before			
	After			
Port:	Before			
	After			

Checked By:

11/14/22

(Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

556 of 628

GPC Plant McDonough ICR Testing

TMS-22 Rev 1_04/11/2019

Project No.	499970.0000.0000							Date	10/18/22				
Client	Georgia Power							Operator Name	Sean MacLeod				
Facility	McDonough Power Plant					Stack Diameter (in.)	285	Barometer ID	14900524				
Source	Unit 4B					Condition	Max	Barometric Pressure (in. Hg)	29.05				
Sampling Location	Stack					Run No.	3	Static Pressure (in. H ₂ O)	- .32				
Assumed Moisture (%)	Ambient Temp. (°F)	Filter No.	Probe			Post-Test Positive Orifice/Meter Leak Check Pass?			Nozzle ID No.				
K Factor.	12.5	522683	Liner Material	Setting (°F)	Length (ft)	✓ Y	N			65-248			
Pilot	+ ✓ Y N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)					
Pilot Post-test: Pass?	+ ✓ Y N	RPTJ-XA.827		M16	1.899	1.0105	.249						
Traverse Point	Time Clock (24 hr)	Elapsed (min)	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice, ΔH Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Temperature (°F) Filter Exit	DGM Meter In	DGM Meter Out	Pump Vacuum (in. Hg)	
1	7:42	0	726,491	.60	1.71	1.7	220	239	255	48	44	44	3.0
	7:46	4	723,04	.60	1.71	1.7	220	239	255	48	44	44	3.0
2	7:50	8	725,51	.61	1.74	1.7	219	250	250	49	46	46	3.0
	7:54	12	728,33	.61	1.74	1.7	219	250	250	49	46	46	3.0
3	7:58	16	730,92	.50	1.43	1.4	219	250	255	49	47	47	3.0
	8:02	20	733,41	.50	1.43	1.4	219	250	257	49	47	47	3.0
4	8:06	24	735,89	.58	1.65	1.7	217	250	258	50	48	48	3.5
	8:10	28	738,52	.58	1.65	1.7	217	250	258	50	48	48	3.5
5	8:14	32	741,22	.68	1.94	1.9	217	251	257	51	48	48	3.5
	8:18	36	744,05	.68	1.94	1.9	217	251	257	51	48	48	3.5
6	8:22	40	747,05	1.60	1.71	1.7	214	249	253	51	48	48	3.5
	8:26	44	749,73	1.60	1.71	1.7	214	249	253	51	48	48	3.5
End	8:31	48	752,197										
1	8:37	48	752,197	1.1	3.14	3.1	220	241	259	52	48	48	5.0
	8:41	52	755,91	1.1	3.14	3.1	220	241	259	52	48	48	5.0
2	8:45	56	759,41	1.1	3.14	3.1	220	245	260	52	48	48	5.0
	8:49	60	763,21	1.1	3.14	3.1	220	245	260	52	48	48	5.0
3	8:53	64	766,71	1.1	3.14	3.1	219	244	263	49	49	49	5.0
	8:57	68	770,26	1.1	3.14	3.1	219	244	263	49	49	49	5.0
4	9:01	72	774,01	1.2	3.41	3.4	219	241	256	49	48	48	5.5
	9:05	76	777,82	1.2	3.42	3.4	219	241	256	49	48	48	5.5
5	9:09	80	781,52	1.2	3.42	3.4	218	245	250	49	48	48	5.5
	9:13	84	785,69	1.2	3.42	3.4	218	240	250	49	48	48	5.5
6	9:17	88	789,37	1.1	3.14	3.1	215	241	260	49	49	49	5.0
	9:21	92	792,86	1.1	3.14	3.1	215	241	260	49	49	49	5.0
End	9:25	96	796,540										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft ³)			Vacuum (in Hg)	Leak Rate (cfm)
	Start	Stop	Time (sec.)		
Port:	Before	—	—	60	11 .001
	After	—	—	60	75 .001
Port:	Before				
	After				

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document



ISOKINETIC FIELD DATA SHEET (Continued)

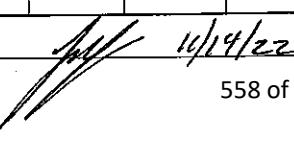
Method: 5 & 29

Page 2 of 2
Date 10/18/22
Operator Name Sean MacLeod

Project No.	499970.0000.0000	Date	10/18/22
Client	Georgia Power	Operator Name	Sean MacLeod
Facility	McDonough Power Plant		
Source	Unit 4B	Condition	Max
Sampling Location	Stack	Run No.	3

Traverse Point	Time		DGM Volume (ft³)	Pilot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Impingers Exit	Temperature (°F)		Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)					DGM Meter In	DGM Meter Out	
1	9:33	96	796.840	.81	2.31	2.3	220	246	266	54	48	48	4.0
	9:37	100	799.60	.81	2.31	2.3	220	246	266	54	48	48	4.0
2	9:41	104	802.772	.66	1.88	1.8	219	246	266	54	49	49	3.5
	9:45	108	805.76	.66	1.88	1.8	219	246	266	54	49	49	3.5
3	9:49	112	808.58	.75	2.14	2.1	218	247	254	53	49	49	4.0
	9:53	116	811.43	.75	2.14	2.1	218	247	254	53	49	49	4.0
4	9:57	120	814.81	.68	1.94	1.9	218	244	260	54	50	50	3.5
	10:01	124	817.25	.68	1.94	1.9	218	244	260	54	50	50	3.5
5	10:05	128	820.16	.75	2.14	2.1	217	245	256	56	49	49	4.0
	10:09	132	823.91	.75	2.14	2.1	217	245	256	56	49	49	4.0
6	10:13	136	826.55	.55	1.57	1.6	213	242	251	58	50	50	3.5
	10:17	140	829.02	.55	1.57	1.6	213	242	251	58	50	50	3.5
End	10:21	140	831.486	-	-	-	-	-	-	-	-	-	-
1	10:29	144	831.486	.43	1.28	1.3	222	247	258	51	49	49	3.0
	10:33	148	833.96	.45	1.28	1.3	222	247	258	51	49	49	3.0
2	10:37	152	836.20	.43	1.23	1.2	223	250	259	50	50	50	3.0
	10:41	156	838.63	.43	1.23	1.2	223	250	259	50	50	50	3.0
3	10:45	160	841.07	.65	1.85	1.9	222	252	258	50	50	50	4.0
	10:49	164	843.91	.65	1.85	1.9	222	252	258	50	50	50	4.0
4	10:53	168	846.46	.76	2.17	2.2	220	248	249	52	51	51	4.0
	10:57	172	850.00	.76	2.17	2.2	220	248	249	52	51	51	4.0
5	11:01	176	853.06	.85	2.42	2.4	217	250	263	51	51	51	4.5
	11:05	180	856.11	.85	2.42	2.4	217	250	263	51	51	51	4.5
6	11:09	184	859.47	.58	1.65	1.7	209	251	261	51	52	52	3.5
	11:13	188	862.75	.58	1.65	1.7	209	251	261	51	52	52	3.5
End	11:17	192	865.277	-	-	-	-	-	-	-	-	-	-

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft³)		Leak Rate (cfm)	Port:	Before	After	Comments:	
Start	Stop	Time (sec.)	Vacuum (in Hg)						
Port:	Before								
	After								
Port:	Before								
	After								
Port:	Before								
	After								

Checked By:  14/14/22 (Project Manager or QA Manager - sign and date)

ISOKINETIC FIELD DATA SHEET

Method: 5 & 29

Project No. 499970.0000.0000								Date 10/18/2022					
Client Georgia Power								Operator Name MIKE LAWRIE + M. M.					
Facility McDonough Power Plant								Stack Diameter (in.) 265					
Source Unit 4B								Barometer ID 14900524					
Sampling Location Stack								Condition Max					
								Static Pressure (in. H ₂ O) 29.10					
								Run No. 4					
								Post-Test Positive Orifice/Meter Leak Check Pass? Y N					
Assumed Moisture (%) 12.5		Ambient Temp. (°F) 48	Filter No. 522685	Probe Liner Material Quartz	Setting (°F) 248	Length (ft) 12			Nozzle ID No. G-5-254				
K Factor 2.85		Pilot Tube	ID No. RPT18A	PTCF or Cp 0.825	Console No. E13	ΔH @ 1.739	DGMCF or Y 0.9441	Diameter (in.) 0.249					
Traverse Point	Time Clock (24 hr)	Elapsed (min)	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice, ΔH		Temperature (°F)			Pump Vacuum (in. Hg)			
			Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In		DGM Meter Out		
1	11:30	0	542.771	0.58	1.65	1.7	218	253	237	ML 451	48	48	5.0
-	11:34	4	544.98	0.58	1.65	1.7	218	253	237	51	48	48	5.0
2	11:38	8	547.78	0.56	1.59	1.6	218	247	238	50	47	47	5.0
-	11:42	12	550.67	0.56	1.59	1.6	218	247	238	50	47	47	5.0
3	11:46	16	553.45	0.51	1.45	1.5	216	247	230	50	47	47	5.0
-	11:50	20	556.15	0.51	1.45	1.5	216	247	230	50	47	47	5.0
4	11:54	24	558.85	0.59	1.68	1.7	216	247	237	52	47	47	5.0
-	11:58	28	561.66	0.59	1.68	1.7	216	247	237	52	47	47	5.0
5	12:02	32	564.81	0.67	1.90	1.9	215	244	234	53	47	47	5.5
-	12:06	36	567.49	0.67	1.90	1.9	215	244	234	53	47	47	5.5
6	12:10	40	570.53	0.44	1.25	1.3	210	246	237	54	48	48	4.5
-	12:14	44	573.23	0.44	1.25	1.3	210	246	237	54	48	48	4.5
End	12:18	48	575.55										
1	12:26	48	575.655	1.1	3.13	3.1	218	242	261	52	48	48	8.0
-	12:30	52	579.63	1.1	3.13	3.1	218	242	261	52	48	48	8.0
2	12:34	56	583.47	1.0	2.85	2.9	218	239	240	59	50	50	8.0
-	12:39	60	581.36	1.0	2.85	2.9	218	239	240	59	50	50	8.0
3	12:42	64	590.92	1.1	3.13	3.1	217	245	251	64	50	50	8.0
-	12:46	68	594.82	1.1	3.13	3.1	217	245	251	64	50	50	8.0
4	12:50	72	598.86	1.1	3.13	3.1	217	243	249	66	51	51	8.5
-	12:54	76	602.76	1.1	3.13	3.1	217	243	247	66	51	51	8.5
5	12:58	80	606.69	1.2	3.42	3.4	217	246	250	67	51	51	9.0
-	13:02	84	610.80	1.2	3.42	3.4	217	246	250	67	51	51	9.0
6	13:06	88	614.89	1.0	2.85	2.9	214	241	230	66	52	52	8.0
-	13:08	92	616.86	1.0	2.85	2.9	214	241	239	66	52	52	8.0
End	13:12	96	620.885										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)

Comments:

Port / AWFCO	Volume (ft ³)		Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)
	Start	Stop			
Port:	Before	-	60	12	0.001
	After	/			
Port:	Before	/			
	After	/			

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.	499970.0000.0000	Date	10/18/2022
Client	Georgia Power	Operator Name	Mike Lawrence / Martin Morales
Facility	McDonough Power Plant		
Source	Unit 4B	Condition	Max
Sampling Location	Slack	Run No.	4

Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Impingers Exit	Temperature (°F)		Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)	Desired (in. H₂O)	Actual (in. H₂O)	DGM Meter In	DGM Meter Out							
1	1322 1422	96	620.88	0.70	1.99	2.0	221	238	240	60	53	53	5.5
-	1326	100	623.66	0.70	1.99	2.0	221	238	240	60	53	53	5.5
2	1330	104	626.91	0.55	1.56	1.6	219	246	248	65	52	52	5.0
-	1334	108	629.30	0.55	1.56	1.6	218	246	248	65	52	52	5.0
3	1338	112	632.42	0.61	1.73	1.7	217	240	245	66	52	52	5.0
-	1342	116	635.14	0.61	1.73	1.7	217	240	245	66	52	52	5.0
4	1346	120	638.27	0.75	2.13	2.1	216	246	241	62	53	53	5.5
-	1350	124	641.31	0.75	2.13	2.1	216	246	241	62	53	53	5.5
5	1354	128	644.28	0.63	1.79	1.8	216	243	246	64	53	53	5.5
-	1358	132	647.11	0.63	1.79	1.8	216	243	246	64	53	53	5.5
6	13402	136	650.27	0.53	1.51	1.5	213	241	242	61	53	53	5.0
-	1406	140	652.93	0.53	1.51	1.5	213	241	242	61	53	53	5.0
End	1410	140	655.820										
1	1420	144	655.820	0.61	1.73	1.7	219	243	242	54	52	52	5.0
-	1424	148	658.36	0.61	1.73	1.7	219	243	242	54	52	52	5.0
2	1428	152	661.25	0.72	2.05	2.1	219	241	238	55	52	52	6.0
-	1432	156	664.41	0.72	2.05	2.1	219	241	238	55	52	52	6.0
3	1436	160	667.53	1.10	3.13	3.1	218	242	235	57	54	54	8.0
-	1440	164	671.31	1.10	3.13	3.1	218	242	235	57	54	54	8.0
4	1444	168	675.01	1.4	3.99	4.0	216	238	243	57	53	53	10.0
1448	172	679.45	1.4	3.99	4.0	216	238	243	57	53	53	10.0	
5	1452	176	683.64	1.7	4.84	4.8	213	243	238	58	52	52	13.0
1456	180	687.84	1.7	4.84	4.8	213	243	238	58	52	52	13.0	
6	14580	184	693.18	1.4	3.99	4.0	206	241	243	57	52	52	11.0
1504	188	697.76	1.4	3.99	4.0	206	241	243	57	52	52	11.0	
End	15083	192	702.025										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:	-Find
Port / AWFCO	Volume (ft³)		Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)	
	Start	Stop				
Port:	Before	-	60	14	0.001	
	After					
Port:	Before					
	After					
Port:	Before					
	After					

Checked By: JMM 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

560 of 628

GPC Plant McDonough ICR Testing

AM-FDG-25 Rev 1_04/11/2019

Project No. 499970.0000.0000								Date 10/19/22					
Client Georgia Power								Operator Name Sean MacLeod					
Facility McDonough Power Plant								Stack Diameter (in.) 285					
Source Unit 4B								Condition Max					
Sampling Location Stack								Run No. 5					
Assumed Moisture (%) 12.5	Ambient Temp. (°F) 40	Filter No. S22688	Probe			Post-Test Positive Orifice/Meter Leak Check Pass? X Y N		Nozzle ID No. G-5-254					
			Liner Material Quartz		Setting (°F) 248				Length (ft) 12				
K Factor 2.85													
Pitot Tube								DGM - Meter Box					
Pitot Pre-test: Pass? + ✓ Y N	- ✓ Y N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)					
Pitot Post-test: Pass? + ✓ Y N	- ✓ Y N	RPT3-88	.825	—	E13	1.739	.9941	.249					
Traverse Point	Time	DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Temperature (°F)			Pump Vacuum (in. Hg)				
				Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Impingers Exit		DGM Meter In	DGM Meter Out		
1	7:05	0	702.120	.60	1.71	1.7	218	248	242	40	38	38	4.5
	7:09	4	703.23	.60	1.71	1.7	218	248	242	40	38	38	4.5
2	7:13	8	708.05	.47	1.34	1.3	217	249	240	39	39	39	4.0
	7:17	12	710.64	.47	1.34	1.3	217	249	240	39	39	39	4.0
3	7:21	16	713.11	.57	1.62	1.6	216	251	239	39	40	40	4.5
	7:25	20	715.92	.57	1.63	1.6	216	251	239	39	40	40	4.5
4	7:29	24	718.98	.71	2.03	2.0	216	250	260	39	41	41	5.0
	7:33	28	721.66	.71	2.02	2.0	216	250	260	39	41	41	5.0
5	7:37	32	724.83	.67	1.91	1.9	215	250	263	40	42	42	5.0
	7:41	36	727.83	.67	1.91	1.9	215	256	263	40	42	42	5.0
6	7:45	40	730.84	.57	1.63	1.6	213	253	261	41	43	43	4.5
	7:49	44	733.65	.57	1.62	1.6	213	253	261	41	43	43	4.5
End	7:53	48	736.327										
1	7:58	48	736.327	1.1	3.14	3.1	214	250	262	43	43	43	7.0
	8:02	52	740.05	1.1	3.14	3.1	218	250	264	43	43	43	7.0
2	8:06	58	743.92	1.1	3.14	3.1	218	252	263	45	44	44	7.0
	8:10	60	747.73	1.1	3.14	3.1	218	252	263	45	44	44	7.0
3	8:14	64	751.62	1.2	3.42	3.4	217	248	263	48	44	44	7.5
	8:18	68	755.62	1.2	3.42	3.4	217	248	263	48	44	44	7.5
4	8:22	72	759.64	1.2	3.42	3.4	217	248	268	50	45	45	7.5
	8:26	76	763.74	1.2	3.42	3.4	217	248	268	50	45	45	7.5
5	8:30	80	767.38	1.2	3.42	3.4	217	248	260	47	46	46	7.5
	8:34	84	771.82	1.2	3.42	3.4	217	248	260	47	46	46	7.5
6	8:38	88	775.09	1.0	2.85	2.9	214	247	265	47	46	46	6.5
	8:42	92	779.58	1.0	2.85	2.9	214	247	265	47	46	46	6.5
End	8:46	96	783.257										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)				
Port:		Start	Stop	Time (sec)					
Before	—	—	60	11	,001				
	After	—	—	60	12	,001			
Port:	Before								
After									

