Calpine Greenleaf Holdings, Inc.

717 Texas Avenue
Suite 1000
Houston, Texas 77002

November 23, 2021

SENT VIA E-MAIL: jbradley@caiso.com
Joanne Bradley (JB)
Account Manager, Customer Service
CAISO
250 Outcropping Way
Folsom, CA 95630

Re: Greenleaf 1 Emergency Repowering Project – Operations Data

Dear Joanne:

We write in response to your request for data regarding the operations of the Greenleaf 1 project, located at the Calpine Greenleaf Holdings, Inc. property in Yuba City, California. Attached please find Excel spreadsheets showing operating and emissions data for both Greenleaf 1 units, as well as a copy of the source test report. In addition, please note the following with respect to the data provided:

1. The Greenleaf 1 units were operated in September and for a limited number of hours in early October. There were no operations in November.
2. All operations during these times were for purposes of commissioning. As there are no emissions limits that apply during commissioning, the Greenleaf 1 project did not exceed any permit limits. Accordingly, the following data requests are not applicable and are not addressed in the attached spreadsheets:
    a. For each category of emissions, please provide permitted operating/emission limits.
    b. For each category of emissions, any actual incremental emissions above the permit limits, (if units are not equipped with continuous emission monitoring systems, please calculate actual emissions using source test data);
    c. The hours that each Covered Resource unit operated in excess of permit limits or operated without otherwise-required permits.
3. The NOx, CO, VOC, and SOx emissions data in the attached spreadsheets were developed using emission factors derived from source tests. The PM10 emissions are based on an emission factor of 4 lbs/hr and the turbine design heat input of 366.1 MMBtu/hr.
4. The fuel flow to each unit was apportioned from the total fuel flow to the facility based on the relative megawatts produced by each unit.
5. The water injection data was estimated based on design flow and unit operating time.

Should you have any questions about the data provided, please do not hesitate to contact me.

Sincerely,

DS

DocuSigned by:

5E549D8EAC8C4C3...

Andrew Gundershaug
Plant Manager

c: Barbara McBride
Betty Chu

SOURCE TEST REPORT
2021 INITIAL COMPLIANCE TEST
GE GAS POWER SYSTEMS
CALPINE GREEN LEAF 1
YUBA CITY, CALIFORNIA

TWO (2) - TM2500 AERODERIVATIVE GAS TURBINE STACKS

Prepared For:

GE GAS POWER SYSTEMS
1 River Road, bldg. 40-304
Schenectady, NY 12345

For Submittal To:

Calpine Green Leaf
5087 S Township Road
Yuba City, CA 95993

Prepared By:

Montrose Air Quality Services, LLC
1351 Brummel Avenue
Elk Grove Village, IL 60007

Document Number: **414AS-011221-RT-18**
Test Date: **September 20th and 21st, 2021**
Submittal Date: **November 4th, 2021**

REVIEW AND CERTIFICATION

I certify, to the best of my knowledge, that this test was performed in a manner conforming to the criteria set forth in ASTM D7036-04: Standard Practice for Competence of Air Emission Testing Bodies, and that project management and supervision of all project related activities were performed by qualified individuals as defined by this practice.

Both qualitative and quantitative factors contribute to field measurement uncertainty and should be taken into consideration when interpreting the results contained within this report. Whenever possible, MAQS personnel reduce the impact of these uncertainty factors through the use of approved and validated test methods. In addition, MAQS personnel perform routine instrument and equipment calibrations, and ensure that the calibration standards, instruments and equipment used during test event meet, at a minimum, test method specifications as well as the specifications of our Quality Manual and ASTM D7036-04. The limitations of the various methods, instruments, equipment and materials utilized during this test have been reasonably considered, but the ultimate impact of the cumulative uncertainty of this project is not fully identified within the results of this report.

I further certify that this report and all attachments were prepared under my direction or supervision in accordance with MAQS quality management system designed to ensure that qualified personnel gathered and evaluated the test information submitted. Based on my inquiry of the person or persons who performed the sampling and analysis relating to this performance test, the information in this report is, to the best of my knowledge and belief, true, accurate and complete.

Name: Justin Merryman, QI Title: Vice President - Technical

Sign: 

Date: 11/04/2021

Name: John Hamner, QI Title: Account Manager

Sign: 

Date: 11/04/2021

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1.0 INTRODUCTION

1.1 PROGRAM OBJECTIVES

GE Gas Power Systems (GE) contracted Montrose Air Quality Services, LLC (Montrose) to perform a compliance emissions test program on Two (2) Aeroderivative Gas Turbine Stack (TM 2500) Units at the Calpine Green Leaf 1 plant located in Yuba City, California. The tests were conducted to determine compliance with Permit Number 13005L.

The testing was conducted by Mr. Thomas Cassin and Mr. Zach Le Fever of Montrose on September 20th and 21st, 2021. Mr. Ziad Admin of GE coordinated the testing program. The tests were conducted according to a test plan dated September 13th, 2021. Montrose performed the tests to measure the following emission parameters:

- Emission Compliance:
    - CO (ppmvd, ppmvd @ 15% O2, lb/MMBtu, lb/hr)
    - NO_X (ppmvd, ppmvd @ 15% O2, lb/MMBtu, lb/hr)
    - VOC (ppmvd, ppmvd @ 15% O2, lb/MMBtu, lb/hr)
    - SO_2 (ppmvd, ppmvd @ 15% O2, lb/MMBtu, lb/hr)
        - O_2 and CO_2 (% volume dry) – for molecular weight & dilution calculations
        - Stack volumetric flow rate (dscfm per Method 19) and moisture content (% by volume)
        - Fuel analysis ("F_d" factor, HHV, sulfur content)

This report presents the test results and supporting data, descriptions of the testing procedures, descriptions of the facility and sampling locations, and a summary of the quality assurance procedures used by Montrose. The average emission test results are summarized and compared to their respective permit limits and performance specifications in Table 1-1. Detailed results for individual test runs can be found in Section 5.0. All supporting data can be found in the appendices.

Both qualitative and quantitative factors contribute to field measurement uncertainty and should be taken into consideration when interpreting the results contained within this report. Whenever possible, Montrose personnel reduce the impact of these uncertainty factors by using approved and validated test methods. In addition, Montrose personnel perform routine instrument and equipment calibrations and ensure that the calibration standards, instruments, and equipment used during test events meet, at a minimum, test method specifications as well as the specifications of our Quality Manual and ASTM D 7036-04. The limitations of the various methods, instruments, equipment, and materials utilized during this test have been reasonably considered, but the ultimate impact of the cumulative uncertainty of this project is not fully identified within the results of this report.

1.2 PROJECT CONTACTS

A list of project participants is included below:

Facility Information

Source Location:	Calpine Green Leaf 1 5087 S. Township Rd Yuba City, CA 95993
Project Contact:	Chuck Houseknecht
Role:	Environmental Manager
Company:	GE Gas Power Systems
Telephone:	+1 518 265 9635
Email:	charles.houseknecht@ge.com

Testing Company Information

Testing Firm:	Montrose Air Quality Services, LLC (Montrose)
Contact:	John Hamner
Title:	Client Project Manager
Telephone:	(630) 715-3259
Email:	jhamner@montrose-env.com

Laboratory Information

Laboratory:	ACA
City, State:	Venture, CA

2.0 SOURCE LOCATION INFORMATION

2.1 FACILITY DESCRIPTION

The project includes two (2) smaller aeroderivative combustion turbines that will operate during both the turbine interim and final operating modes. The aeroderivative turbine will be rated at approximately 30 megawatts (MW), operating in simple cycle mode. The aeroderivative combustion turbine will be used during black start events, as well as to provide supplemental power when needed.

2.2 SAMPLING LOCATIONS

Information regarding the sampling location is presented below:

Sample location ID:	TM2500 Exhaust Stacks (Unit 1 and Unit 2)
Configuration:	Rectangular, Vertical
Dimensions:	7 feet and 1 inches width, 11 feet and 6 inches depth
Port access:	Manlift

Traverse point information is presented below:

- Gaseous emission tests – Thirty (30) point stratification test and sampling point selection per EPA Method 7E

3.0 TEST DESCRIPTION

3.1 PROGRAM OBJECTIVES

The objective of this test program was to determine compliance with the source testing conditions of the facility's Permit Number 13005L. The testing was performed on the TM2500 Unit 1 and Unit 2 at the Exhaust Stacks. The permit limits and results are presented in Table 3-1.

TABLE 3-1
EMISSION LIMITS

Parameter	Permit Limit	Result – Unit 1	Result – Unit 2
Condition			
Unit Data:			
Fuel Heat Input (MMBtu/hr)	366.1	313	322.9
Fuel to Water Ratio	--	1.371	1.325
Fuel Flow lb/sec	--	3.71	3.88
Water Injection lb/sec	--	5.09	5.15
MW	--	30.11	32.19
Fuel Analysis HHV Btu/scf	--	1047.50	1008.28
Fuel Analysis LHV Btu/scf	--	944.83	908.63
CO Emissions:			
ppmvd	--	16.60	11.23
lb/MMBtu	--	0.043	0.029
ppmvd @ 15% O_2	4.0	19.65	12.94
lb/hr	2.64	13.68	9.25
NO_X Emissions:			
ppmvd	--	19.08	18.60
lb/MMBtu	--	0.082	0.078
ppmvd @ 15% O_2	2.5	25.49	21.47
lb/hr as NO_2	2.71	22.39	25.22
THC Emissions as C_3H_8:			
ppmvd	--	1.11	0.83
lb/MMBtu	--	0.005	0.003
ppmvd @ 15% O_2	--	1.33	0.94
lb/hr	2.3	1.15	0.83
SO_2 Emissions:			
lb/MMBtu	--	0.000087	0.000202
ppmvd	--	0.015	0.035
ppmvd @ 15% O_2	--	0.017	0.040
lb/hr	0.20	0.027	0.064
O_2 Emissions:			
%	--	15.88	15.78

*****THC Emissions as CH_4 were reported in the final results because the NMHC VOC lb/MMBtu numbers were negative**.**

3.2 TEST CONDITIONS

Emission tests were performed while the source units, and applicable abatement units, were operating at the condition. Tests were performed the following condition:

- Base Load Condition

Plant personnel established the test conditions and collected all applicable unit-operating data. Montrose monitored the collection of process data.

3.3 TEST PROGRAM SCHEDULE

The test program schedule is presented in Table 3-2.

TABLE 3-2
TEST MATRIX AND SCHEDULE

Date	Source ID/ Activity	Sample Runs	Sample Duration
September 20, 2021	**Unit 1, Stack**		
	NO_x, O_2, CO_2, CO	3	60 to 180 Minutes
	VOCs	3	60 to 180 Minutes
	SO_2	1	Grab Sample
September 21, 2021	**Unit 2, Stack**		
	NO_x, O_2, CO_2, CO	3	60 to 180 Minutes
	VOCs	3	60 to 180 Minutes
	SO_2	1	Grab Sample

3.4 MONTROSE TEST PROCEDURES

The test procedures used for this test program are summarized in Table 3-3 below. Additional information regarding specific applications or modifications to standard procedures is presented in the following sub-sections.

TABLE 3-3
TEST PROCEDURES

Parameter	Measurement Principle	Reference Method
Volumetric flow rate	Stoichiometric calculation	EPA 19
NO_x	Chemiluminescence	EPA 7E
O_2	Paramagnetism	EPA 3A
CO_2	Non-dispersive infrared	EPA 3A

CO	Gas filter correlation NDIR	EPA 10
SO_2	Fuel Gas Sample	ASTM D3246
VOC	FID, Tedlar bag / GC	EPA 25/A18
Moisture	Impinger weight gain	EPA 4

3.4.1 Gaseous Emissions

Concentrations of the gaseous constituents of stack gas (O_2, CO_2, NO_x and CO) were measured using Montrose's dry extractive reference method (RM) monitor system in accordance with EPA Method 3A, 7E and 10. This system meets the requirements of EPA methods for gaseous species. Pertinent information regarding the performance of the method is presented below:

- Method Deviations: None
    - Method Options: N/A
    - Detection Limits: <2% of Span

Sampling traverse points for gaseous emissions were determined in accordance with EPA Method 7E. Stratification test was failing after two ports and the test was aborted. The three compliance test were completed performing a full traverse during each test, and five (5) ports and six (6) points were used for each compliance test.