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.	499970.0000.0000								Date	10/14/20			
Client	Georgia Power								Operator Name	Sean Macteal			
Facility	McDonough Power Plant												
Source	Unit 4B				Condition				Max				
Sampling Location	Stack				Run No.				5				
Traverse Point	Time		DGM Volume (ft³)	Pilot ΔP (in. H₂O)	Orifice, ΔH		Temperature (°F)						Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Filter Exit	Impingers Exit	DGM Meter In	DGM Meter Out	

Handwritten Data:

1	8:54	96	783,282	.71	2.02	2.0	219	255	263	50	46	46	5,0
	8:58	100	786,33	.71	2.02	2.0	219	255	263	50	46	46	5,0
2	9:02	104	789,39	.68	1.71	1.7	217	250	261	48	47	47	5,0
	9:06	108	792,19	.68	1.71	1.7	217	250	261	48	47	47	5,0
3	9:10	112	795,06	.57	1.62	1.6	216	253	260	50	47	47	5,0
	9:14	116	797,85	.57	1.62	1.6	216	253	260	50	47	47	5,0
4	9:18	120	800,76	.60	1.71	1.7	215	256	260	52	47	47	5,0
	9:22	124	803,49	.60	1.71	1.7	215	256	260	52	47	47	5,0
5	9:26	128	806,39	.62	1.77	1.8	215	245	255	52	47	47	5,0
	9:30	132	809,34	.62	1.77	1.8	215	245	255	52	47	47	5,0
6	9:34	136	812,36	.53	1.51	1.5	211	241	257	51	48	48	4.5
	9:38	140	815,02	.53	1.51	1.5	211	241	257	51	48	48	4.5
End	9:42	140	817,655										
1	9:49	144	817,655	.65	1.85	1.9	219	241	259	49	49	49	5,0
	9:53	148	820,57	.65	1.85	1.9	219	241	259	49	49	49	5,0
2	9:57	152	823,66	.75	2.14	2.1	219	254	260	45	48	48	5,5
	10:01	156	826,78	.75	2.14	2.1	219	254	260	45	48	48	5,5
3	10:05	160	830,18	1.2	3.42	3.4	218	248	256	45	49	49	7.5
	10:09	164	833,99	1.2	3.42	3.4	218	248	256	45	49	49	7.5
4	10:13	168	838,22	1.5	4.28	4.3	216	244	257	45	49	49	9.0
	10:17	172	842,53	1.5	4.28	4.3	216	244	257	45	49	49	9.0
5	10:21	176	847,14	1.8	5.13	5.1	214	245	257	44	50	50	10.5
	10:25	180	851,97	1.8	5.13	5.1	214	245	257	44	50	50	11.0
6	10:29	184	856,44	1.8	4.28	4.3	208	247	258	45	50	50	9.0
	10:33	188	861,44	1.5	4.28	4.3	208	247	258	45	50	50	9.0
End	10:37	192	865,913										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:							
Port / AWFCO		Volume (ft³)		Leak Rate (cfm)								
		Start	Stop		Time (sec.)	Vacuum (in Hg)						
Port:	Before											
	After											
Port:	Before											
	After											
Port:	Before											
	After											

Checked By: Jeffrey J. Macteal (Project Manager or QA Manager - sign and date)

ISOKINETIC FIELD DATA SHEET

Method: 5 & 29

Project No.		499970.0000.0000					Date	10/19/2022			
Client		Georgia Power					Operator Name	Mike Lawrence			
Facility		McDonough Power Plant			Stack Diameter (in.)	285		Barometer ID	14900524		
Source		Unit 4B			Condition	Max		Barometric Pressure (in. Hg)	29.25		
Sampling Location		Stack			Run No.	10		Static Pressure (in. H ₂ O)	-0.32		
Assumed Moisture (%)	Ambient Temp. (°F)	52	Filter No.	Probe		Post-Test Positive Orifice/Meter Leak Check Pass?		Nozzle ID No.			
K Factor	2.85	522679	Liner Material	Setting (°F)	Length (ft)			G1-5-249			
				Quartz	248	12	Y			N	
		Pilot Tube			DGM - Meter Box						
Pilot Pre-test: Pass?		+ ✓ N	ID No.	PTCF or Cp	Console No.	Meter No.	ΔH @	DGMCF or Y	Diameter (in.)		
Pilot Post-test: Pass?		+ ✓ N	RPT18A	0.827		M16	1.899	1.0105	2.49		
Traverse Point	Time	DGM Volume (ft ³)	Pilot ΔP (in. H ₂ O)	Orifice, ΔH	Temperature (°F)				Pump Vacuum (in. Hg)		
	Clock (24 hr)	Elapsed (min)	Desired (in. H ₂ O)	Actual (in. H ₂ O)	Stack Flue Gas	Probe	Impingers Exit	DGM Meter In		DGM Meter Out	
1	1050	0	868.896	0.62	1.76	1.8	221	246	49	49	2.5
-	1054	4	871.70	0.62	1.76	1.8	221	246	49	49	2.5
2	1058	8	874.54	0.46	1.31	1.3	220	248	260	48	50
-	1102	12	877.33	0.46	1.31	1.3	220	248	260	48	50
3	1106	16	879.71	0.65	1.85	1.9	219	249	254	46	51
-	1110	20	882.62	0.65	1.85	1.9	219	249	254	46	51
4	1114	24	885.53	0.70	1.99	2.0	218	249	251	46	51
-	1118	28	888.47	0.70	1.99	2.0	218	249	251	46	51
5	1122	32	891.45	0.67	1.90	1.9	217	249	258	46	52
-	1126	36	894.34	0.67	1.90	1.9	217	249	258	46	52
6	1130	40	897.25	0.53	1.51	1.5	214	254	260	46	53
-	1134	44	899.87	0.53	1.51	1.5	214	254	260	46	53
End	1138	48	902.361								
1	1143	48	902.361	1.0	2.85	2.9	221	252	261	53	53
-	1147	52	905.92	1.0	2.85	2.9	221	252	261	53	53
2	1151	56	909.56	1.0	2.85	2.9	220	252	268	46	54
-	1155	60	913.05	1.0	2.85	2.9	220	252	268	46	54
3	1159	64	916.58	1.1	3.13	3.1	220	253	263	48	54
-	1203	68	920.26	1.1	3.13	3.1	220	253	263	48	54
4	1207	72	923.93	1.1	3.13	3.1	220	253	268	49	55
-	1211	76	927.62	1.1	3.13	3.1	220	253	268	49	55
5	1215	80	931.29	1.2	3.42	3.4	219	255	254	49	56
-	1219	84	935.03	1.2	3.42	3.4	219	255	254	49	56
6	1223	88	938.95	1.0	2.85	2.9	218	258	259	50	56
-	1227	92	942.59	1.0	2.85	2.9	218	258	259	50	56
End	1231	96	946.129								

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:				
Port / AWFCO		Volume (ft ³)		Vacuum (in Hg)	Leak Rate (cfm)				
Port:	Before	Start	Stop	Time (sec.)					
	Before	—	—	60	11	0.001			
	After	—	—	60	15	0.001			
Port:	Before								
	After								

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Project No.	499970.0000.0000	Date	10/19/2022
Client	Georgia Power	Operator Name	Miche Lawrence
Facility	McDonough Power Plant		
Source	Unit 4B	Condition	Max
Sampling Location	Stack	Run No.	6

Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Temperature (°F)			DGM Meter In	DGM Meter Out	Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)			Filter Exit	Impingers Exit				
1	12:40	96	946.12	0.15	2.13	2.1	222	252	252	59	57	57	57	4.5
-	12:44	100	949.10	0.15	2.13	2.1	222	252	252	59	57	57	57	4.5
2	12:48	104	952.09	0.64	1.82	1.8	220	255	261	50	57	57	57	4.0
-	12:52	108	954.95	0.64	1.82	1.8	220	255	261	50	57	57	57	4.0
3	12:56	112	957.76	0.68	1.93	1.9	219	252	256	51	58	58	58	4.5
-	13:00	116	960.64	0.68	1.93	1.9	219	252	256	51	58	58	58	4.5
4	13:04	120	963.52	0.70	1.99	2.0	219	249	242	52	57	57	57	4.5
-	13:08	124	966.49	0.70	1.99	2.0	219	249	242	52	57	57	57	4.5
5	13:12	128	969.44	0.71	2.02	2.0	218	245	238	51	59	59	59	4.5
-	13:16	132	972.45	0.71	2.02	2.0	218	245	238	51	59	59	59	4.5
6	13:20	136	975.43	0.55	1.56	1.6	215	261	264	52	59	59	59	4.0
-	13:24	140	978.46	0.55	1.56	1.6	215	261	264	52	59	59	59	4.0
End	13:28	140	980.83											
1	13:36	144	980.83	0.16	2.16	2.2	222	238	260	54	59	59	59	5.0
-	13:40	148	983.45	0.76	2.16	2.2	222	238	260	54	59	59	59	5.0
2	13:44	152	987.12	0.89	2.53	2.5	224	244	256	43	59	59	59	5.5
-	13:48	156	990.46	0.89	2.53	2.5	224	244	256	43	59	59	59	5.5
3	13:52	160	993.78	ML 0.12	3.42	3.4	222	252	246	55	60	60	60	7.0
-	13:56	164	997.51	1.2	3.42	3.4	222	252	246	55	60	60	60	7.0
4	14:00	168	1001.39	1.8	5.13	5.1	220	246	260	54	60	60	60	10.5
-	14:04	172	1005.94	1.8	5.13	5.1	220	246	260	54	60	60	60	10.5
5	14:08	176	1010.71	2.1	5.98	6.0	218	250	260	45	61	61	61	13.0
-	14:12	180	1015.79	2.1	5.98	6.0	218	250	260	45	61	61	61	13.0
6	14:16	184	1020.96	1.5	4.27	4.2	211	249	238	45	62	62	62	9.0
-	14:20	188	1025.36	1.5	4.27	4.3	211	249	238	45	62	62	62	9.0
End	14:24	192	1029.713											

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:
Port / AWFCO	Volume (ft³)	Time (sec.)	Vacuum (in Hg)	Leak Rate (cfm)	
Port:	Start	Stop			
	Before				
Port:	After	/	/	/	
	Before				
Port:	After				
	Before				
Port:	After				

Checked By: *Jay F* 11/14/22 (Project Manager or QA Manager - sign and date)

Project No. 499970.0000.0000								Date 10/20/2022						
Client Georgia Power								Operator Name Mike Lawrie						
Facility McDonough Power Plant								Stack Diameter (in.) 285						
Source Unit 4B								Condition Max						
Sampling Location Stack								Run No. 7						
Assumed Moisture (%) 12.5		Ambient Temp. (°F) 40	Filter No. 522680	Probe	Post-Test Positive Orifice/Meter Leak Check Pass?			Nozzle ID No.						
K Factor 2.75			Liner Material Quartz	Setting (°F) 248	Length (ft) 12	Y N		L-5-254						
Pilot Tube								DGM - Meter Box						
Pilot Pre-test: Pass? Y N		ID No.	PTCF or Cp 0.825	Console No. —	Meter No. M16	ΔH @ 1.899	DGMCF or Y 10105	Diameter (in.) .249						
Pilot Post-test: Pass? Y N		RPT1-88												
Traverse Point	Time	DGM Volume (ft³)	Pilot ΔP (in. H₂O)	Orifice, ΔH	Temperature (°F)				Pump Vacuum (in. Hg)					
	Clock (24 hr)	Elapsed (min)	Desired (in. H₂O)	Actual (in. H₂O)	Stack Flue Gas	Probe	Impingers Exit	DGM Meter In	DGM Meter Out					
1	7:33	0	30.602	0.67	1.84	1.8	215	241	259	40	44	44	3.5	
—	7:37	4	33.50	0.67	1.84	1.8	215	241	259	40	44	44	3.5	
2	7:41	8	36.26	0.64	1.76	1.8	214	245	260	43	45	45	3.5	
—	7:45	12	39.06	0.64	1.76	1.8	214	245	260	43	45	45	3.0	
3	7:49	16	41.87	0.61	1.67	1.7	213	242	260	41	45	45	3.0	
—	7:53	20	44.63	0.61	1.67	1.7	213	242	260	41	45	45	3.0	
4	7:57	24	47.21	0.64	1.84	1.8	212	243	257	40	47	47	3.5	
—	8:01	28	50.08	0.64	1.84	1.8	212	243	257	40	47	47	3.5	
5	8:05	32	52.85	0.70	1.92	1.9	212	248	258	39	47	47	3.5	
—	8:09	36	55.71	0.70	1.92	1.9	212	248	258	39	47	47	3.5	
6	8:13	40	58.57	0.54	1.48	1.5	211	251	252	39	48	48	3.0	
—	8:17	44	61.19	0.54	1.48	1.5	211	251	252	39	48	48	3.0	
End	8:21	48	63.743											
B	1	8:27	48	63.743	1.0	2.75	2.8	214	250	253	42	49	49	4.5
—	8:31	52	67.26	1.0	2.75	2.8	214	250	253	42	49	49	4.5	
2	8:35	56	70.78	1.0	2.75	2.8	214	248	251	41	50	50	4.5	
—	8:39	60	74.29	1.0	2.75	2.8	214	248	251	41	50	50	4.5	
3	8:43	64	77.80	1.1	3.02	3.0	214	248	254	45	52	52	5.0	
—	8:47	68	81.41	1.1	3.02	3.0	214	248	254	45	52	52	5.0	
4	8:51	72	85.02	1.1	3.02	3.0	214	245	250	48	52	52	5.0	
—	8:55	76	88.63	1.1	3.02	3.0	214	245	250	48	52	52	5.0	
5	8:59	80	92.21	1.2	3.3	3.3	214	247	254	49	54	54	5.0	
—	9:03	84	95.83	1.2	3.3	3.3	214	247	254	49	54	54	5.0	
6	9:07	88	99.43	0.93	2.55	2.6	211	248	254	50	55	55	4.5	
—	9:11	92	103.05	0.93	2.55	2.6	211	248	254	50	55	55	4.5	
End	9:15	96	106.361											

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:
Port / AWFCO	Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)	
	Start	Stop			
Port:	Before	—	60	10	0.001
	After	—	60	10	0.001
Port:	Before				
	After				

Notes: Test Location Schematic is presented separately.
additional leak checks here or on a separate sheet.

Document

Page 2 of 2
 Date 10/20/2022
 Operator Mike Lawrence

Project No.	499970.0000.0000	Date	10/20/2022
Client	Georgia Power	Operator	
Facility	McDonough Power Plant	Name	Mike Lawrence
Source	Unit 4B	Condition	Max
Sampling Location	Stack	Run No.	1

Traverse Point	Time		DGM Volume (ft³)	Pitot ΔP (in. H₂O)	Orifice, ΔH		Stack Flue Gas	Probe	Filter Exit	Impingers Exit	Temperature (°F)		Pump Vacuum (in. Hg)
	Clock (24 hr)	Elapsed (min)			Desired (in. H₂O)	Actual (in. H₂O)					DGM Meter In	DGM Meter Out	
1	9:22	96	106.369	0.76	2.09	2.1	215	245	252	56	57	57	4.0
-	9:26	100	109.48	0.76	2.09	2.1	215	245	252	56	57	57	4.0
2	9:30	104	112.54	0.53	1.45	1.5	214	246	251	49	58	58	3.0
-	9:34	108	115.17	0.53	1.45	1.5	214	246	251	49	58	58	3.0
3	9:38	112	117.82	0.69	1.89	1.9	213	249	255	52	58	58	3.5
-	9:42	116	120.69	0.69	1.89	1.9	213	249	255	52	58	58	3.5
4	9:46	120	123.63	0.77	2.11	2.1	213	246	254	52	59	59	4.0
-	9:50	124	126.66	0.77	2.11	2.1	213	246	254	52	59	59	4.0
5	9:54	128	129.58	0.65	1.82	1.8	211	248	244	52	60	60	3.5
-	9:58	132	132.54	0.65	1.82	1.8	211	248	244	52	60	60	3.5
6	10:02	136	135.35	0.54	1.51	1.5	209	246	248	52	61	61	3.0
-	10:06	140	137.81	0.54	1.51	1.5	209	246	248	52	61	61	3.0
End	10:10	140	140.268										
1	10:15	144	140.268	0.70	1.96	2.0	216	244	265	52	61	61	4.0
-	10:19	148	143.09	0.70	1.96	2.0	216	244	265	52	61	61	4.0
2	10:23	152	146.17	0.79	2.21	2.2	216	243	247	42	62	62	4.5
-	10:27	156	149.24	0.79	2.21	2.2	216	243	247	42	62	62	4.5
3	10:31	160	152.45	1.1	3.08	3.1	215	240	255	42	63	63	5.5
-	10:35	164	156.12	1.1	3.08	3.1	215	240	255	42	63	63	5.5
4	10:39	168	159.81	1.5	4.2	4.2	213	244	246	42	63	63	5.5
-	10:43	172	163.71	1.5	4.2	4.2	213	244	246	42	63	63	5.5
5	10:47	176	168.05	1.7	4.76	4.8	211	243	263	42	64	64	7.5
-	10:51	180	172.65	1.7	4.76	4.8	211	243	263	42	64	64	7.5
6	10:55	184	177.42	1.5	4.2	4.2	204	239	241	43	65	65	7.0
-	10:59	188	181.67	1.5	4.2	4.2	204	239	241	43	65	65	7.0
End	11:03	192	186.081										