3.4.2 Volatile Organic Compounds

Concentrations of volatile organic compounds (VOCs) were measured by flame ionization detection (FID) and gas chromatographic (GC) analysis of sample gas collected per EPA Method 18 and 25A. Pertinent information regarding the performance of the method is presented below:

Method Deviations: THC Emissions as CH_4 were reported in the final results because the NMHC VOC lb/MMBtu numbers were negative**.**

- Sampling Media: Direct measurement for M25A, M18 Methane/Ethane samples collected using integrated Tedlar bag sampling
- Target Analytes: Total non-methane, non-ethane hydrocarbons
- Method 4 results were used to correct VOC concentrations to dry basis.
- Analytical Laboratory: ACC Laboratory – M18

3.4.7 Fuel Analysis

Sample gas from the facility's natural gas fuel supply pipeline was collected and submitted for analysis. Pertinent information regarding the fuel analysis is presented below:

- Analytical Method: ASTM D-1945/ASTM D-3246/ASTM-3588
    - Sample Containers: Teflon-coated pressurized fuel bombs

- Analytical Laboratory: Texas Oil Tech Laboratories, Inc., Houston

3.4.10 Process Data

The plant's unit operating data was used to document process conditions during the test runs. Unit operating data was provided by GE personnel. Data presented in this report includes the following:

- Fuel flow rates
- Power output

4.0 QUALITY ASSURANCE AND REPORTING

4.1 SAMPLING AND ANALYTICAL QA/QC

Montrose has instituted a rigorous QA/QC program for all of its air pollution testing. Quality assurance audits are performed as part of the test program to ensure that the final results are calculated from the highest quality data. The program ensures that the emission data reported are as accurate as possible. The procedures included in the cited reference methods were followed for all steps of preparation, sampling, calibration, and analysis. Montrose was responsible for preparation, calibration and cleaning of the sampling apparatus. Montrose also conducted the sampling and sample recovery, storage, and shipping.

Contract laboratories conducted some of the preparation and sample analyses as needed. The laboratories that were used are established leaders in development and performance of the reference methods for which they have been selected. Their credentials for adherence to the required quality assurance procedures are well known.

4.2 QUALITY CONTROL PROCEDURES

Our Quality Assurance Program Summary, located in Appendix A, provides our equipment maintenance and calibration schedule, quality control acceptance limits, and any corrective action that may be needed. For additional quality control, Montrose followed the procedures outlined below and in the method write-ups in Section 3.4.

4.2.1 Equipment Inspection and Maintenance

- Each critical piece of field equipment was assigned a unique identification number to allow tracking of its calibration history
    - All field equipment was visually inspected prior to testing and included pre-test calibration checks
    - Glassware was visually inspected prior to testing

4.2.2 Equipment Calibrations

Our equipment maintenance and calibration schedule is located in Appendix A.

4.3 DATA ANALYSIS, VALIDATION, AND UNCERTAINTY

The raw data collected during the sampling and analysis procedures were used to calculate the results of the testing program. The analysis or reduction of the data to the final results followed these steps, where appropriate to the test method:

- Check field-sampling data for accuracy and calculate appropriate data averages (e.g., temperatures, pressures, volumes, etc.).
    - Double check calculation of the data averages.
    - Review all in-house and contract laboratory reports and ensure that appropriate and/or required QA/QC steps were followed.
    - Enter field and laboratory data to established and verified computer spreadsheets for calculation of volumetric flow rates, mass emission rates or other appropriate results.
    - Double-check all lab and field data inputs.
    - Perform example calculations by hand using raw data on a single test run for each type of emission result reported.
    - Compile summary tables of results and review all table inputs.

This report includes copies of spreadsheet printouts (data input and results output) and example calculation checks. The field data sheets with average data calculations are also included. Standard conditions used for data reduction are 29.92 inches of mercury and 68 °F. All values found to be below the detection limit of the analytical method are reported as “less than” (“<”) either the full detection limit value, one-half of the detection limit, or zero based on the applicable method.

5.0 DISCUSSION OF RESULTS

5.1 DETAILED DISCUSSION OF RESULTS

The average results are compared to the permit limits and performance specifications in Tables 1-1. The results of individual compliance test runs performed on Unit 1 and Unit 2 are presented in Tables 5-1 through 5-6.

Additional information is included in the appendices. Appendix A presents the quality assurance information, including instrument calibration data. Raw field data sheets are included in Appendix B. Appendix C presents the general and specific equations used for the emissions calculations and computer spreadsheets. Laboratory reports and chain of custody sheets for the samples are located in Appendix D.

5.2 PROBLEMS/DEVIATIONS/EXCEPTIONS

There no problems encountered during the testing.

TABLE 5-1
RESULTS SUMMARY GASEOUS EMISSIONS
CALPINE GREEN LEAF 1
TM2500 (Unit 1)

Reference Method Test Run Data

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 1
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Monday, September 20, 2021
Operator:	Tom Cassin

F Factor Information

F_s	-
F_d	8615.6
Reference Method Measurement Basis:	Dry - Extractive
CEMS Analyzer Measurement Basis:	-

Uncorrected Reference Method Analyzer Results

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/20/21	10:26	11:58	13.82	18.63	-	15.77	3.05
2	09/20/21	12:19	13:47	8.77	20.91	-	15.79	3.04
3	09/20/21	14:05	15:31	27.15	17.52	-	15.94	2.90

Calibration Corrected Reference Method Analyzer Results
Moisture Basis As Measured

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/20/21	10:26	11:58	13.76	18.74	-	15.79	3.07
2	09/20/21	12:19	13:47	8.93	21.03	-	15.84	3.07
3	09/20/21	14:05	15:31	27.12	17.48	-	16.00	2.92

Reference Method Emission Rate Summary - lb/MMBtu

Run Number	Test Date	CO lb/MMBtu	NO_x lb/MMBtu	SO_2 lb/MMBtu	F_s Factor	F_d Factor
1	09/20/21	0.035	0.0788	-	-	8615.6
2	09/20/21	0.023	0.0893	-	-	8615.6
3	09/20/21	0.072	0.077	-	-	8615.6