Sample Train Leak Checks (e.g., pre-test, at each port change, post-test)					Comments:
Port / AWFCO	Volume (ft³)		Vacuum (in Hg)	Leak Rate (cfm)	
Port:	Before				K Factor changed to 2.8 at Port C - Point 5
	After				
Port:	Before				
	After				
Port:	Before				
	After				

Checked By: Jeff 11/14/22 (Project Manager or QA Manager - sign and date)

NA = Not Applicable

TRC Report Number 499970

566 of 628

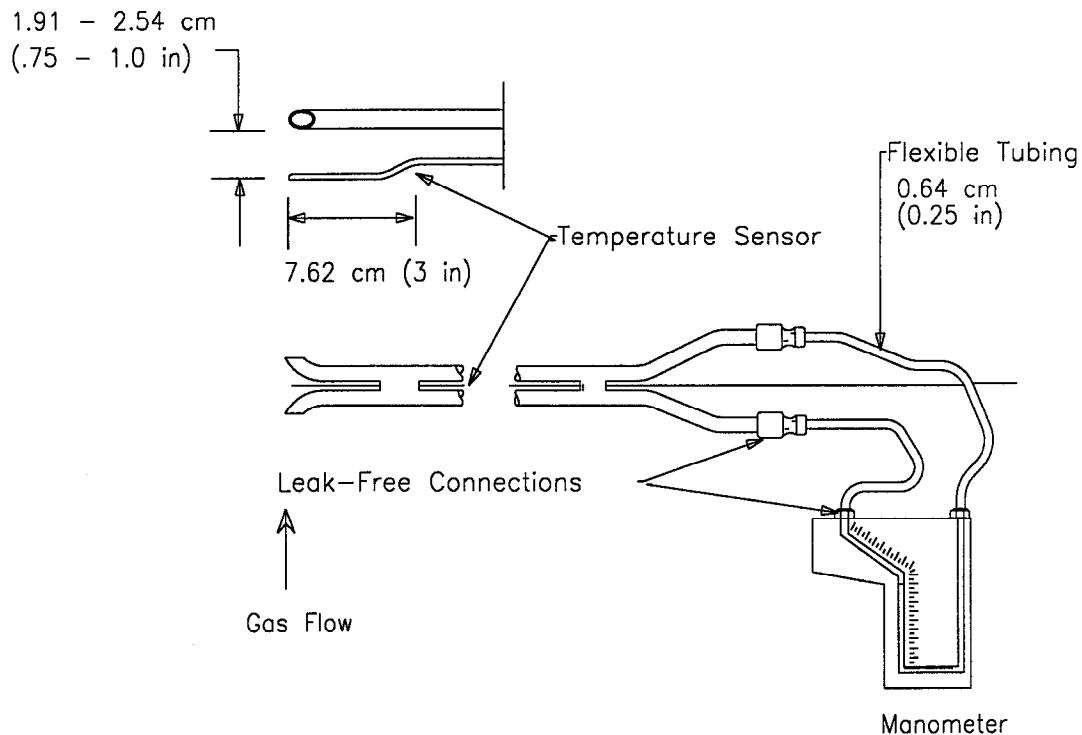
GPC Plant McDonough ICR Testing

AM-FDS-06 Rev 1_04/11/2019

Sample Train Diagrams

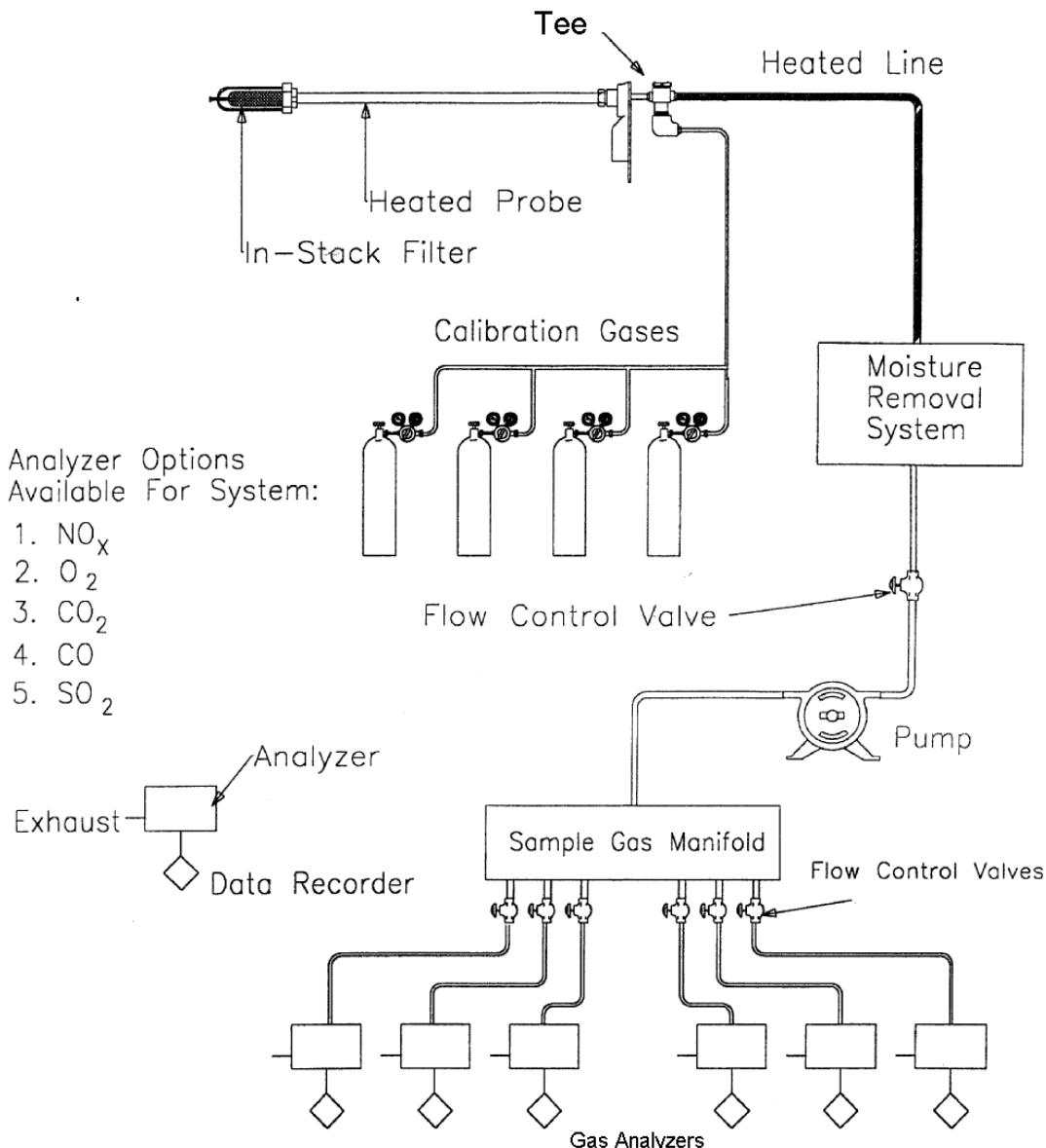
Determination of Stack Gas Velocity and Volumetric Flow Rate

USEPA Promulgated Test Method 2



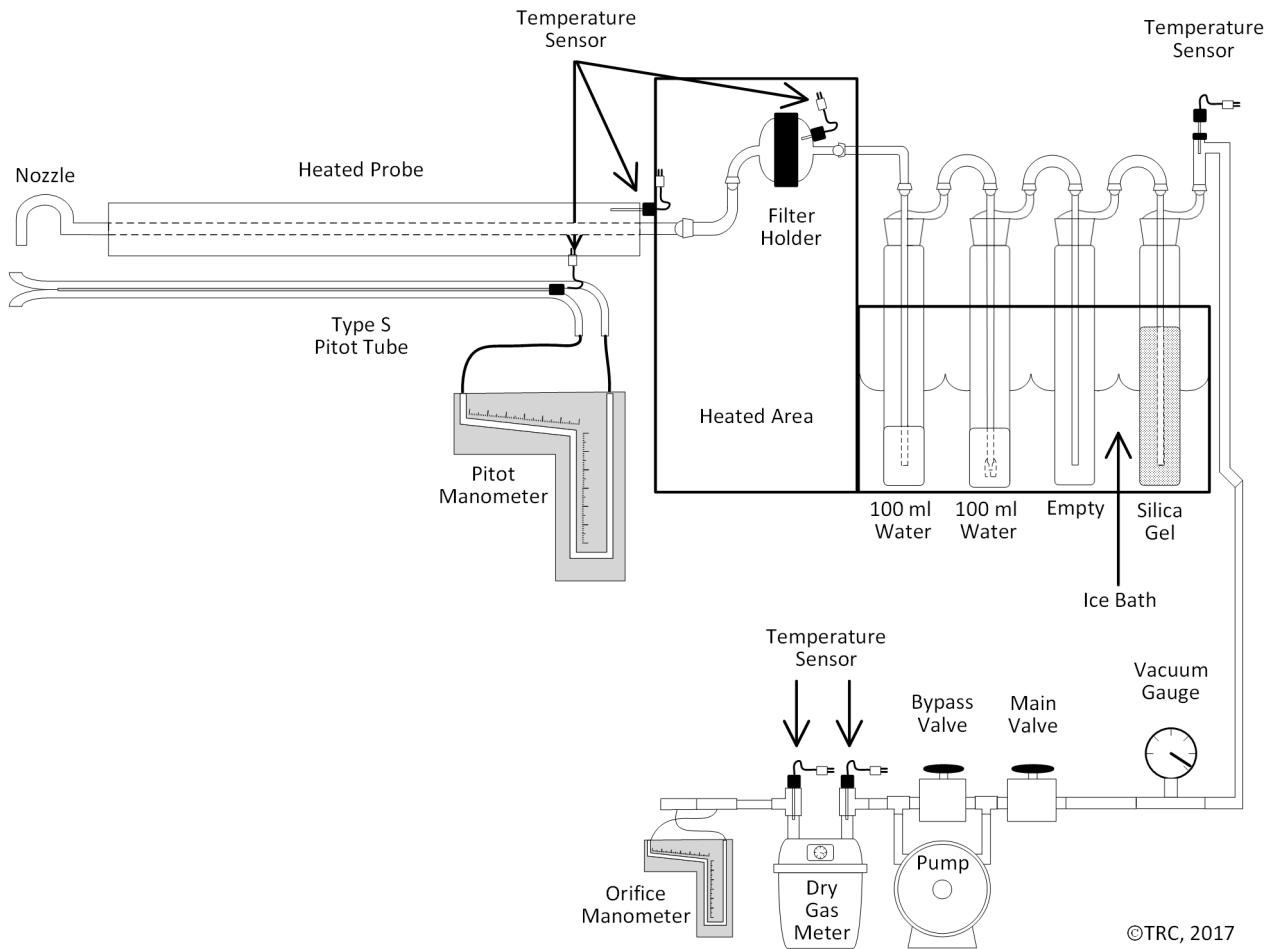
Determination of Multiple Gaseous Pollutants Using an Extractive Sampling Train

USEPA Promulgated Methods 3A and 7E



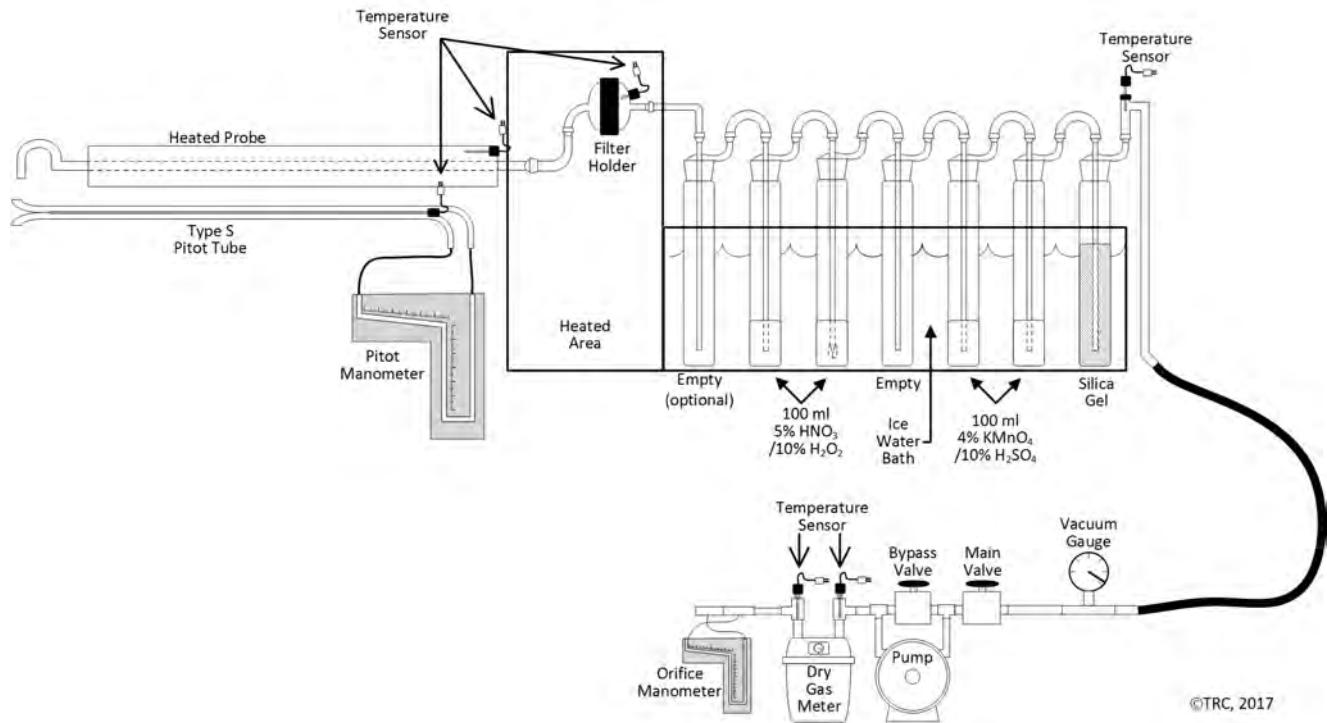
Determination of Particulate Emissions From Stationary Sources

USEPA Promulgated Method 5



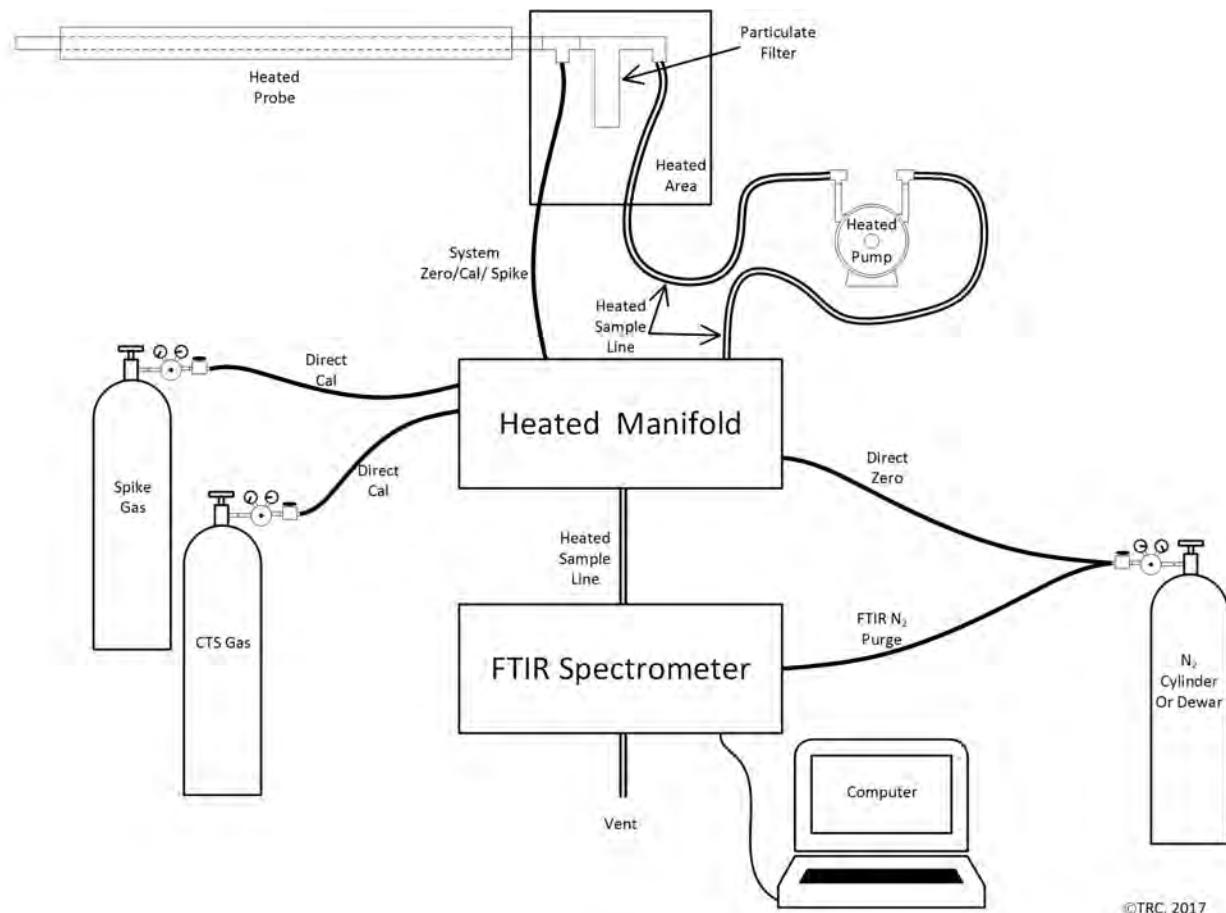
Determination of Metals Emissions From Stationary Sources