Reference Method Emission Rate Summary - lb/hr Using Heat Input and lb/MMBtu Emissions Factor

Run Number	Test Date	CO lb/hr	NO_x lb/hr	SO_2 lb/hr	Heat Input MMBtu/hr
1	09/20/21	11.25	25.17	-	319.5
2	09/20/21	7.03	27.20	-	304.56
3	09/20/21	22.75	24.09	-	314.05

Test Run Data Corrected to Reference O_2

		Corrected Data			Data Used for Correction			
Run Number	Test Date	CO ppmvd Corrected to 15% Oxygen	NO_x ppmvd Corrected to 15% Oxygen	SO_2 ppmvd Corrected to NA	CO ppmvd	NO_x ppmvd	SO_2 ppmvd	O_2 (% v/v Dry)
1	09/20/21	15.87	21.62	-	13.76	18.74	-	15.79
2	09/20/21	10.41	24.51	-	8.93	21.03	-	15.84
3	09/20/21	32.66	21.05	-	27.12	17.48	-	16.00

TABLE 5-2
RESULTS SUMMARY VOC EMISSIONS
CALPINE GREEN LEAF 1
TM2500 (Unit 1)

Method 25A - Total Hydrocarbon - THC- Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack
Project Number:	PROJ-01221
Test Date:	Monday, September 20, 2021
Operator:	Tom Cassin

Location	Source 1			
Test Run Number	1	2	3	Average
Condition	Base	Base	Base	
Test Date	9/20/2021	9/20/2021	9/20/2021	
Test Start	10:26	12:19	14:05	
Test End	11:58	13:47	15:31	
Test Duration (Minutes)	1:32	1:28	1:26	1:28:40
THC (ppmvw as Propane)	0.62	0.25	2.12	1.00
Volumetric Flow Rate (scfm)	165304.87	159436.67	169603.32	164782
THC (lb/hr as Propane)	0.70	0.27	2.46	1.15
THC (lb/hr as Carbon)	0.57	0.22	2.01	0.94
Moisture Content (%)	10.59	10.35	10.62	10.52
Oxygen (% Dry)	15.79	15.84	16	15.88
F_d	8616	8616	8616	8616
THC (lb/MMBtu) - F_d Basis	0.003	0.001	0.010	0.005
THC (ppmvw as Propane @ 15% O2)	0.72	0.29	2.55	1.19
THC (ppmvd as Propane @ 15% O2)	0.80	0.33	2.85	1.33
THC (ppmvd as Propane)	0.69	0.28	2.37	1.11

TABLE 5-3
RESULTS SUMMARY SULFUR DIOXIDE EMISSIONS
CALPINE GREEN LEAF 1
TM2500 (Unit 1)

SOURCE TEST DATA SUMMARY

Client				GE Power
Unit / Location				Unit 1
Reference temperature, °F				68
Test number	Grab 1	Grab 1	Grab 1	Average
Date	9-20-21	9-20-21	9-20-21	--
FUEL DATA				
Fuel "F" factor @ 68°F, dscf/MMBtu	8,616	8,616	8,616	8,616
Fuel "F" factor @ T_{ref}, dscf/MMBtu	8,616	8,616	8,616	8,616
Fuel higher heating value (HHV), Btu/scf	1,048	1,048	1,048	1,048
Fuel density, lb/scf	0.0454	0.0454	0.0454	0.0454
Fuel flow, lb/sec	3.79	3.61	3.73	3.71
Fuel flow, scfh	300,529	286,256	295,771	294,185
Fuel Sulfur, ppm weight	1.0	1.0	1.0	1.0
Fuel Sulfur, gr/100 scf	0.0318	0.0318	0.0318	0.0318
ANALYZER DATA				
O_2, % volume dry	15.79	15.84	16.00	15.88
VOLUMETRIC FLOW RATE				
Stack flow rate - based on fuel, dscfm	184,884	177,843	189,755	184,161
EMISSIONS				
SO_2 concentrations, ppm volume dry	0.015	0.015	0.014	0.015
2b SO_2 concentrations, ppm @ 15% O_2 dry	0.017	0.017	0.017	0.017
2e SO_2 mass emissions, lb/hr	0.027	0.026	0.027	0.027
2f SO_2 mass emissions, lb/MMBtu	0.000087	0.000087	0.000087	0.000087

TABLE 5-4
RESULTS SUMMARY GASEOUS EMISSIONS
CALPINE GREEN LEAF 1
TM2500 (Unit 2)

Reference Method Test Run Data

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 2
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Tuesday, September 21, 2021
Operator:	Tom Cassin

F Factor Information

F_c	-
F_d	8621.5
Reference Method Measurement Basis:	Dry - Extractive
CEMS Analyzer Measurement Basis:	-

Uncorrected Reference Method Analyzer Results

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/21/21	8:19	9:39	10.97	19.19	-	15.63	3.12
2	09/21/21	9:55	11:15	12.54	17.78	-	15.74	3.04
3	09/21/21	11:33	12:56	9.91	18.66	-	15.98	2.87

Calibration Corrected Reference Method Analyzer Results
Moisture Basis As Measured

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/21/21	8:19	9:39	10.97	19.21	-	15.59	3.13
2	09/21/21	9:55	11:15	12.68	17.83	-	15.74	3.05
3	09/21/21	11:33	12:56	10.03	18.75	-	16.02	2.88

Reference Method Emission Rate Summary - lb/MMBtu

Run Number	Test Date	CO lb/MMBtu	NO_x lb/MMBtu	SO_2 lb/MMBtu	F_c Factor	F_d Factor
1	09/21/21	0.027	0.0778	-	-	8621.5
2	09/21/21	0.032	0.0743	-	-	8621.5
3	09/21/21	0.027	0.083	-	-	8621.5

Reference Method Emission Rate Summary - lb/hr Using Heat Input and lb/MMBtu Emissions Factor

Run Number	Test Date	CO lb/hr	NO_x lb/hr	SO_2 lb/hr	Heat Input MMBtu/hr
1	09/21/21	8.99	25.87	-	332.5
2	09/21/21	10.29	23.77	-	319.95
3	09/21/21	8.47	26.01	-	314.41

Test Run Data Corrected to Reference O_2

		Corrected Data			Data Used for Correction			
Run Number	Test Date	CO ppmvd Corrected to 15% Oxyger	NO_x ppmvd Corrected to 15% Oxyger	SO_2 ppmvd Corrected to NA	CO ppmvd	NO_x ppmvd	SO_2 ppmvd	O_2 (% v/v Dry)
1	09/21/21	12.18	21.34	-	10.97	19.21	-	15.59
2	09/21/21	14.49	20.38	-	12.68	17.83	-	15.74
3	09/21/21	12.14	22.69	-	10.03	18.75	-	16.02

TABLE 5-5
RESULTS SUMMARY VOC EMISSIONS
CALPINE GREEN LEAF 1
TM2500 (Unit 2)

Method 25A - Total Hydrocarbon - THC- Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack GT2
Project Number:	PROJ-011221
Test Date:	Tuesday, September 21, 2021
Operator:	Tom Cassin

Location	Source 1			
Test Run Number	1	2	3	Average
Condition	Base	Base	Base	
Test Date	9/21/2021	9/21/2021	9/21/2021	
Test Start	8:19	9:55	11:33	
Test End	9:39	11:15	12:56	
Test Duration (Minutes)	1:20	1:20	1:23	1:21:00
THC (ppmvw as Propane)	0.97	0.72	0.51	0.73
Volumetric Flow Rate (scfm)	164846.23	162136.92	169282.9	165422
THC (lb/hr as Propane)	1.10	0.80	0.59	0.83
THC (lb/hr as Carbon)	0.90	0.65	0.48	0.68
Moisture Content (%)	11.09	11.49	11.22	11.27
Oxygen (% Dry)	15.59	15.74	16.02	15.78
F_d	8622	8622	8622	8622
THC (lb/MMBtu) - F_d Basis	0.004	0.003	0.002	0.003
THC (ppmvw as Propane @ 15% O2)	1.08	0.82	0.62	0.84
THC (ppmvd as Propane @ 15% O2)	1.21	0.92	0.69	0.94
THC (ppmvd as Propane)	1.09	0.81	0.57	0.83

TABLE 5-6
RESULTS SUMMARY SULFUR DIOXIDE EMISSIONS
CALPINE GREEN LEAF 1
TM2500 (Unit 2)

SOURCE TEST DATA SUMMARY				
Client				GE Power
Unit / Location				Unit 2
Reference temperature, °F				68
Test number	Grab 1	Grab 1	Grab 1	Average
Date	9-21-21	9-21-21	9-21-21	--
FUEL DATA				
Fuel "F" factor @ 68°F, dscf/MMBtu	8,622	8,622	8,622	8,622
Fuel "F" factor @ T_{ref}, dscf/MMBtu	8,622	8,622	8,622	8,622
Fuel higher heating value (HHV), Btu/scf	1,008	1,008	1,008	1,008
Fuel density, lb/scf	0.0444	0.0444	0.0444	0.0444
Fuel flow, lb/sec	4.01	3.85	3.79	3.88
Fuel flow, scfh	325,135	312,162	307,297	314,865
Fuel Sulfur, ppm weight	2.3	2.3	2.3	2.3
Fuel Sulfur, gr/100 scf	0.0715	0.0715	0.0715	0.0715
ANALYZER DATA				
O_2, % volume dry	15.59	15.74	16.02	15.78
VOLUMETRIC FLOW RATE				
Stack flow rate - based on fuel, dscfm	185,408	183,185	190,677	186,423
EMISSIONS				
SO_2 concentrations, ppm volume dry	0.036	0.035	0.033	0.035
2b SO_2 concentrations, ppm @ 15% O_2 dry	0.040	0.040	0.040	0.040
2e SO_2 mass emissions, lb/hr	0.066	0.064	0.063	0.064
2f SO_2 mass emissions, lb/MMBtu	0.000202	0.000202	0.000202	0.000202

APPENDIX A
QUALITY ASSURANCE AND QUALITY CONTROL

Appendix A.1
ASTM D-7036 Accreditation/QI Certificates

STACK TESTING ACCREDITATION COUNCIL

American Association for Laboratory Accreditation

Accredited Air Emission Testing Body

A2LA has accredited

MONTROSE AIR QUALITY SERVICES

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 11th day of February 2020.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3925.01
Valid to February 28, 2022

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

CERTIFICATE OF COMPLETION

Zach LeFever

This document certifies that this individual has passed a comprehensive examination and is now a Qualified Individual (QI) as defined in Section 8.3 of ASTM D7036-04 for the following method(s):

Source Evaluation Society Group 1: *EPA Manual Gas Volume and Flow Measurements and Isokinetic Particulate Sampling Methods*

Certificate Number: 011-2019-68

Tate Strickler, Accreditation Director

DATE OF ISSUE: 3/15/19

DATE OF EXPIRATION: 3/15/24

MONTROSE ENVIRONMENTAL

CERTIFICATE OF COMPLETION

Thomas E Cassin

This document certifies that this individual has passed a comprehensive examination and is now a Qualified Individual (QI) as defined in Section 8.3 of ASTM D7036-04 for the following method(s):

Source Evaluation Society Group 3: *EPA Gaseous Pollutants Instrumental Sampling Methods*

Certificate Number: 023-2021-23

Tate Strickler, VP – Quality Systems

DATE OF ISSUE: 5/4/21

DATE OF EXPIRATION: 5/3/26

MONTROSE ENVIRONMENTAL

Appendix A.2
RM Analyzer Calibration Data

MONTROSE
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Relative Accuracy Test Audit Analyzer Data

Client:	GE Power	Test Start Date:	Monday, September 20, 2021
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 1		
Test Location:	Stack	Reference Method Measurement Basis	Dry - Extractive
Condition/Load:	Base	CEMS Analyzer Measurement Basis	-
Project Number:	PROJ-011221		

Analyzer Information

Reference Method Analyzers

Pollutant Measured	Make	Model	Serial Number
CO	Thermo	48i	1160990031
NO_x	Thermo	42i	1160990029
O_2	Teledyne	T803	88
CO_2	Teledyne	T803	88