USEPA Promulgated Method 29



Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive FTIR

USEPA Promulgated Method 320



©TRC, 2017

Quality Assurance Data

Sampling Equipment Calibration Data

Dry Gas Meter 5-Point Full Test

Meter Box ID
E13
Gas Meter Number
8219522
Calibrated By
P. Daley

8/2/2022
29.7
4/18/2022

Orifice ID	Run #1	Run #2	Run #1	Run #2								
Orifice Coefficient K'	0.2395	0.3447	0.4562	0.5928	0.8143	0.8143						
Ambient Temperature	73	73	73	73	73	73	73	73	73	73	73	73
Meter Readings												
Vacuum ($\geq 15.1"$ Hg)	25	25	24	24	22	22	20	20	16	16		
Delta H	0.28	0.28	0.59	0.59	1.10	1.10	1.90	1.90	3.60	3.60		
Initial Volume Ft^3	949.700	954.800	960.000	965.100	970.700	976.300	981.600	987.000	936.000	941.300		
Final Volume Ft^3	954.700	959.900	965.000	970.100	976.100	981.300	986.800	992.100	941.000	949.100		
Total ($\geq 5 \text{ Ft}^3$)	5	5.1	5	5	5.4	5	5.2	5.1	5	5		
Initial DGM Temperature $^{\circ}\text{F}$	74	75	76	77	77	77	77	77	73	74		
Final DGM Temperature $^{\circ}\text{F}$	75	76	76	77	77	77	77	77	74	74		
Average Temperature $^{\circ}\text{F}$	74.5	75.5	76.0	77.0	77.0	77.0	77.0	77.0	73.5	74.0		
Time Minutes	15	16	10	10	8	8	6	6	4	7		
Time Seconds	49.87	8.53	59.78	54.62	56.81	17.13	38.57	32.22	41.29	19.41		
Delta H@	1.628	1.625	1.654	1.651	1.762	1.762	1.810	1.810	1.844	1.843		
Gamma (Y)	0.9945	0.9960	0.9962	0.9903	0.9939	0.9940	0.9938	0.9971	0.9913	0.9936		
Average Gamma (Y)	Pass	0.9952	Pass	0.9932	Pass	0.9939	Pass	0.9955	Pass	0.9924		
Delta H@ tolerance	Pass											
Gamma (Y)												
Delta H@												

0.9941
1.739

QA / QC Check: Sign and Date
Dale J. Dale



QA / QC Check: Sign and Date
08-03-22

Dry Gas Meter Temperature Display Calibration

Meter Box ID	E13
Date	8/2/2022
Calibrated By	P. Daley

Reference Calibrator	Omega-CL23A
Serial Number	T-235647
Reference Calibration Date	12/3/2021

Input Temperature	Temperature Reading from Individual Thermocouple Input ¹					Channel Number
	Deg. F	Deg. R	1	% Diff	2	
0	460	1	-0.2%	0	0.0%	1
50	510	50	0.0%	50	0.0%	50
100	560	100	0.0%	100	0.0%	100
500	960	499	0.1%	500	0.0%	499
900	1360	899	0.1%	899	0.1%	899
1900	2360	1899	0.0%	1899	0.0%	1899
		Pass	Pass	Pass	Pass	Pass

1 - Channel temperatures must agree with +/- 5 °F or 3 °C

2 - Acceptable temperature difference is less than 1.5 %

Dry Gas Meter Thermocouple Calibration ³		
Readout Display Temperature of F	Reference Thermometer °F	Percent Difference
73	73	0.0%

3 - Dry gas meter thermocouple is compared to an ASTM type mercury in glass reference thermometer

Paul J. Daley

08-03-22



POST-TEST DRY GAS METER CALIBRATION
Calibrated Orifice Procedure

Project ID
Meter Box ID
Date
Calibrated By

491281
E13
11/10/2022
PFD

Barometric Pressure
Full Test Date
Gamma (Y)
Delta H@

30.1
8/2/2022
0.99414
1.739

Orifice ID
Orifice Coefficient K'
Ambient Temperature
Vacuum (≥ 15.1 " Hg)
Delta H
Initial Volume Ft^3
Final Volume Ft^3
Total ($\geq 5 \text{ Ft}^3$)
Initial DGM Temperature $^{\circ}\text{F}$
Final DGM Temperature $^{\circ}\text{F}$
Average Temperature $^{\circ}\text{F}$
Time Minutes
Time Seconds
Delta H@
Gamma (Y)

	Run #1	Run #2	Run #3
Orifice ID		BU-63	
Orifice Coefficient K'		0.5926	
Ambient Temperature	72	72	72
Meter Readings			
Vacuum (≥ 15.1 " Hg)	20	20	20
Delta H	1.93	1.93	1.93
Initial Volume Ft^3	874.000	880.600	886.400
Final Volume Ft^3	880.400	886.100	891.400
Total ($\geq 5 \text{ Ft}^3$)	6.400	5.500	5.000
Initial DGM Temperature $^{\circ}\text{F}$	71	71	71
Final DGM Temperature $^{\circ}\text{F}$	71	71	71
Average Temperature $^{\circ}\text{F}$	71.0	71.0	71.0
Time Minutes	8	7	6
Time Seconds	13.29	6.35	25.90
Delta H@	1.832	1.832	1.832
Gamma (Y)	0.9888	0.9944	0.9901

Average Post-Test Gamma (Y)
Full Calibration Gamma (Y)

0.9911
0.9941

Percent Difference 0.31% Pass

QA / QC Check: Sign and Date

Jon T. Howard 12-28-22

Dry Gas Meter Temperature Display Calibration

Meter Box ID	E13
Date	11/10/2022
Calibrated By	PFD

Reference Calibrator	Omega-CL23A
Serial Number	T-235647
Reference Calibration Date	12/3/2021

Input Temperature	Temperature Reading from Individual Thermocouple Input ¹					Channel Number
	Deg. F	Deg. R	1	% Diff	2	
0	460	1	-0.2%	0	0.0%	0
50	510	51	-0.2%	51	-0.2%	51
100	560	101	-0.2%	101	0.0%	100
500	960	499	0.1%	499	0.1%	499
900	1360	900	0.0%	900	0.0%	900
1900	2360	1899	0.0%	1899	0.0%	1900
		Pass	Pass	Pass	Pass	Pass

1 - Channel temperatures must agree with +/- 5 °F or 3 °C

2 - Acceptable temperature difference is less than 1.5 %

Dry Gas Meter Thermocouple Calibration³

Readout Display Temperature of F	Reference Thermometer °F	Percent Difference
71	72	-0.2%

3 - Dry gas meter thermocouple is compared to an ASTM type mercury in glass reference thermometer

Meterbox Calibration

Box ID: E13
Date: 11/10/2022
Cal By: PFD
dH[®]:

T C Readout Cal

Date: 11/10/2022
Cal By: PFD
Y:

Dry Gas Meter 5-Point Full Test

Meter Box ID
18654645
Gas Meter Number
P. Daley
Calibrated By

MS-40	Run #1	Run #2																					
0.2395			0.3447		BU-48		BU-55		BU-63		BU-5928		BU-73		0.8143								
73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	

M16	Calibration Date	8/2/2022
18654645	Barometric Pressure	29.8
P. Daley	Orifice Set Calibration Date	4/18/2022

	Run #1	Run #2																						
Orifice ID	MS-40		MS-40		BU-48		BU-55		BU-63		BU-5928		BU-73		0.4562		0.5928		0.8143		0.10132		0.10070	
Orifice Coefficient K'	0.31	0.31	0.65	0.65	1.20	1.20	2.05	2.05	3.90	3.90	369.600	369.600	375.900	375.900	396.900	396.900	412.600	412.600	417.900	417.900	422.900	422.900	375.500	375.500
Ambient Temperature	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	
Vacuum ($\geq 15.1"$ Hg)	25	25	23	23	22	22	20	20	18	18														
Delta H	0.31	0.31	0.65	0.65	1.20	1.20	2.05	2.05	3.90	3.90														
Initial Volume Ft^3	381.400	386.500	402.200	407.300	391.800	396.900	412.600	417.900	369.600	369.600														
Final Volume Ft^3	386.400	391.500	407.200	412.300	396.800	401.900	417.650	422.900	375.500	375.500														
Total ($\geq 5 \text{ Ft}^3$)	5	5	5	5	5	5	5	5	5	5														
Initial DGM Temperature $^{\circ}\text{F}$	72	73	75	75	74	75	76	76	76	76														
Final DGM Temperature $^{\circ}\text{F}$	73	74	75	76	75	75	76	76	76	76														
Average Temperature $^{\circ}\text{F}$	72.5	73.5	75.0	75.5	74.5	75.0	75.0	76.0	76.0	76.0														
Time Minutes	16	16	11	11	8	8	6	6	5	5														
Time Seconds	10.37	9.40	10.69	10.25	27.29	26.68	35.56	31.53	38.47	46.66														
Delta H@	1.804	1.800	1.820	1.819	1.926	1.924	1.951	1.951	2.000	2.000														
Gamma (Y)	1.0121	1.0130	1.0107	1.0109	1.0094	1.0091	1.0133	1.0130	1.0073	1.0067														
Average Gamma (Y)	Pass	1.0125	Pass	1.0108	Pass	1.0092	Pass	1.0132	Pass	1.0070														
Delta H@ tolerance	Pass																							

Gamma (Y)	1.0105
Delta H@	1.899

QA / QC Check: Sign and Date



Dale J. Daley 08-03-22

Dry Gas Meter Temperature Display Calibration

Meter Box ID	M16
Date	8/2/2022
Calibrated By	P. Daley

Reference Calibrator	Omega-CL23A
Serial Number	T-235647
Reference Calibration Date	12/3/2021

Input Temperature	Temperature Reading from Individual Thermocouple Input ¹					Channel Number
	Deg. F	Deg. R	1	% Diff	2	
0	460	2	-0.4%	2	-0.4%	1
50	510	50	0.0%	50	0.0%	49
100	560	99	0.2%	99	0.2%	99
500	960	499	0.1%	499	0.1%	499
900	1360	901	-0.1%	902	-0.1%	901
1900	2360	1902	-0.1%	1901	0.0%	1901
		Pass	Pass	Pass	Pass	Pass

1 - Channel temperatures must agree with +/- 5 °F or 3 °C

2 - Acceptable temperature difference is less than 1.5 %

Dry Gas Meter Thermocouple Calibration ³		
Readout Display Temperature of F	Reference Thermometer °F	Percent Difference
72	73	-0.2%
	Pass	Pass

3 - Dry gas meter thermocouple is compared to an ASTM type mercury in glass reference thermometer

POST-TEST DRY GAS METER CALIBRATION
Calibrated Orifice Procedure



Project ID 491281
Meter Box ID M16
Date 11/10/2022
Calibrated By PFD

Barometric Pressure	30.1
Full Test Date	8/2/2022
Gamma (Y)	1.0105
Delta H@	1.899

	Run #1	Run #2	Run #3
Orifice ID		BU-63	
Orifice Coefficient K'		0.5926	
Ambient Temperature	72	72	72
Meter Readings			
Vacuum (≥ 15.1 " Hg)	20	20	20
Delta H	2.10	2.10	2.10
Initial Volume Ft ³	357.400	362.900	368.100
Final Volume Ft ³	362.600	367.900	373.100
Total (≥ 5 Ft ³)	5.200	5.000	5.000
Initial DGM Temperature °F	71	71	71
Final DGM Temperature °F	71	71	71
Average Temperature °F	71.0	71.0	71.0
Time Minutes	6	6	6
Time Seconds	46.69	31.28	31.78
Delta H@	1.995	1.995	1.995
Gamma (Y)	1.0029	1.0035	1.0048

Average Post-Test Gamma (Y)	1.0037
Full Calibration Gamma (Y)	1.0105

Percent Difference	0.67%	Pass
---------------------------	-------	------

QA / QC Check: Sign and Date

Jon T. Howard 12-28-22

Dry Gas Meter Temperature Display Calibration

Meter Box ID	M16
Date	11/10/2022
Calibrated By	PFD

Reference Calibrator	Omega-CL23A
Serial Number	T-235647
Reference Calibration Date	12/3/2021

Input Temperature	Temperature Reading from Individual Thermocouple Input ¹					Channel Number
	Deg. F	Deg. R	1	% Diff	2	
0	460	1	-0.2%	0	0.0%	0
50	510	51	-0.2%	51	-0.2%	51
100	560	100	0.0%	100	0.0%	100
500	960	500	0.0%	500	0.0%	500
900	1360	900	0.0%	900	0.0%	900
1900	2360	1900	0.0%	1900	0.0%	1900
		Pass	Pass	Pass	Pass	Pass

1 - Channel temperatures must agree with +/- 5 °F or 3 °C

2 - Acceptable temperature difference is less than 1.5 %

Dry Gas Meter Thermocouple Calibration³

Readout Display Temperature of F	Reference Thermometer °F	Percent Difference
71	72	-0.2%

3 - Dry gas meter thermocouple is compared to an ASTM type mercury in glass reference thermometer



Meterbox Calibration

Box ID: M16
Date: 11/10/2022
Cal By: PFD
 dH° :

Y:

T C Readout Cal

Date: 11/10/2022
Cal By: PFD

Field Barometer Working Standard Accuracy Verification Check

Procedure 2: Calibration with National Weather Service Barometer at Nearby Station or Local Airport

Instrument Identification: Manufacturer: Sunnto
 Model: Observer Serial Number: 14900524 ID Number: 0 Owner: J. Grizzle

Reference Standard:

Location of NWS Station or Airport Barometer: Savannah-Hilton Head International Airport (KSAV)

Certificate Information:

Analyst Full Name: <u>J. Grizzle</u>	Procedure: <u>SOP AM-CAL-008</u>	Accuracy Verification Date: <u>9/14/2022</u>	Accuracy Verification Due Date: <u>3/15/2023</u>
Test Conditions: Temp °C <u>29</u>	RH% <u>35</u>		

National Weather Service (NWS) Barometer

Corrected NWS Barometric Pressure	<u>29.98</u>	in. Hg (Pbr)
Elevation of NWS Barometer (above Sea Level)	<u>23</u>	feet (A)
Absolute NWS Barometric Pressure	<u>29.96</u>	in. Hg (Pbr)
(Station or Absolute Pbr is actual barometer reading at barometer elevation, uncorrected to sea level)		

Location of Field Barometer

Elevation at Location (above Sea Level)	<u>52</u>	feet (B)
---	-----------	----------

Altitude Correction:

Elevation of NWS Reference Barometer: (A)	<u>23</u>	feet
Elevation of Field Barometer: (B)	<u>52</u>	feet
Difference (A-B)	<u>-29</u>	feet

Correction of Reference Barometric Pressure (Pbr) to Location and Altitude of Field Barometer

$$\begin{aligned} \text{Pbr calc} &= \text{Pbr} + [0.001 \times (A-B)] \\ \text{Pbr calc} &= 29.96 + (0.001 * -29) \\ \text{Pbr calc} &= 29.93 \end{aligned}$$

Pbr Calculated (from above):

Pb Field Barometer Reading:	<u>29.90</u>	in. Hg
-----------------------------	--------------	--------

Is Field Barometer within 0.1 in. Hg of Pbr Calculated? Yes

If no, adjust Field Barometer to Pbr Calculated.

QA/QC By:



Date: 9/14/22

Maintaining Accuracy:

The accuracy of this instrument has been checked and found to be in tolerance unless otherwise noted. The instrument should provide accurate readings until the next accuracy verification due date. If this instrument is damaged or abused in any way, it should not be used for making measurements until its accuracy is checked and verified to be in tolerance.