MONTROSE
AIR QUALITY SERVICES

Method 25A Analyzer Data

Client:	GE	Test Start Date:	Monday, September 20, 2021
Facility:	Greenleaf 1	Operator:	Tom Cassin
Test Location:	Stack		
Condition/Load:	Base		
Project Number:	PROJ-01221		

Analyzer Information

Reference Method Analyzers

Source	Make	Model	Serial Number
Source 1	JUM	FID 3-500	20013023-35

MONTROSE AIR QUALITY SERVICES

Initial Analyzer Calibration Error Check

Client:	GE Power	Test Start Date:	9/20/2021
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 1		
Test Location:	Stack		
Condition/Load:	Base		
Project Number:	PROJ-011221		

Initial Linearity Calibration Data

Pollutant Measured	Calibration Gas Level	Calibration Gas Cylinder Data			Absolute Difference	Analyzer Response	Calibration Error Percentage	Pass/Fail Status
		Expiration Date	Serial Number	Concentration (C_v)				
CO	High	2/7/2023	CC192422	48.64	0.05	48.69	0.10	Pass
	Mid	2/1/2024	EB0080203	23.82	0.38	24.20	0.78	Pass
	Low	1/10/2025	CC95867	0.00	0.06	-0.06	0.12	Pass
NO_x	High	2/7/2023	CC192422	46.48	0.17	46.65	0.37	Pass
	Mid	2/1/2024	EB0080203	24.04	0.03	24.07	0.06	Pass
	Low	1/10/2025	CC95867	0.00	0.10	-0.10	0.22	Pass
O_2	High	1/15/2026	EB0088291	20.87	0.07	20.94	0.34	Pass
	Mid	5/10/2029	CC100657	10.32	0.03	10.35	0.14	Pass
	Low	1/10/2025	CC95867	0.00	0.01	-0.01	0.05	Pass
CO_2	High	1/15/2026	EB0088291	19.50	0.09	19.59	0.46	Pass
	Mid	5/10/2029	CC100657	10.01	0.11	9.90	0.56	Pass
	Low	1/10/2025	CC95867	0.00	0.03	0.03	0.15	Pass

MONTROSE
AIR QUALITY SERVICES

Method 25A Analyzer Data

Client:	GE	Test Start Date:	9/20/2021
Facility:	Greenleaf 1	Operator:	Tom Cassin
Test Location:	Stack		
Condition/Load:	Base	Gas Used for Calibration:	Propane
Project Number:	PROJ-01221	Gas Used for Zero:	Air

RM Analyzer Linearity Calibration Data

Sampling Location	Calibration Gas Cylinder Values			Calibration Gas Level	Range	Predicted Response	System Response	Calibration Error Percentage	Pass/Fail <±5%
	Cylinder ID	Exp Date	Concentration						
Source 1	CC145376	3/19/2026	16.92	High	20		16.96	0.20	Pass
	CC431837	10/20/2028	9.87	Mid		9.89	9.86	-0.33	Pass
	CC287500	4/10/2029	5.98	Low		5.99	6.01	0.39	Pass
	EB0039484	4/5/2027	0.00	Zero			0.00	0.00	Pass

GE Power
Greenleaf1 GT1
Base Load

Linearity

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/20/21 5:28 AM	-0.1	-0.1	21.17	0	0.97	
9/20/21 5:29 AM	-0.09	-0.11	0.12	0.33	-0.22	
9/20/21 5:30 AM	-0.15	-0.03	-0.01	0.04	-0.29	
9/20/21 5:31 AM	**-0.1**	**-0.06**	**-0.01**	**0.03**	-0.18	**Z**
9/20/21 5:32 AM	-0.08	-1.13	20.83	5.39	0.01	
9/20/21 5:33 AM	-0.08	-0.97	20.94	18.64	0.03	
9/20/21 5:34 AM	-0.09	-1.02	**20.94**	**19.59**	-0.02	**H**
9/20/21 5:35 AM	-0.12	-0.93	14.04	18.84	-0.22	
9/20/21 5:36 AM	-0.15	-0.81	10.37	10.42	-0.18	
9/20/21 5:37 AM	-0.07	-0.9	**10.35**	**9.9**	-0.18	**M**
9/20/21 5:38 AM	37.01	38.94	0.05	5.32	-0.26	
9/20/21 5:39 AM	46.6	48.74	-0.01	0.02	-0.26	
9/20/21 5:40 AM	**46.65**	**48.69**	-0.02	0	-0.26	**H**
9/20/21 5:41 AM	35.74	30.43	-0.02	0.01	-0.32	
9/20/21 5:42 AM	24.06	24.28	-0.02	-0.01	-0.26	
9/20/21 5:43 AM	**24.07**	**24.2**	-0.03	0.01	-0.27	
9/20/21 5:44 AM	23.98	23.95	-0.03	0.01	-0.25	
9/20/21 5:45 AM	0.07	0	-0.01	0.01	-0.27	
9/20/21 5:56 AM	-0.09	-0.04	19.65	0	-0.12	
9/20/21 5:57 AM	-0.02	-0.9	10.35	8.83	**0**	**Z**
9/20/21 5:58 AM	-0.14	-0.79	19.7	9.97	17.02	
9/20/21 5:59 AM	-0.09	-0.18	21.25	0.27	**16.96**	**H**
9/20/21 6:00 AM	-0.07	-0.15	21.16	0	9.87	
9/20/21 6:01 AM	-0.04	-0.26	20.9	0.02	**9.86**	**M**
9/20/21 6:02 AM	-0.08	-0.26	21.25	0.01	6.04	
9/20/21 6:03 AM	-0.09	-0.31	21.41	0.02	**6.01**	**L**
9/20/21 6:04 AM	-0.09	-0.29	21.41	0.02	1.03	

MONTROSE AIR QUALITY SERVICES

Measurement System Response Time Test

Client:	GE Power	Response TimeTest Date:	09/20/21
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 1		
Test Location:	Stack		
Project Number:	PROJ-011221		

Upscale Response Time Test

Pollutant Measured	Calibraton Gas Used (Mid or High)	Calibration Gas Concentration	Stable Response	Start Time	Time to Target Value	Upscale Target Value	Response Time
CO	Mid	23.82	24.13	5:52:00	5:53:00	22.92	0:01:00
NO_x	Mid	24.04	23.90	5:52:00	5:53:00	22.71	0:01:00
O_2	Mid	10.32	10.35	5:46:00	5:47:00	9.83	0:01:00

Downscale Response Time Test

Pollutant Measured	Calibraton Gas Used (Mid or High)	Calibration Gas Concentration	Start Time	Time to Target Value	Downscale Target Value[1]	Response Time
CO	Mid	23.82	5:54:00	5:55:00	1.19	0:01:00
NO_x	Mid	24.04	5:54:00	5:55:00	1.20	0:01:00
O_2	Mid	10.32	5:48:00	5:49:00	0.52	0:01:00

MONTROSE
AIR QUALITY SERVICES

Measurement System Response Time Test

Client:	GE	Response TimeTest Date:	9/20/2021
Facility:	Greenleaf 1	Operator:	Tom Cassin
Test Location:	Stack		
Project Number:	PROJ-01221		

Upscale Response Time Test

Pollutant Measured	Calibraton Gas Used	Calibration Gas Concentration	Target Response	Start Time	Time to Target Value	Upscale Target Value	Response Time
Source 1	Mid	9.873	9.86	6:06:00	6:07:00	9.37	0:01:00

Downscale Response Time Test

Pollutant Measured	Calibraton Gas Used	Calibration Gas Concentration	Start Time	Time to Target Value	Downscale Target Value[1]	Response Time
Source 1	Mid	9.873	6:08:00	6:09:00	0.49	0:01:00

GE Power **Response Time**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	UHC ppmvw
9/20/21 5:45 AM	0.07	0	-0.01	-0.27
9/20/21 5:46 AM	-0.01	0.02	-0.01	-0.16
9/20/21 5:47 AM	-0.06	-0.92	10.35	-0.21
9/20/21 5:48 AM	-0.11	-0.81	10.33	-0.22
9/20/21 5:49 AM	-0.06	-0.1	-0.01	-0.23
9/20/21 5:50 AM	-0.06	-0.06	-0.02	-0.21
9/20/21 5:51 AM	-0.07	0	-0.03	-0.25
9/20/21 5:52 AM	-0.16	-0.07	0.02	-0.25
9/20/21 5:53 AM	23.9	24.13	-0.03	-0.26
9/20/21 5:54 AM	23.96	24.26	-0.01	-0.27
9/20/21 5:55 AM	0.07	0.1	-0.03	-0.24
9/20/21 5:56 AM	-0.09	-0.04	19.65	-0.12
9/20/21 6:05 AM	-0.07	-0.54	10.61	0.02
9/20/21 6:06 AM	-0.14	-0.84	10.37	0.03
9/20/21 6:07 AM	-0.09	-0.44	20.91	9.86
9/20/21 6:08 AM	-0.05	-0.27	20.93	9.81
9/20/21 6:09 AM	-0.07	-0.55	10.67	-0.03
9/20/21 6:10 AM	-0.12	-0.51	21.07	1.06

Measurement Ranges

Day 1	CO (ppm)	NO_x (ppm)	SO_2 (ppm)	O_2 (% vol)	CO_2 (% vol)
Measurement Ranges Based on Calibration Gas	48.64	46.48	-	20.87	19.50

Low-Level or Zero Calibration Gas System Responses

Day 1 = A Day 2 =B	Run Number	Test Date	CO (ppm)		NO_x (ppm)		SO_2 (ppm)		O_2 (% vol)		CO_2 (% vol)	
			Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal
A	1	09/20/21	-0.05	-0.19	0.01	0.02	-	-	-0.01	-0.02	0.01	0.00
A	2	09/20/21	-0.19	-0.29	0.02	0.02	-	-	-0.02	-0.03	0.00	0.00
A	3	09/20/21	-0.29	-0.05	0.02	0.06	-	-	-0.03	-0.03	0.00	0.02

Day 1	CO (ppm)	NO_x (ppm)	SO_2 (ppm)	O_2 (% vol)	CO_2 (% vol)
High or Mid	Mid	Mid	-	Mid	Mid
C_{MA}	23.82	24.04	-	10.32	10.01

High-Level Calibration Gas System Responses

Day 1 = A Day 2 =B	Run Number	Test Date	CO (ppm)		NO_x (ppm)		SO_2 (ppm)		O_2 (% vol)		CO_2 (% vol)	
			Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal
A	1	09/20/21	24.13	23.91	23.75	24.03	-	-	10.32	10.29	9.94	9.95
A	2	09/20/21	23.91	23.67	24.03	23.78	-	-	10.29	10.27	9.95	9.87
A	3	09/20/21	23.67	23.99	23.78	24.38	-	-	10.27	10.27	9.87	9.95

MONTROSE AIR QUALITY SERVICES

Calibration Error and Drift Summary

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 1
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Monday, September 20, 2021
Operator:	Tom Cassin

Carbon Monoxide (CO) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (ppm)	Direct Response (ppm)	System Response (ppm)	System Bias % of Span	System Response (ppm)	System Bias % of Span	% of Span (D)
1	Low	48.64	-0.06	-0.05	0.0	-0.19	-0.3	0.3
	Upscale	48.64	24.20	24.13	-0.1	23.91	-0.6	0.5
2	Low	48.64	-0.06	-0.19	-0.3	-0.29	-0.5	0.2
	Upscale	48.64	24.20	23.91	-0.6	23.67	-1.1	0.5
3	Low	48.64	-0.06	-0.29	-0.5	-0.05	0.0	0.5
	Upscale	48.64	24.20	23.67	-1.1	23.99	-0.4	0.7

Nitrogen Oxides (NO_x) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (ppm)	Direct Response (ppm)	System Response (ppm)	System Bias % of Span	System Response (ppm)	System Bias % of Span	% of Span (D)
1	Low	46.48	-0.10	0.01	0.2	0.02	0.3	0.0
	Upscale	46.48	24.07	23.75	-0.7	24.03	-0.1	0.6
2	Low	46.48	-0.10	0.02	0.3	0.02	0.3	0.0
	Upscale	46.48	24.07	24.03	-0.1	23.78	-0.6	0.5
3	Low	46.48	-0.10	0.02	0.3	0.06	0.3	0.1
	Upscale	46.48	24.07	23.78	-0.6	24.38	0.7	1.3