Field Barometer Working Standard Accuracy Verification Check

Procedure 2: Calibration with National Weather Service Barometer at Nearby Station or Local Airport

Instrument Identification: Manufacturer: Sunnto
 Model: Observer Serial Number: 14900524 ID Number: 0 Owner: J. Grizzle

Reference Standard:

Location of NWS Station or Airport Barometer: Denver International Airport

Certificate Information:

Analyst Full Name: <u>J. Grizzle</u>	Procedure: <u>SOP AM-CAL-008</u>	Accuracy Verification Date: <u>11/14/2022</u>	Accuracy Verification Due Date: <u>5/15/2023</u>
Test Conditions: Temp °C <u>2</u>	RH% <u>34</u>		

National Weather Service (NWS) Barometer
 Corrected NWS Barometric Pressure 30.06 in. Hg (Pbr)
 Elevation of NWS Barometer (above Sea Level) 5404 feet (A)
 Absolute NWS Barometric Pressure 24.66 in. Hg (Pbr)
 (Station or Absolute Pbr is actual barometer reading at barometer elevation, uncorrected to sea level)

Location of Field Barometer
 Elevation at Location (above Sea Level) 5915 feet (B)

Altitude Correction:
 Elevation of NWS Reference Barometer: (A) 5404 feet
 Elevation of Field Barometer: (B) 5915 feet
 Difference (A-B) -511 feet

Correction of Reference Barometric Pressure (Pbr) to Location and Altitude of Field Barometer

$$\text{Pbr calc} = \text{Pbr} + [0.001 \times (\text{A}-\text{B})]$$

$$\text{Pbr calc} = 24.66 + (0.001 * -511) = 24.15$$

Pbr Calculated (from above): 24.15 in. Hg
 Pb Field Barometer Reading: 24.15 in. Hg

Is Field Barometer within 0.1 in. Hg of Pbr Calculated? Yes

If no, adjust Field Barometer to Pbr Calculated.

QA/QC By: [Signature]

Date: 11/14/22

Maintaining Accuracy:

The accuracy of this instrument has been checked and found to be in tolerance unless otherwise noted. The instrument should provide accurate readings until the next accuracy verification due date. If this instrument is damaged or abused in any way, it should not be used for making measurements until its accuracy is checked and verified to be in tolerance.

Top Loading Field Balance Check

Analyst:	W. MCKIBBEN
Project Number:	491281.0000.0000
Client:	Georgia Power - McIntosh Plant
Test Location:	Rincon, GA

(See SOP AM-CAL-009 for instructions)

Type of Scale	OHAUS SCOUT Pro
Scale ID#	M4-20

Tolerance (g) = +/- 0.5

Date	Reference Weight Serial Number	Nominal Weight Value* (g)	Weight Found (g)	Difference	Pass
9/12/22	FW500-1	500.0	499.7	0.3	Y
9/13/22			499.7	0.3	Y
9/14/22			499.7	0.3	Y
9/15/22			499.8	0.2	Y
9/16/22			499.6	0.4	Y
9/17/22			499.7	0.3	Y
9/19/22	↓	↓	499.6	0.4	Y

*Weight (ASTM Class 6 or better) must be at least 500 g or within 50 g of loaded impinger.



Revised: 20220719

Certificate of Calibration

S-Type Pilot Tube Calibration

See the Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 2, item 4

Pilot Information	
Pilot Type:	S
Pilot Serial #:	A10808
Jig ID:	APEX-WT-CAL
Blockage %:	<2
Correction Factor:	1.00

Calibration Conditions		
Bar. Pressure (in Hg):	30.08	
Elevation (ft):	407	
Adj. Bar. Pressure (in Hg):	29.67	
Static Pressure (in H2O):	-0.6	
Tunnel Velocity (ft/s):	50	
Tunnel Temperature (°F):	74	
Humidity (%):	56	

Side "A" Calibration		
Run No.	ΔP_{std} in H2O	Deviation Cp(s) - avg. Cp(s)
1	0.560	-0.003
2	0.562	0.001
3	0.562	0.002
"A" Average	0.565	0.003

(must be ≤ 0.01)

TRC Pilot ID# RPTI-8A

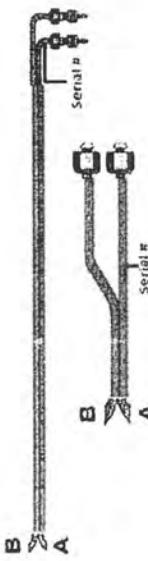
Average	Acceptance Criteria	Overall Avg
* Use A or B avg	Cp(s) - avg. Cp(s)	0.827
AVG. Cp(A) - AVG. Cp(B) must be ≤ 0.01		
If the Average and both Deviation Averages "A" & "B" are ≤ 0.01 , then the OVERALL AVERAGE above may be used		
* IF NOT, use the "A" Average OR "B" Average.		

Reference Pitot Information	
Std. Pitot Type:	Ellipsoidal
Cp(std):	0.990

Serial #: APEX-RP1

Reference Pitot Information	
Std. Pitot Type:	Ellipsoidal
Cp(std):	0.990

Serial #: APEX-RP1



$$\begin{aligned} C_{avg} &= C_{p(A)} + \frac{\sum C_{p(i)}}{N} \\ \text{Deviation} &= C_{p(A)} - C_{p(B)} \\ \Delta_{avg} [C_p] &= \sigma [C_p] = \sqrt{\frac{\sum [C_{p(i)} - C_{avg}]^2}{N}} \end{aligned}$$

Technician: Tracy Wilson

Signature:

Date: 9/1/2022

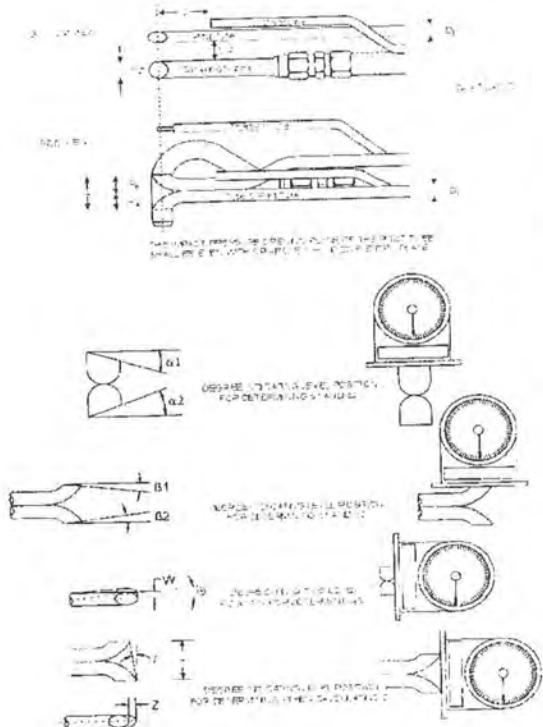
I certify that the above pilot tube was tested in accordance with the US EPA Method 2 standards

Revised: 2020/09/16

Certificate of Calibration

S-Type Geometric Pitot Tube Calibration

See the Code of Federal Regulations, Title 40, Part 60, Appendix A,
Method 2, Item 4



PITOT TUBE/PROBE # **A10808**

Parameter	Value	Allowable Range	Check
Assembly Level?	y	Yes, Y	PASS
Ports Damaged?	n	No, N	PASS
α ₁	0	-10° < α ₁ < +10°	PASS
α ₂	0	-10° < α ₂ < +10°	PASS
β ₁	0	-5° < β ₁ < +5°	PASS
β ₂	1	-5° < β ₂ < +5°	PASS
γ	0	N/A	-
ε	0	N/A	-
D _t	0.375	.188" to .375"	PASS
A	0.857	2.1D _t ≤ A ≤ 3D _t	PASS
A/2D _t	1.143	1.05 ≤ P _A /D _t ≤ 1.5	PASS
Z = A tan γ	0.000	Z ≤ .125"	PASS
W = A tan θ	0.000	W ≤ .031"	PASS

Certified by: KP
Technician

Karl Perkins

8/31/2022

Calibration Date

I certify that pitot tube/probe number A10808 meets or exceeds all specifications, criteria and/or applicable design features and is hereby assigned a pitot tube certification factor of 0.84. See 40 CFR Pt. 60, App. A, EPA Method 2.

The factory, geometric calibration performed by Apex Instruments is valid until initial field use by the end user; this is under the assumption that the pitot tube is in the same physical condition as it was when calibrated. The end user may use the purchase date (or placed into service date) as a way to track initial and ensuing annual calibrations. A geometric calibration should be performed following each subsequent field use.

Purchase Date

Apex Instruments - Address: 204 Technology Park Ln., Fuquay-Varina, NC 27526 USA | Tel: (919) 557-7300 Web: www.apexinst.com

POST-TEST TYPE S PITOT TUBE INSPECTION

(See SOP AM-CAL-006 for Instructions)

Pitot Tube No.: RPTI- 8A

Date: 10/31/2022

Analyst: DMW

Project Number: _____

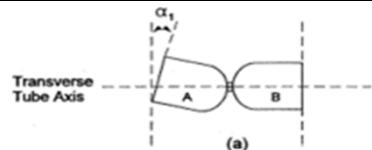
Client: _____

Test Location: _____

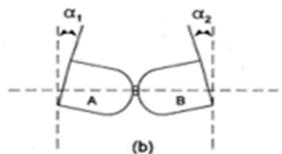
Type S Pitot tube face openings meet alignment specifications illustrated in Figures 2-2 and 2-3 of Method 2?

yes no

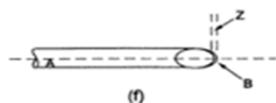
Comments: RPTI- 8A/ RPI 8A/ RTC 8A



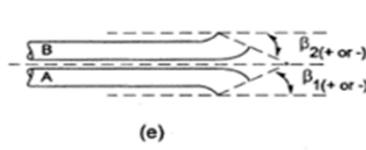
Limit:
 $\alpha_1 < 10^\circ$



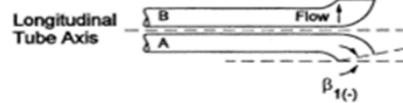
Limit:
 $\alpha_2 < 10^\circ$



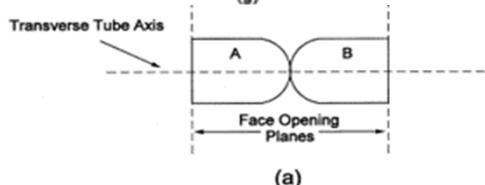
Limit:
 $Z \leq 1/8$ (0.125) inch



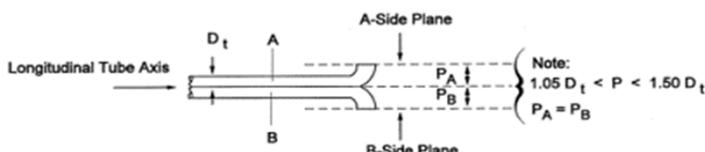
Limit:
 $\beta_1 < 5^\circ$
 $\beta_2 < 5^\circ$



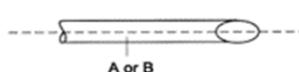
Limit:
 $W \leq 1/32$ (0.0132) inch



Requirement:
Face opening planes
perpendicular to transverse axis



Requirement:
Face opening planes parallel
to longitudinal axis



Requirement:
Both legs of equal length and
centerlines coincident when viewed
from both sides.



Revised: 2022/07/29

Certificate of Calibration

S-Type Pitot Tube Calibration

See the Code of Federal Regulations, Title 40, Part 50, Appendix A, Method 42, Item 4

Pitot Information	
Pitot Type:	S
Pitot Serial #:	A10810
Jig ID:	APEX-WT-CAL
Blockage %:	< 2
Correction Factor:	1.00

Calibration Conditions			
Ba. Pressure (in Hg)	30.08	Elevation (ft)	407
Adj. Ba. Pressure (in Hg)	29.67	Static Pressure (in H2O)	-0.6
Tunnel Velocity (ft/s)	50	Tunnel Temperature (°F)	74
Humidity (%)	56		

Side "A" Calibration			
Run No.	ΔP_{std} in H2O	ΔP_s in H2O	$C_p(s)$
1	0.567	0.796	0.836
2	0.565	0.793	0.836
3	0.563	0.797	0.832
"A" Average		0.834	0.002

(must be ≤ 0.01)

TRC Pilot ID# RPTI-8B

Average	Acceptance Criteria	Overall Avg
* Use A or B avg		0.825
AVG. $C_p(A) - AVG. C_p(B)$ must be ≤ 0.01		
If the Average and both Deviation Averages "A" & "B" are ≤ 0.01 , then the OVERALL AVERAGE above may be used		
* IF NOT, use the "A" Average OR "B" Average.		

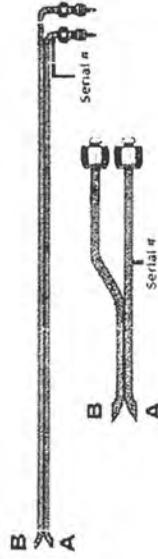
(must be ≤ 0.01)

Reference Pitot Information	
Std. Pitot Type:	Ellipsoidal
Coef(s):	0.990

Serial #: APEX-RP;

Side "B" Calibration			
Run No.	ΔP_{std} in H2O	ΔP_s in H2O	$C_p(s)$
1	0.566	0.535	0.815
2	0.567	0.836	0.615
3	0.567	0.833	0.817
"B" Average		0.816	0.001

(must be ≤ 0.01)



$$\text{Deviation } \frac{\sum_i C_p(s_i) - C_p(s_{avg})}{\sum_i C_p(s_i)}$$

$$\text{Avg Dev } \sigma(s) = \sqrt{\frac{\sum_i (C_p(s_i) - C_p(s_{avg}))^2}{3}}$$

Technician: Tracy Wilson

Signature:

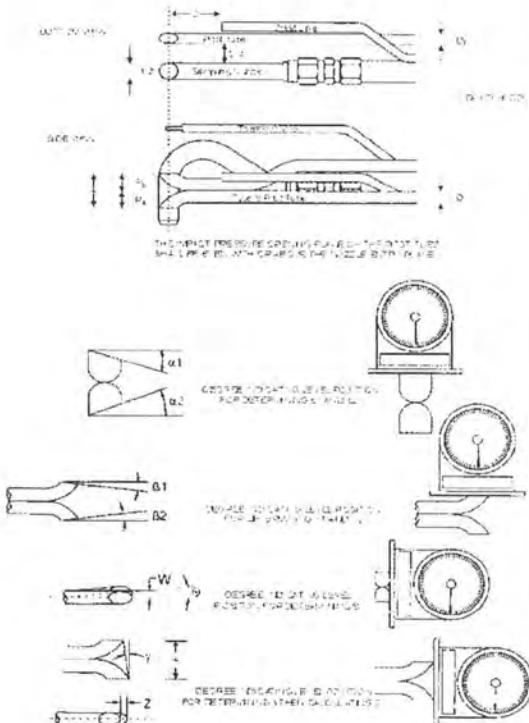
Date: 9/1/2022

I certify that the above pitot tube was tested in accordance with the U.S. EPA Method 2 standards.

Certificate of Calibration

S-Type Geometric Pitot Tube Calibration

See the Code of Federal Regulations, Title 40, Part 60, Appendix A,
Method 2 Item 4



PITOT TUBE/PROBE

A10810

Parameter	Value	Allowable Range	Check
Assembly Level?	y	Yes, Y	PASS
Ports Damaged?	n	No, N	PASS
α_1	0	$-10^\circ < \alpha_1 < +10^\circ$	PASS
α_2	1	$-10^\circ < \alpha_2 < +10^\circ$	PASS
β_1	1	$-5^\circ < \beta_1 < +5^\circ$	PASS
β_2	0	$-5^\circ < \beta_2 < +5^\circ$	PASS
γ	1	N/A	-
θ	0	N/A	-
D_t	0.375	.188" to .375"	PASS
A	0.860	$2.1D_t \leq A \leq 3D_t$	PASS
$A/2D_t$	1.147	$1.05 \leq P_A/D_t \leq 1.5$	PASS
$Z = A \tan \gamma$	0.015	$Z \leq .125"$	PASS
$W = A \tan \theta$	0.000	$W \leq .031"$	PASS

Certified by: KP
Technician

Karl Perkins

8/31/2022

Signature

Calibration Date

I certify that pitot tube/probe number A10810 meets or exceeds all specifications, criteria and/or applicable design features and is hereby assigned a pitot tube certification factor of 0.84. See 40 CFR Pt. 60, App. A, EPA Method 2.

The factory, geometric calibration performed by Apex Instruments is valid until initial field use by the end user; this is under the assumption that the pitot tube is in the same physical condition as it was when calibrated. The end user may use the purchase date (or placed into service date) as a way to track initial and ensuing annual calibrations. A geometric calibration should be performed following each subsequent field use.

Purchase Date

Apex Instruments - Address: 204 Technology Park Ln., Fuquay-Varina, NC 27526 USA | Tel: (919) 557-7300 Web: www.apexinst.com

POST-TEST TYPE S PITOT TUBE INSPECTION

(See SOP AM-CAL-006 for Instructions)

Pitot Tube No.: RPTI- 8B

Date: 10/31/2022

Analyst: DMW

Project Number: _____

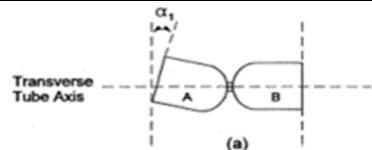
Client: _____

Test Location: _____

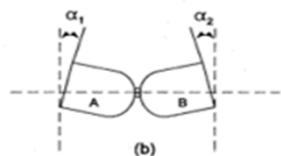
Type S Pitot tube face openings meet alignment specifications illustrated in Figures 2-2 and 2-3 of Method 2?

yes no

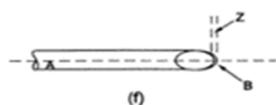
Comments: RPTI- 8B/ RPI 8B/ RTC 8B



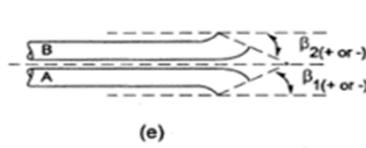
Limit:
 $\alpha_1 < 10^\circ$



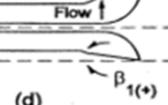
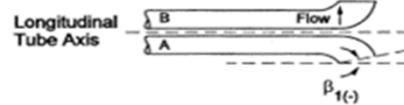
Limit:
 $\alpha_2 < 10^\circ$



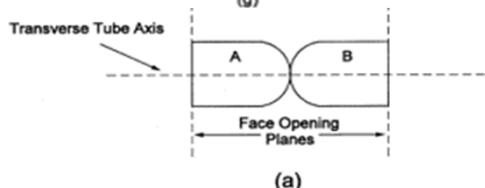
Limit:
 $Z \leq 1/8$ (0.125) inch



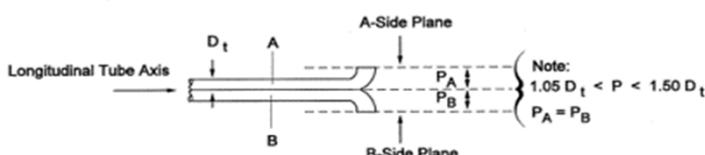
Limit:
 $\beta_1 < 5^\circ$
 $\beta_2 < 5^\circ$



Limit:
 $W \leq 1/32$ (0.0132) inch



Requirement:
Face opening planes
perpendicular to transverse axis



Requirement:
Face opening planes parallel
to longitudinal axis



Requirement:
Both legs of equal length and
centerlines coincident when viewed
from both sides.

Analyzer Interference Test Data

Analyzer Interference and Manufacturer Stability Tests

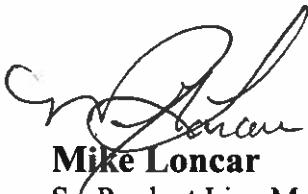
In an effort to assist our customers with meeting the requirements of the Instrumental Methods for testing 3A, 6C, 7E, 10, and 20, we are providing a summary of interferences for certain Thermo Fisher Scientific analyzers.

The requirement for conducting analyzer interference checks for potential interfering gases is the responsibility of the testing organizations. The Methods do, however, allow for the manufacturer of instruments to provide this data. Tests are required to be conducted on the same “make and model” as those being used for method testing.

The information contained in the accompanying tables pertains to the “make” of analyzers under the name of: Thermo Electron Corporation, Thermo Environmental Instruments, and Thermo Scientific. The “model” of analyzers are: Model 42 for NO, NO₂, NO_x, Model 43 for SO₂, Model 48 for CO, and Model 410 for CO₂. The specific pollutant detection and analytical technology for each of the above listed specific models have remained the same for various series of analyzers manufactured over the past years. Therefore the interference test results shown for the iQ series analyzers in this document would produce essentially the same results for iSeries and earlier series of these models.

The potential interference gas test results shown in the following tables indicate that none of the Thermo Scientific analyzers tested have a collective analytical detection interference that would sum more than 0.5% of the analyzer span value. The acceptance criterion based on Section 13.4 of Method 7E, states that the sum of the responses must not be greater than 2.5% of the analyzer calibration value.

If you have any questions regarding the information contained herein, please do not hesitate to contact us.



Mike Loncar

Sr. Product Line Manager, Environmental Analyzers
Environmental & Process Monitoring

Thermo Fisher Scientific
27 Forge Parkway | Franklin, MA 02038
Phone +1 (508) 553-1651 | Mobile +1 (508) 641-4629
michael.loncar@thermofisher.com | www.thermofisher.com

Manufacturer's Stability Test

Thermo Fisher Scientific certifies that the 42iQ Series of analyzers and the 48iQ analyzer have been tested in accordance with the USEPA procedures outlined in 40 CFR Part 52.23, as well as Methods 7E and 10, and have the results shown below:

Test Description	Acceptance Criteria	Results: 42iQ Family	Results: 48iQ
Thermal Stability	Drift \leq 3% of Range @ 80% of Range	Drift $<$ 2% of Range @ 80% of Range between 0 and 40 C	Drift $<$ 2% of Range @ 80% of Range between 5 and 45 C
Fault Conditions	Alarm if conditions result in performance outside of compliance	Visible and electronic alarms are a standard feature	
Insensitivity to Supply Voltage Variations	$\pm 10\%$ variation from nominal voltage produces drift \leq 2% of span @ 80% of Range	< 1% deviation from span for voltage change from 90 VAC to 130 VAC	
Analyzer Calibration Error	(Response-Span Value) \leq 2% of Span Value for high, medium and low calibration gas	< 2% of Calibration Span	

Thermo Scientific Model 42iQLS/HL NO-NO₂-NO_x Analyzer
Potential Interferent Gas Responses

Potential Interferent		Model 42iQLS		
Test Gas	Concentration	As ppm NO	As ppm NO ₂	As ppm NO _x
CO ₂	5%	-0.01	-0.01	-0.02
CO ₂	15%	-0.02	-0.01	-0.03
H ₂ O	3%	-0.04	0.02	-0.02
N ₂ O	47 ppm	0.03	-0.01	0.02
CO	50 ppm	0.03	0.00	0.03
SO ₂	27 ppm	0.00	-0.01	-0.01
CH ₄	50 ppm	0.01	0.01	0.00
HCl	20 ppm	0.02	0.00	0.02
NH ₃	9 ppm	0.00	0.00	-0.01
Sum of Responses		0.17	0.07	0.16
Span Value		160	128	160
% of Calibration Span		0.11%	0.06%	0.10%
Potential Interferent		Model 42iQHL		
Test Gas	Concentration	As ppm NO	As ppm NO ₂	As ppm NO _x
CO ₂	5%	0.00	0.00	0.00
CO ₂	15%	0.00	0.00	0.00
H ₂ O	3%	0.03	-0.01	0.01
N ₂ O	47 ppm	0.03	0.00	0.03
CO	50 ppm	0.00	0.02	0.02
SO ₂	27 ppm	0.00	0.00	0.00
CH ₄	50 ppm	0.00	0.00	0.00
HCl	20 ppm	-0.01	0.09	0.08
NH ₃ ¹	9 ppm	0.01	6.61	6.68
Sum of Responses		0.08	0.12	0.15
Span Value		160	128	160
% of Calibration Span		0.05%	0.09%	0.09%

Note: Acceptance criterion based on Section 13.4 of Method 7E, states that the sum of the responses must not be greater than 2.5% of the analyzer calibration value.

Thermo Fisher
SCIENTIFIC

¹NH₃ interferent results shown for the Model 42iQHL was not used in the calculation of the interferent response check because it is a known interferent with an approximate 1 ppm to 1 ppm positive bias in analyzers using stainless steel NO₂ to NO converters. Thermo Scientific recommends that NO_x analyzers with stainless steel NO₂ to NO converters must use a NH₃ scrubber when testing sources with potential NH₃ in the flue gas.

Thermo Scientific Model 43iQHL SO₂ Analyzer
Potential Interferent Gas Responses

Potential Interferent		Model 43iQHL
Test Gas	Concentration	As ppm SO ₂
CO ₂	5%	0.0
CO ₂	15%	0.1
H ₂ O	3%	0.0
NO	10 ppm	0.2
NO ₂	38 ppm	0.0
N ₂ O	47 ppm	0.1
CO	50 ppm	0.1
SO ₂	100 ppm	100.0
CH ₄	50 ppm	0.0
HCl	160 ppm	0.0
NH ₃	9 ppm	0.0
Sum of Responses		0.450
Span Value		100
% of Calibration Span		0.45%

Note: Acceptance criterion based on Section 13.4 of Method 7E, states that the sum of the responses must not be greater than 2.5% of the analyzer calibration value.

Thermo Scientific Model 48iQ CO Analyzer
Potential Interferent Gas Responses

Potential Interferent		Model 48iQ
Test Gas	Concentration	As ppm CO
CO ₂	5%	-0.2
CO ₂	15%	-0.5
H ₂ O	3%	0.2
NO	10 ppm	0.1
NO ₂	38 ppm	-0.1
N ₂ O	10 ppm	-0.1
CO	507 ppm	508.0
SO ₂	27 ppm	-0.1
CH ₄	50 ppm	-0.1
HCl	160 ppm	0.0
NH ₃	9 ppm	-0.1
Sum of Responses		1.6
Span Value		507
% of Calibration Span		0.32%

Note: Acceptance criterion based on Section 13.4 of Method 7E, states that the sum of the responses must not be greater than 2.5% of the analyzer calibration value.

Thermo Scientific Model 410iQHL CO₂ Analyzer
Potential Interferent Gas Responses

Potential Interferent		Model 410iQ
Test Gas	Concentration	As % CO ₂
CO ₂	5%	4.8
CO ₂	15%	15.0
H ₂ O	3%	0.0
NO	10 ppm	0.0
NO ₂	38 ppm	0.0
N ₂ O	10 ppm	0.0
CO	507 ppm	0.0
SO ₂	27 ppm	0.0
CH ₄	50 ppm	0.0
HCl	160 ppm	0.0
NH ₃	9 ppm	0.0
Sum of Responses		0.02
Span Value		15
% of Calibration Span		0.12%

Note: Acceptance criterion based on Section 13.4 of Method 7E, states that the sum of the responses must not be greater than 2.5% of the analyzer calibration value.

USA

27 Forge Parkway
Franklin, MA 02038
Ph: (508) 520-0430
Toll Free: (866) 282-0430
orders.aqi@thermofisher.com

Find out more at thermofisher.com

© 2018 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

ANALYZER INTERFERENCE RESPONSE TEST

USEPA Reference Method: 3A Analyzer Type: O₂

Analyzer Manufacturer: Servomex Model Number: 1440

Analyzer Span: 0-25%

Test Performed by: D. Grabowski Date: 1/23/1998

Interference Gas	Interference Gas Concentration	Affect of Interference Gas on Analyzer	
		Analyzer Response, ppm	Percent of Span
NO _x	498.0 ppm	0.02	0.08
SO ₂	208.9 ppm	0.02	0.08
CO	450.7 ppm	0.00	0.00
CO ₂	10.06%	0.00	0.00
O ₂	22.5%	--	--
Total Response (sum)		0.04	0.16

Total affect on analyzer reading must be < 2% of analyzer span.

Detailed interference response test data is maintained on file and is available upon request.

ANALYZER INTERFERENCE RESPONSE TEST

USEPA Reference Method: 3A Analyzer Type: CO₂

Analyzer Manufacturer: Servomex Model Number: 1440

Analyzer Span: 0-20%

Test Performed by: D. Grabowski Date: 1/23/1998

Interference Gas	Interference Gas Concentration	Affect of Interference Gas on Analyzer	
		Analyzer Response, ppm	Percent of Span
NO _x	498.0 ppm	-0.02	-0.10
SO ₂	208.9 ppm	-0.02	-0.10
CO	450.7 ppm	-0.02	-0.10
CO ₂	10.06%	--	--
O ₂	22.5%	-0.02	-0.10
Total Response (sum)		-0.08	-0.40

Total affect on analyzer reading must be < 2% of analyzer span.

Detailed interference response test data is maintained on file and is available upon request.

Calibration Gas Certificates

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: ULTRA HIGH PURITY-PURE

Part Number: NI UHP15A Reference Number: 157-402293026-1
Cylinder Analyzed: EB0141785 Cylinder Volume: 142.0 CF
Laboratory: 107 - Grand Prairie - TX Cylinder Pressure: 2000 PSIG
Analysis Date: Nov 23, 2021 Valve Outlet: 580
Lot Number: 157-402293026-1

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
NITROGEN	99.999 %	99.999 %
CO + CO2	1.0 PPM	0.42 PPM
Moisture	1.0 PPM	0.45 PPM
Oxygen	1.0 PPM	0.98 PPM
THC	0.5 PPM	0.09 PPM

Cylinders in Batch:

ALM-050814, CC 706693, CC152897, CC246, CC424585, CC431934, CC452040, CC706644, CC8871, EB0061516, EB0112948,
EB0117418, EB0141785, SG9114667BAL, TW08-538924

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

CERTIFICATE OF ANALYSIS**Grade of Product: EPA PROTOCOL STANDARD**

Customer: TRC CAL GAS
Part Number: E03NI80E15AC2K9
Cylinder Number: ALM038221
Laboratory: 124 - Pasadena (SG06) - TX
PGVP Number: A32021
Gas Code: CO2,O2,BALN

Customer PO Number: po#
Reference Number: 163-402302642-1
Cylinder Volume: 150.9 CF
Cylinder Pressure: 2015 PSIG
Valve Outlet: 590
Certification Date: Dec 14, 2021

Expiration Date: Dec 14, 2029

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted. The results relate only to the items tested. The report shall not be reproduced except in full without approval of the laboratory. Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
CARBON DIOXIDE	10.00 %	10.09 %	G1	+/- 0.8% NIST Traceable	12/14/2021
OXYGEN	10.00 %	10.02 %	G1	+/- 0.7% NIST Traceable	12/14/2021
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	12010106	K005090	17.97 % CARBON DIOXIDE/NITROGEN	+/-0.5%	Jan 11, 2024
NTRM	10010917	K015369	20.89 % OXYGEN/NITROGEN	+/-0.5%	Jun 27, 2022

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
HORIBA VIA 510 CO2 19GYCXEG	NDIR	Dec 03, 2021
O2 SIEMENS OXYMAT 6 DD550	PARAMAGNETIC	Nov 24, 2021

Triad Data Available Upon Request

PERMANENT NOTES: STOCK BY CONCENTRATION



Signature on file

Approved for Release

605 of 628

GPC Plant McDonough ICR Testing
Page 1 of 1

EPA PROTOCOL GAS CERTIFICATE OF ANALYSIS

Cylinder Number:	CC719835
Product ID Number:	123956
Cylinder Pressure:	1900 PSIG
COA #	CC719835.20190912-0
Customer PO. NO.:	
Customer:	

Certification Date:	09/17/2019
Expiration Date:	09/15/2027
MFG Facility:	- Shreveport - LA
Lot Number:	CC719835.20190912
Tracking Number:	098508086
Previous Certification Dates:	

This calibration standard has been certified per the May 2012 EPA Traceability Protocol, Document EPA-600/R-12/531, using procedure G1.

Do Not Use This Cylinder Below 100 psig (0.7 Megapascal).

Certified Concentration(s)

Component	Concentration	Uncertainty	Analytical Principle	Assayed On
Carbon Dioxide	21.7 %	±0.16 %	NDIR	09/17/2019
Oxygen	22.0 %	±0.12 %	MPA	09/16/2019
Nitrogen	Balance			

Analytical Measurement Data Available Online.

Reference Standard(s)

Serial Number	Lot	Expiration	Type	Balance	Component	Concentration	Uncertainty(%)	NIST Reference
EB0069971	EB0069971.20180504	07/21/2026	GMIS	N2	O2	24 %	0.497	071001
EB0097768	EB0097768.20171018	02/06/2026	GMIS	N2	CO2	24.8 %	0.398	C1309410.01

Analytical Instrumentation

Component	Principle	Make	Model	Serial	MPC Date
O2	MPA	Thermo	410i	1162980025	09/06/2019
CO2	NDIR	Thermo	410i	1162980025	08/28/2019

SMART-CERT



This is to certify the gases referenced have been calibrated/tested, and verified to meet the defined specifications. This calibration/test was performed using Gases or Scales that are traceable through National Institute of Standards and Technology (NIST) to the International System of Units (SI). The basis of compliance stated is a comparison of the measurement parameters to the specified or required calibration/testing process. The expanded uncertainties use a coverage factor of k=2 to approximate the 95% confidence level of the measurement, unless otherwise noted. This calibration certificate applies only to the item described and shall not be reproduced other than in full, without written approval from Red Ball Technical Gas Services. If not indicated, the uncertainty of calibrations are available upon request and were taken into account when determining pass or fail.

606 of 628

GPC Plant McDonough JCB Testing
 Assay Laboratory, Red Ball TGS
 Version 02-J, Revised on 2018-09-17



Amisha Jewitt

Analytical Chemist

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E15AC3V6	Reference Number:	122-402434002-1
Cylinder Number:	CC255453	Cylinder Volume:	144.0 CF
Laboratory:	124 - Durham (SAP) - NC	Cylinder Pressure:	2015 PSIG
PGPV Number:	B22022	Valve Outlet:	660
Gas Code:	CO,NO,NOX,BALN	Certification Date:	May 13, 2022

Expiration Date: May 13, 2025

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted.

Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	5.500 PPM	5.468 PPM	G1	+/- 1.0% NIST Traceable	05/06/2022, 05/13/2022
CARBON MONOXIDE	5.500 PPM	5.515 PPM	G1	+/- 1.1% NIST Traceable	05/11/2022
NITRIC OXIDE	5.500 PPM	5.426 PPM	G1	+/- 1.1% NIST Traceable	05/06/2022, 05/13/2022
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	21060423	CC365332	9.942 PPM CARBON MONOXIDE/NITROGEN	+/- 0.8%	Jul 23, 2027
PRM	C1948110.02	APEX1324263 NOx	10.01 PPM NOx/NITROGEN	+/- 0.5%	Dec 23, 2022
NTRM	16010115	ND47909	9.95 PPM NITRIC OXIDE/NITROGEN	+/- 1.0%	Oct 16, 2022
GMIS	16010115	ND47909 NOX	9.95 PPM NOx/NITROGEN	+/- 0.6%	Oct 16, 2022

The SRM, PRM or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
SIEMENS ULTRAMAT 6 N1M6726	Nondispersive Infrared (NDIR)	Apr 28, 2022
THERMO NO 42I-1202839462	Chemiluminescence	Apr 28, 2022
THERMO NOX 42I-1202839462	Chemiluminescence	Apr 28, 2022

Triad Data Available Upon Request

NOTES:GEORGIA POWER COMMODITY # 84901



CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E04NI90E15A00F8	Reference Number:	122-402429008-1
Cylinder Number:	CC463842	Cylinder Volume:	149.0 CF
Laboratory:	124 - Durham (SAP) - NC	Cylinder Pressure:	2015 PSIG
PGPV Number:	B22022	Valve Outlet:	660
Gas Code:	CO2,CO,NO,NOX,BALN	Certification Date:	May 10, 2022

Expiration Date: May 10, 2025

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted.

Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	11.50 PPM	11.54 PPM	G1	+/- 1.3% NIST Traceable	05/03/2022, 05/10/2022
CARBON MONOXIDE	11.50 PPM	11.60 PPM	G1	+/- 0.9% NIST Traceable	05/03/2022
NITRIC OXIDE	11.50 PPM	11.53 PPM	G1	+/- 1.3% NIST Traceable	05/03/2022, 05/10/2022
CARBON DIOXIDE	9.000 %	8.993 %	G1	+/- 0.7% NIST Traceable	05/03/2022
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	21060423	CC365332	9.942 PPM CARBON MONOXIDE/NITROGEN	+/- 0.8%	Jul 23, 2027
PRM	C194051001	D887660	9.91 PPM NITROGEN DIOXIDE/AIR	+/- 2.0%	Feb 02, 2022
NTRM	20060417	ND47935	20.72 PPM NITRIC OXIDE/NITROGEN	+/- 1.0%	Apr 27, 2023
GMIS	1534002020105	EB0130069	4.912 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.0%	Apr 30, 2024
NTRM	08010610	K005088	13.94 % CARBON DIOXIDE/NITROGEN	+/- 0.6%	Jan 30, 2024

The SRM, PRM or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010249 CO2	FTIR	Apr 20, 2022
SIEMENS ULTRAMAT 6 N1M6726	Nondispersive Infrared (NDIR)	Apr 06, 2022
Nicolet iS50 AUP2010249 NO	FTIR	Apr 20, 2022
Nicolet iS50 AUP2010249 NO2	FTIR	Apr 20, 2022

Triad Data Available Upon Request



Signature on file

Approved for Release

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Part Number: X03NI99C15A02X4 Reference Number: 160-402497981-1
Cylinder Number: CC481228 Cylinder Volume: 144.0 CF
Laboratory: 124 - Plumsteadville - PA Cylinder Pressure: 2015 PSIG
Analysis Date: Aug 04, 2022 Valve Outlet: 350SS
Lot Number: 160-402497981-1
Expiration Date: Aug 04, 2023

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T.
Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
FORMALDEHYDE	1.000 PPM	1.011 PPM	+/- 10%
SULFUR HEXAFLUORIDE	5.000 PPM	5.010 PPM	+/- 5%
NITROGEN	Balance		



CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Part Number: X03NI99C15A01B1 Reference Number: 160-402497982-1A
Cylinder Number: CC506386 Cylinder Volume: 144.3 CF
Laboratory: 124 - Plumsteadville - PA Cylinder Pressure: 2015 PSIG
Analysis Date: Aug 09, 2022 Valve Outlet: 330
Lot Number: 160-402497982-1A
Expiration Date: Aug 09, 2024

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T.
Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
SULFUR HEXAFLUORIDE	5.000 PPM	5.013 PPM	+/- 5%
HYDROGEN CHLORIDE	25.00 PPM	23.78 PPM	+/- 5%
NITROGEN	Balance		



CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Customer: TRC ENVIRONMENTAL CORP - LA PORT E , TX
Part Number: X02NI99C15A1268
Cylinder Number: CC712186
Laboratory: 124 - La Porte Mix - TX
Analysis Date: Feb 20, 2020
Lot Number: 126-401741349-1

Reference Number: 126-401741349-1
Cylinder Volume: 144.4 CF
Cylinder Pressure: 2015 PSIG
Valve Outlet: 350

Expiration Date: Feb 20, 2023

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
ETHYLENE	100.0 PPM	98.72 PPM	+/- 2%
NITROGEN	Balance		

Notes:TRC ENVIRONMENTAL CORP

PO#: 149535



CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED STANDARD-SPEC

Part Number:	X03NI99C15A5RA1	Reference Number:	SG02-IC000024932-1
Cylinder Number:	CC752703	Cylinder Volume:	143.3 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2000 PSIG
Analysis Date:	Aug 15, 2022	Valve Outlet:	330
Lot Number:	SG02-IC000024932-1		

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

ANALYTICAL RESULTS

Component	Req Conc	Actual Concentration (Mole %)	Analytical Uncertainty
SULFUR HEXAFLUORIDE	5.000 PPM	5.470 PPM	+/- 5%
HYDROGEN FLUORIDE	25.00 PPM	25.90 PPM	+/- 5%
NITROGEN	Balance		

Notes: Analysis Date: 8/8/2022

Expiration Date: 8/8/2023

Blend +/- 20% Analytical +/- 5%

Shelf Life 1 Year



Test Protocol

EMISSION TEST PROTOCOL EPA Information Collection Request

Prepared For
Georgia Power
In Response to EPA's Section 114 Letter, Dated 6 April 2022

Testing At The
Georgia Power
Plant McIntosh
Simple Cycle Combustion Turbines 1-8 (Testing 2 of 8 Units)
Rincon, GA

And
Georgia Power
Plant McDonough
Combined Cycle Combustion Turbines (Testing 2 CTs)
Smyrna, GA

TRC ENVIRONMENTAL CORPORATION Protocol 491281
Revision 0

August 31, 2022

Submitted By

Jon T. Howard

Jon Howard
Technical Director
(334)-704-4706, Phone
jhoward@trccompanies.com, Email

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Project Contact Information	1
2.0 FACILITY AND PROCESS DESCRIPTIONS	2
2.1 PROCESS DATA	2
3.0 TEST REQUIREMENTS.....	2
4.0 SPECIFIC TEST PROCEDURES	4
5.0 TEST PROGRAM SCHEDULE.....	6
6.0 PROJECT PERSONNEL AND RESPONSIBILITIES.....	7
7.0 PLANT REQUIREMENTS.....	8
8.0 TEST PROCEDURES	8
8.1 Determination of Sample Point Locations by USEPA Method 1	8
8.2 Volumetric Flow Rate Determination by USEPA Method 2	9
8.3 CO ₂ Determination by USEPA Method 3A	9
8.4 O ₂ Determination by USEPA Method 3A	9
8.5 CO Determination by USEPA Method 10.....	9
8.6 Moisture Determination by USEPA Method 4	9
8.7 Moisture Determination by USEPA Method 320	9
8.8 Filterable PM Determination by USEPA Method 5	10
8.9 Trace Metals Determination by USEPA Method 29	10
9.0 QUALITY ASSURANCE PROCEDURES.....	10
10.0 TEST REPORT	12

© 2022, TRC Environmental Corporation, all rights reserved. The contents of this document are the property of TRC Environmental Corporation (TRC). No part of this work may be reproduced or transmitted in any form or by any means, except as permitted in written license agreement with TRC. TRC has made every reasonable attempt to ensure the completeness and accuracy of this document. The TRC logo is a registered trademark of TRC.

TRC Compliance Protocol revised 4/8/19

1.0 INTRODUCTION

TRC Environmental Corporation (TRC) will perform a comprehensive emission test program on two Simple Cycle Combustion Turbines (CTs) of Units 1-8 at Georgia Power-Plant McIntosh in Rincon, GA beginning the week of 12 September 2022. Similarly, testing will be performed on two Combined Cycle CTs at Georgia Power-Plant McDonough beginning the week of 10 October 2022. The test program is being conducted in response to the emission testing request of EPA's Section 114 Information Collection Request (ICR) letter issued to Ms. Rosa Chi, Air Manager, Environmental Affairs of Georgia Power. This program will be completed in accordance with the methods and procedures presented in Enclosure 1 of 40 CFR, Part 63, Subpart YYYY and in accordance with technical discussion between representative EPA Officials, Georgia Power and TRC.

1.1 Project Contact Information

Entity/Location	Address	Contact
Georgia Power Environmental Affairs	Georgia Power Environmental Affairs 2480 Maner Rd SE Atlanta, GA 30339	Rosa Chi Air Manager, Environmental Affairs (404) 506-3123 (phone) TRCHI@southernco.com Jason Grooms Air Monitoring & Testing Supervisor (912) 687-3137 (phone) jgrooms@southernco.com GA Power- Testing Coordination Drew Blankenship Specialist, Sr. Environmental (770) 550-1503 (phone) jablanke@southernco.com
Test Facilities	Georgia Power Plant McIntosh 981 Old Augusta Rd Cen Rincon, GA 31326 Permit No. 4911-103-0014-V-06-0 Facility No. 110071160714 Georgia Power Plant McDonough 5551 S Cobb Drive Smyrna, GA 30080 Permit No. 4911-067-0003-V-04-0 Facility No. 04-13-067-00003	Plant Contact: Robby Chapin Sr. Compliance Specialist (912) 306-1402 (phone) RAChapin@southernco.com Plant Contact: Alan Robinson Sr. Compliance Specialist (770) 550-8228 (phone) AWROBINS@southernco.com

Testing Company	TRC Environmental Corporation 9225 US Highway 183 South Austin, Texas 78747	Jon Howard Technical Director (334)-704-4706 (phone) (512) 243-0222 (fax) jhoward@trccompanies.com Jason Grizzle Project Manager/Test Team Lead (720) 838-3857 (phone) jgrizzle@trccompanies.com
-----------------	--	---

2.0 FACILITY AND PROCESS DESCRIPTIONS

The McIntosh Combustion Turbine-Electric Generating Plant includes 8 diffusion-flame, simple-cycle combustion turbines permitted to burn both natural gas and No. 2 fuel oil. Each CT has a power rating of 95 MW and maximum rated heat input of 1208 MMBtu/hr.

The McDonough-Atkinson Combined-Cycle Facility includes 3 lean pre-mix, combined-cycle power blocks, which primarily burn natural gas. Each power block is nominally rated at 840 MW and consists of two combustion turbines, two heat recovery steam generators with duct-burners, and one steam turbine. Two of the combustion turbines, CT4A and CT5A, also have the capability to burn ultra-low sulfur diesel as a back-up fuel; therefore, this testing is only required while firing natural gas for these combined-cycle CTs. The site also includes 4 simple-cycle CTs that are not required to be included as part of this testing.

2.1 PROCESS DATA

The process data to be documented during each test run (as applicable) include:

- Fuel type (e.g., natural gas, propane, fuel oil), and heat input (British thermal units per hour (Btu/hr)).
- Actual fuel feed rate during test (based on HHV) and permitted fuel feed rate (based on HHV) (MMBtu/hr). Explanation of the procedure used (e.g., EPA Method 19) to determine the actual fuel feed rate.
- Turbine load (percent).
- Emission unit operating temperature (°F).
- Operating parameters

3.0 TEST REQUIREMENTS

For Plant McIntosh, two distinct, simple cycle CTs within the Units 1-8 block will be selected for testing. Each of the two CTs will be tested during both natural gas and fuel oil firing conditions.

Similarly for Plant McDonough, two distinct, combined-cycle CTs will be selected for testing. Each of the those two CTs will be tested during natural gas firing conditions only. Duct burners may be fired during testing consistent with the YYYY NESHAP.

The following table presents a list of the pollutants and respective test methods to be tested at each plant and point source location:

Test Condition	M320 FTIR ^a (CH ₂ O, HCl & HF)	M10 ^a (CO)	M29 ^b (MMs)	M5 ^b (PM)	M3A ^{ab} (O ₂)	M1-4 ^{ab} (VFR)	Comment
Plant McIntosh							
CT-1 (Gas)	X	X	X	X	X	X	M320 and M10 concurrent; M29/M5 combined
CT-1 (Oil)	X	X	X	X	X	X	M320 and M10 concurrent; M29/M5 combined
CT-2 (Gas)	X	X	X	X	X	X	M320 and M10 concurrent; M29/M5 combined
CT-2 (Oil)	X	X	X	X	X	X	M320 and M10 concurrent; M29/M5 combined
Plant McDonough							
CT-1 (Gas)	X	X	X	X	X	X	M320 and M10 concurrent; M29/M5 combined
CT-2 (Gas)	X	X	X	X	X	X	M320 and M10 concurrent; M29/M5 combined

^atest parameters conducted simultaneously; seven 1-hour run durations.

^btest parameters conducted simultaneously; seven 4-hour run durations.

EPA Reference Method (RM) 320 FTIR sampling for formaldehyde, hydrogen chloride (HCl) and hydrogen fluoride (HF) will include all the method-specified quality control procedures. TRC may also implement additional quality procedures from a test protocol published by EPRI to address low-level FTIR measurement of formaldehyde. Those additional procedures would ensure accurate and precise field measurements and minimize bias. The formaldehyde detection limit for the FTIR analyzer will be approximately 30 ppb_{vw} (uncorrected for moisture and O₂). TRC has communicated to Georgia Power and EPA that spiking criterion for HF may be challenging based on previous experience and difficulties associated with the chemical nature of HF. TRC and Georgia Power will report spike recovery and Method 301 validation results for HF whether pass or fail.

Reference Method (RM) 320 sampling for the HAP of formaldehyde and acid gases (HCl and HF) will be performed simultaneously with determination of carbon monoxide (CO) test runs for input to potential development of CO as a surrogate. Carbon monoxide sampling will be performed in accordance with RM10 procedures. Continuous sampling for oxygen (O₂) will be performed in accordance with RM 3A concurrently with RM320 and M10 runs for pollutant correction to 15%O₂. Seven (7) test runs by RM320 and RM10 will be completed and will consist of one-hour duration each run. Volumetric flow rate (VFR) from any concurrent M5/M29 test runs will be used to calculate results in units of pounds per hour (lb/hr) in addition to units of ppm@15%O₂. If M5/M29 test runs are not being performed concurrently with RM320 and RM10, independent flow measurements will be performed.

Sampling for Method 29 HAPS metals consisting of antimony (Sb), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), and selenium (Se) will be combined with Method 5. Filterable particulate matter (PM) will be determined from the front-half, filter and probe/nozzle sections of the sampling train. Seven (7), four-hour (4 dscm) test runs will be completed as specified in Enclosure 1 of the Rule. Results from those runs will be corrected to 15%O₂ and concurrent (VFR) will be used to calculate results in units of (lb/hr). TRC plans to implement two separate sampling systems to minimize fuel usage and to provide overall efficiency of testing. One complete sample train will be leak checked and ready to proceed into a subsequent test run following the completion any previous run. Immediately following sampling, the M5/M29 sampling assembly will either be recovered in a TRC mobile laboratory or GA Power's testing support trailer. Each part of the sampling assembly will be collected in appropriate, labeled, sample jars and stored according to method requirements. Each sample will be logged onto a chain of custody document that will be kept with the samples. All samples will be couriered to the contract laboratory for analysis according to all method specifications.

Carbon dioxide (CO₂) will be performed in accordance with EPA RM 3A in conjunction with O₂ sampling for calculation of source gas molecular weight as required for (VFR). EPA Method 4 will be used to determine moisture content of the gas stream during each run. EPA method 4 will be determined from the combined M5/M29 sample trains.

4.0 SPECIFIC TEST PROCEDURES

Detailed test procedures are described in Section 8 of this protocol. Three complete test runs will be performed for each constituent in accordance with the following USEPA methods:

1. Stratification testing to determine the gaseous test point strategy for FTIR parameters and carbon monoxide (CO) will be determined by traverse measurement of oxygen (O₂) in accordance with the procedures defined in Method 7E Section 8.1.2. This approach has been approved by EPA.
2. Volumetric flow will be determined utilizing USEPA Methods 1 and 2. The location of the ports in relation to upstream and downstream disturbances will be measured and recorded. Wind tunnel calibrated pitots with pre-determined coefficients will be used for all flow measurements in lieu of a default coefficient of 0.84. Volumetric flow rate (VFR) data from the Method 5/29 particulate matter/metals sampling will be applied to all FTIR (Method 320- formaldehyde, HCL & HF) and carbon monoxide (CO) bracketed measurements for calculation of emission rates (lb/hr). In any event where FTIR and CO sampling is not bracketed by ongoing M5/M29 test runs, independent flow measurements will be performed.
3. A check for the presence or absence of cyclonic flow will be performed in accordance with Section 11.4 of Method 1 and recorded on the data sheet appended.
4. Oxygen (O₂) and carbon dioxide (CO₂) content of the stack gas will be determined instrumentally on a continuous, online basis by Method 3A during each test run. All 1-hour test runs for CO will be accompanied with online measurement of O₂ and CO₂. As proposed to and approved by EPA, TRC may also collect integrated bag samples with Methods 5/29 and analyzed via calibrated analyzer. Instrument calibration will be verified in accordance with Method 3A procedures when sampling is performed on an online, continuous basis and verified following any analysis of integrated bag samples. Oxygen

measurement data will be bracketed for all pollutant measurements for subsequent calculation of concentration @15%O₂.

5. Moisture tests will be performed in accordance with Method 4 in conjunction with the Method 5/29 PM and Metals sampling.
6. Particulate emissions will be determined in accordance with Method 5. Each test run will be a minimum of 240 minutes in length, or as necessary to collect a minimum of 4 dry standard cubic meters (DSCM) as specified in Enclosure 1 of the YYYY Combustion Turbine NESHAP. Sampling for filterable PM will be performed in the front half of the Method 29 sampling system. A quartz-lined probe and quartz nozzles will be utilized for the tests. TRC will implement a split train assembly through use of a Teflon jumper from the filter exit to the Method 29 metals impingers.
7. HAP metals (antimony (Sb), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), and selenium (Se)) will be performed in strict accordance with Method 29 sampling and analytical procedures. The sampling assembly will be combined with Method 5 front-half filterable PM. A quartz-lined probe and quartz nozzles will be utilized for the tests. TRC will implement a split train assembly through use of a Teflon jumper from the filter exit to the Method 29 metals impingers. Analytical detection limits for HAP metals will be reported where applicable.
8. Carbon monoxide (CO) emissions will be determined in accordance with USEPA Method 10 and will be concurrent with all FTIR Method 320 measurements. Each test run will consist of one hour of continuous testing. Detection limits for CO will be reported as 2% of the calibration range.
9. Low-level formaldehyde, hydrogen chloride (HCl) and hydrogen fluoride (HF) emissions will be determined in accordance with Method 320, as described in Section 3 above. Each test will be a minimum one hour in length. Typically, sample delivery systems for HCl and HF are operated at a much higher temperature than that of formaldehyde. Since all three parameters are being evaluated in a single test grouping, TRC will evaluate whether formaldehyde off-gassing is present from the higher temperature setting prior to start of FTIR test runs. If off-gassing of formaldehyde is present, two separate delivery systems may be implemented with separate measurement of formaldehyde from HCl and HF. TRC will spike at 50-150% of the native formaldehyde concentration. If formaldehyde is not detected, TRC will spike at approximately 50% of the NESHAP YYYY emissions limit of 91ppb. For HCl, TRC will spike at approximately 1 ppm concentration if this compound is not detected. If HCl is detected, spiking will be performed at 50-150% of the native concentration. The same approach for HCl spiking will be applied for HF.

TRC plans to perform Method 301 validation spiking according to Section 13.0 of the Method which indicates that validation at one source may also apply to another type of source, if it can be shown that the exhaust gas characteristics are similar at both sources. TRC anticipates that at a minimum, validation testing will be performed at Plant McIntosh on one location while firing oil, but validation testing may also be completed at Plant McIntosh during an oil-firing condition. If validation testing is not completed at Plant McIntosh while firing gas, this would be performed while at Plant McDonough. For any additional test emission points the spiking procedures indicated in Section 9.0 of Method 320 will be performed for HCHO and HCl.

5.0 TEST PROGRAM SCHEDULE

TRC will execute the referenced scope of services according to the following test schedules:

Plant McIntosh

*Times are Plant Operating Time							
Date	Plant	Unit	Source	Test	Start Time*	End Time*	Load Req
Mon-Sept-12-2022	McIntosh	1		Set-Up			
Tue-Sept-13-2022	McIntosh	1	GAS	Run 1 for M-29	7:00	20:00	Full
Wed-Sept-14-2022	McIntosh	1	GAS	Run 2, 3 for M-29	7:00	20:00	Full
Thu-Sept-15-2022	McIntosh	1	GAS	Run 5, 6 for M-29; 1-7 for M10 and M320	7:00	20:00	Full
Fri-Sept-16-2022	McIntosh	1	GAS	Run 6, 7 for M-29	7:00	20:00	Full
Sat-Sept-17-2022	McIntosh	1	OIL	Run 1, 2 for M-29; 1-7 for M10 and M320	7:00	20:00	Full
Sun-Sept-18-2022				No Testing			
*Times are Plant Operating Time							
Date	Plant	Unit	Source	Test	Start Time*	End Time*	Load Req
Mon-Sept-19-2022	McIntosh	1	OIL	Run 3, 4 for M-29	7:00	20:00	Full
Tue-Sept-20-2022	McIntosh	1	OIL	Run 5, 6, 7 for M-29	7:00	20:00	Full
Wed-Sept-21-2022	McIntosh	2	GAS	Run 1, 2 for M-29; 1-7 for M10 and M320	7:00	20:00	Full
Thu-Sept-22-2022	McIntosh	2	GAS	Run 3, 4, 5 for M-29	7:00	20:00	Full
Fri-Sept-23-2022				No Testing			
Sat-Sept-24-2022				No Testing			
Sun-Sept-25-2022				No Testing			
*Times are Plant Operating Time							
Date	Plant	Unit	Source	Test	Start Time*	End Time*	Load Req
Mon-Sept-26-2022	McIntosh	2	GAS	Run 6 for M-29	12:00	20:00	Full
Tue-Sept-27-2022	McIntosh	2	GAS/OIL	Run 7 for M-29; Run 1 for M-291-7 for M10 and M320	7:00	20:00	Full
Wed-Sept-28-2022	McIntosh	2	OIL	Run 2, 3, 4 for M-29	6:00	21:00	Full
Thu-Sept-29-2022	McIntosh	2	OIL	Run 5, 6, 7 for M-29	6:00	21:00	Full
Fri-Sept-30-2022				Breakdown			
Sat-Oct-1-2022							
Sun-Oct-2-2022							

Plant McDonough

*Times are Plant Operating Time							
Date	Day	Weekday	Activity	Start time*	End Time*	Load Req	
Week 1							
Oct 10	1	Monday	Set up				
Oct 11	2	Tuesday	CT1 (Gas)- Complete setup and QA; Perform Test Run 1 for M29	07:00	20:00	Full	
Oct 12	3	Wednesday	CT1 (Gas)- perform seven 1-hr runs for M10 & M320; perform M29 Runs 2&3;	07:00	20:00	Full	
Oct 13	4	Thursday	CT1 (Gas)- perform M29 Runs 4&5	07:00	20:00	Full	
Oct 14	5	Friday	CT1 (Gas)- perform M29 Runs 6&7	07:00	20:00	Full	
Oct 15	6	Saturday	Move Equipment to CT2				
Oct 16	7	Sunday	Off				
Week 2							
Oct 17	8	Monday	CT1 (Gas)- perform seven 1-hr runs for M10 & M320; M29 Runs 1&2	07:00	20:00	Full	
Oct 18	9	Tuesday	CT1 (Gas)- M29 Runs 3&4; Begin M301 Validations for M320 CH2O, HCl and HF.	07:00	20:00	Full	
Oct 19	10	Wednesday	Move to CT2; CT2 (Gas)- M29 Runs 5&6; Continue M301 Validations	07:00	20:00	Full	
Oct 20	11	Thursday	CT2 (Gas)- M29 Run 7	07:00	20:00	Full	
Oct 21	12	Friday	Reserved	----		----	
Oct 22	13	Saturday	Reserved	----		----	

6.0 PROJECT PERSONNEL AND RESPONSIBILITIES

- Jon Howard
(TRC) Technical Director:
Coordinates all test activities. Maintains communications between all test Georgia Power Management and plant personnel. Project Technical Oversight.
- Jason Grizzle
(TRC) Senior Project Manager, Technical Director and Field Manager:
Coordinates all test activities. Maintains communications between all test participants and plant personnel.
- Will McKibben
(TRC) Engineer I/Scientist I and Quality Assurance Manager:
Prepares and recovers Method 29/Method 5 sample trains and samples collected. Ensures all field calculations are completed. Method 320 QA and overall project quality assurance.
- Tom Dunder, PhD
(TRC) FTIR-Method 320 Technical Director and Quality Oversight (Remote):
Evaluates FTIR sampling QA and ensures data qualification.

Technician II:

Assists in operation of test trains as required. Performs traversing of manual and instrumental methods.

Technician III:

Assists in operation of test trains and performs traversing of manual and instrumental test methods.

7.0 PLANT REQUIREMENTS

TRC must be supplied with the following items to complete this test program:

1. Safe access to test positions.
2. Electrical power 110 V, 30 A, 60 cycle service at the test locations.
3. Four-inch Six-inch (for M201A) test ports cleaned and loose prior to arrival of test crew.
4. Sufficient lighting at the test site.
5. Plant or pollution control equipment operating data, in the format required by the applicable regulatory agency, for inclusion in the report.
6. Washroom facilities for use by members of the test crew.
7. A shelter at the test location if weather conditions warrant.
8. Stable operations and the required load or production rate during the test period.
9. Communication between the test location and the control room.
10. Parking location to place TRC mobile trailer within 200 feet of sampling locations with access to multiple 110 V, 20 A, 60 cycle or 480 V, 50 A, 60 cycle circuits.

8.0 TEST PROCEDURES

All testing, sampling, analytical, and calibration procedures used for this test program will be performed in accordance with the methods presented in the following sections. Where applicable, the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods, USEPA 600/R-94/038c, September 1994 is used to supplement procedures.

8.1 Determination of Sample Point Locations by USEPA Method 1

This method is applicable to gas streams flowing in ducts, stacks, and flues. It is designed to aid in the representative measurement of pollutant emissions and/or total volumetric flow rates from stationary sources. To qualify as an acceptable sample location, it must be located at a position at least two stack or duct equivalent diameters downstream and a half equivalent diameter upstream from any flow disturbance. The location of the ports in relation to upstream and downstream disturbances will be measured and recorded.

The cross-section of the measurement site is divided into a number of equal areas, and the traverse points are then located in the center of these areas. The minimum number of points are determined from either Figure 1-1 (particulate) or Figure 1-2 (non-particulate) of USEPA Method 1.

Prior to performing volumetric flow traverses, a check for the presence or absence of cyclonic flow will be performed in accordance with Section 11.4 of Method 1 and recorded on the data sheet enclosed.

8.2 Volumetric Flow Rate Determination by USEPA Method 2

This method is applicable for the determination of the average velocity and the volumetric flow rate of a gas stream.

The gas velocity head (ΔP) and temperature is measured at traverse points defined by USEPA Method 1. The velocity head is measured with a Type S (Stausscheibe or reverse type) pitot tube and oil-filled manometer; the gas temperature is measured with a Type K thermocouple. The average gas velocity in the flue is calculated based on: the gas density (as determined by Methods 3, 3A, or 3B, and 4), the flue gas pressure, the average of the square roots of the velocity heads at each traverse point, and the average flue gas temperature.

8.3 CO₂ Determination by USEPA Method 3A

This method is applicable for the determination of CO₂ concentrations in controlled and uncontrolled emissions from stationary sources only when specified within the regulations. The CO₂ analyzer is equipped with a non-dispersive infrared (IR) detector.

8.4 O₂ Determination by USEPA Method 3A

This method is applicable for the determination of O₂ concentrations in controlled and uncontrolled emissions from stationary sources only when specified within the regulations. The O₂ analyzer is equipped with a paramagnetic-based detector.

8.5 CO Determination by USEPA Method 10

This method is applicable for the determination of CO concentrations in controlled and uncontrolled emissions from stationary sources only when specified within the regulations. The non-dispersive infrared analyzer (NDIR) CO analyzer is equipped with an internal gas correlation filter wheel, eliminating potential detector interference. Therefore, use of an interference removal trap is not required.

8.6 Moisture Determination by USEPA Method 4

This method is applicable for the determination of the moisture content of stack gas.

A gas sample is extracted at a constant rate from the source. Moisture is removed from the sample stream by a series of pre-weighed impingers immersed in an ice bath. A minimum of 21 dry standard cubic feet of flue gas is collected during each sample run.

8.7 Moisture Determination by USEPA Method 320

The Method 320 sampling and measurement system meets the requirements for stack sampling of gaseous organic and inorganic compounds set forth by the United States Environmental Protection Agency (USEPA). In particular, it meets the requirements of USEPA Reference Method 320, "Measurement Of Vapor Phase Organic And Inorganic Emissions By Extractive Fourier Transform Infrared (FTIR) Spectroscopy," 40CFR63. This method applies to the analysis of a range of volatile organic compounds (VOCs) and volatile inorganic compounds emitted from an industrial source.

The source emissions are extracted from the single sampling point in the gas stream and then transported to the FTIR analyzer via a heated, extractive sampling system. The various components of the matrix are identified and quantified by absorbance of infrared radiation. All data measurements and analytical results are stored on computer. The data is copied to Cloud Server, USB drive, or a second hard drive before departing the test site.

Method 320 FTIR testing will utilize a Spectrum Environmental Solutions Extractive (FTIR) monitoring system, WaverunIR-EXT with a gas sampling and conditioning system that has been optimized by TRC. This FTIR instrument is calibrated using a stored spectral library of reference spectra. Calibration is verified on site through direct and system calibration measurements using gas standards. These gases include the method-required CTS (calibration transfer standard, 10 ppm Ethylene) and a nitrogen zero gas. Direct, system and dynamic matrix spiking calibrations will be conducted as previously described.

8.8 Filterable PM Determination by USEPA Method 5

This method is applicable for the determination of particulate matter (PM) emissions from stationary sources. USEPA Methods 2-4 are performed concurrently with, and as an integral part, of these determinations.

Flue gas is withdrawn isokinetically from the source at traverse points determined per USEPA Method 1, and PM is collected in the nozzle, probe liner, and on a glass fiber filter. The probe liner and filter are maintained at a temperature of $120 \pm 14^{\circ}\text{C}$ ($248 \pm 25^{\circ}\text{F}$) or such other temperature as specified by an applicable subpart of the standards, or as approved by the Administrator for a particular application. The PM mass, which includes any material that condenses at or above the filtration temperature, is determined gravimetrically after the removal of uncombined water.

8.9 Trace Metals Determination by USEPA Method 29

This method is applicable to the determination of metals emissions from stationary sources. In addition to the metal's emissions, this method may be used to determine particulate emissions if the prescribed procedures and precautions are followed. Methods 2-4 are performed concurrently with, and as an integral part of, these determinations.

Flue gas is withdrawn isokinetically from the source at traverse points determined per USEPA Method 1 through a nozzle, probe liner, glass fiber filter and a series of impingers. The probe liner and filter are maintained at a temperature of $120 \pm 14^{\circ}\text{C}$ ($248 \pm 25^{\circ}\text{F}$) or such other temperature as specified by an applicable subpart of the standards or approved by the Administrator for a particular application. Particle-bound metals are collected in the nozzle, in the probe, and on the filter. Gaseous metals are collected in a solution of nitric acid and hydrogen peroxide (analyzed for select metals including Hg) and a solution of acidified potassium permanganate (analyzed only for Hg).

The recovered samples are analyzed using the methods specified in Method 29 or such other techniques as specified by an applicable subpart of the standards, or as approved by the Administrator for a particular application.

9.0 QUALITY ASSURANCE PROCEDURES

TRC integrates our Quality Management System (QMS) into every aspect of our testing service. We follow the procedures specified in current published versions of the test Method(s) referenced in this protocol. Any modifications or deviations are specifically identified in the body of this protocol. We routinely participate in independent, third-party audits of our activities and maintain:

- Accreditation from the Louisiana Environmental Laboratory Accreditation Program (LELAP).
- Accreditation from the Stack Testing Accreditation Council (STAC) and the American Association for Laboratory Accreditation (A2LA) that our operations conform with the requirements of ASTM D 7036 as an Air Emission Testing Body (AETB).

These accreditations demonstrate that our systems for training, equipment maintenance and calibration, document control and project management will fully ensure that project objectives are achieved in a timely and efficient manner with a strict commitment to quality.

All calibrations are performed in accordance with the test Method(s) identified in this protocol. If a method allows for more than one calibration approach, or if approved alternatives are available, the calibration documentation in the appendices of the report will specify which approach is used. All measurement devices are calibrated or verified at set intervals against standards traceable to the National Institute of Standards and Technology (NIST). NIST traceability information is available upon request.

Raw data is kept on file at the TRC office performing the sampling. All samples from the test program are retained for 60 days after the submittal of the report, after which they are discarded unless TRC is advised otherwise.

Calculations are performed electronically via spreadsheet application. An explanation of the nomenclature and calculations along with the complete test results will be appended to the report. Also, to be appended to the report are calibration data and copies of the raw field data sheets.

10.0 TEST REPORT

A final test report will be prepared following the completion of the tests. Sample summary tables and spreadsheets are in the appendix. This report shall additionally contain all general reporting requirements specified in ASTM D7036-04, Section 15. The contents of the report will include the following sections, as required:

1.0 INTRODUCTION

- 1.1 Project Contact Information
- 1.2 Facility and Process Description

2.0 SUMMARY OF RESULTS

3.0 DISCUSSION OF RESULTS

4.0 SAMPLING AND ANALYSIS PROCEDURES

5.0 QUALITY ASSURANCE PROCEDURES

6.0 TEST RESULTS SUMMARY

APPENDIX (as applicable)

- AETB and QI Information Summary
- Qualified Individual Certificate(s)
- Continuous Emissions Monitoring System (CEMS) and Plant Operating Data
- Sample Location Information
- Sample Train Diagrams
- Sample Analysis Data
- Calculation Nomenclature and Formulas
- Processed Field Data and Results
- Sampling Equipment Calibration Data
- Response Time Data
- Analyzer Interference Test Data
- Calibration Gas Certificates
- Raw Field Data Sheets

REPORT LAST PAGE