Oxygen (O_2) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (%vol)	Direct Response (%vol)	System Response (ppm)	System Bias % of Span	System Response (%vol)	System Bias % of Span	% of Span (D)
1	Low	20.87	-0.01	-0.01	0.0	-0.02	0.0	0.0
	Upscale	20.87	10.35	10.32	-0.1	10.29	-0.3	0.1
2	Low	20.87	-0.01	-0.02	0.0	-0.03	-0.1	0.0
	Upscale	20.87	10.35	10.29	-0.3	10.27	-0.4	0.1
3	Low	20.87	-0.01	-0.03	-0.1	-0.03	-0.1	0.0
	Upscale	20.87	10.35	10.27	-0.4	10.27	-0.4	0.0

Carbon Dioxide (CO_2) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (%vol)	Direct Response (%vol)	System Response (ppm)	System Bias % of Span	System Response (%vol)	System Bias % of Span	% of Span (D)
1	Low	19.50	0.03	0.01	-0.1	0.00	-0.2	0.1
	Upscale	19.50	9.90	9.94	0.2	9.95	0.3	0.1
2	Low	19.50	0.03	0.00	-0.2	0.00	-0.2	0.0
	Upscale	19.50	9.90	9.95	0.3	9.87	-0.2	0.4
3	Low	19.50	0.03	0.00	-0.2	0.02	-0.1	0.1
	Upscale	19.50	9.90	9.87	-0.2	9.95	0.3	0.4

MONTROSE
AIR QUALITY SERVICES

Method 25A Calibration Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack
Project Number:	PROJ-01221
Test Date:	9/20/2021
Operator:	Tom Cassin

Upscale Calibration Gas Used	
	Source 1
Calibration Gas Type	Propane
Upscale Gas Used	Mid
Upscale Gas Concentration	9.87

Upscale System Response

	Source 1	
Test Run Number	Pre Cal	Post Cal
1	9.92	9.90
2	9.92	9.87
3	9.92	9.80
4	-	-

Zero System Response

	Source 1	
Test Run Number	Pre Cal	Post Cal
1	-0.01	0.13
2	-0.01	-0.12
3	-0.01	-0.06
4	-	-

Method 25A Drift Calculations

Source 1						
Run	Span Gas Concentration (ppm)	Calibration Gas Level	System Response (ppm) Initial	System Response (ppm) Final	Drift %	Acceptability +/- 3%
1	9.87	Upscale	9.92	9.90	-0.10	Pass
		Zero	-0.01	0.13	0.70	Pass
2	9.87	Upscale	9.92	9.87	-0.25	Pass
		Zero	-0.01	-0.12	-0.55	Pass
3	9.87	Upscale	9.92	9.80	-0.60	Pass
		Zero	-0.01	-0.06	-0.25	Pass

GE Power **Pre 1**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/20/21 10:11 AM	0.04	-0.02	-0.03	0.01	-0.14	
9/20/21 10:12 AM	**0.01**	**-0.05**	**-0.01**	**0.01**	-0.07	**Z**
9/20/21 10:13 AM	0.02	-0.98	10.29	7.78	-0.06	
9/20/21 10:14 AM	-0.05	-0.86	**10.32**	**9.94**	-0.09	**M**
9/20/21 10:15 AM	23.53	23.66	-0.01	1.18	-0.09	
9/20/21 10:16 AM	23.72	24.12	-0.02	0.01	-0.11	
9/20/21 10:17 AM	**23.75**	**24.13**	-0.04	0.01	-0.11	**M**
9/20/21 10:18 AM	21.62	7.91	10.22	2	-0.03	
9/20/21 10:19 AM	0.03	-0.82	10.29	9.9	**-0.01**	**Z**
9/20/21 10:20 AM	7.14	1.64	20.72	5.91	9.88	
9/20/21 10:21 AM	-0.02	-0.41	20.85	0.01	**9.92**	**M**
9/20/21 10:22 AM	-0.01	2.02	18.93	0.02	1.05	

GE Power **Post1/Pre2**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/20/21 12:00 PM	0.23	-0.11	-0.02	0.04	-0.1	
9/20/21 12:01 PM	0.11	-0.09	-0.02	-0.01	-0.08	
9/20/21 12:02 PM	**0.02**	**-0.19**	**-0.02**	**0**	-0.02	**Z**
9/20/21 12:03 PM	0.02	-0.96	10.29	8.96	-0.01	
9/20/21 12:04 PM	0.03	-0.9	10.3	9.96	-0.07	
9/20/21 12:05 PM	0.06	-0.97	**10.29**	**9.95**	-0.1	**M**
9/20/21 12:06 PM	23.47	23.55	-0.02	1.01	-0.12	
9/20/21 12:07 PM	**24.03**	**23.91**	-0.02	0.02	-0.1	**M**
9/20/21 12:08 PM	23.98	13.72	0.05	0.04	-0.08	
9/20/21 12:09 PM	22.31	12.98	14.73	2.27	0.13	
9/20/21 12:10 PM	0.17	-0.45	20.86	16.13	**0.13**	**Z**
9/20/21 12:11 PM	-0.02	-0.41	15.63	18.79	9.15	
9/20/21 12:12 PM	0.05	-0.42	20.82	1.03	**9.9**	**M**

GE Power **Post2/Pre3**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/20/21 1:48 PM	15.67	4.28	0.63	2.15	-0.33	
9/20/21 1:49 PM	0.08	-0.29	-0.02	0.29	-0.23	
9/20/21 1:50 PM	**0.02**	**-0.29**	**-0.03**	**0**	-0.3	**Z**
9/20/21 1:51 PM	0.01	-0.66	10.02	0.07	-0.3	
9/20/21 1:52 PM	-0.02	-1	10.28	9.84	-0.22	
9/20/21 1:53 PM	-0.06	-0.98	**10.27**	**9.87**	-0.21	**M**
9/20/21 1:54 PM	33.06	21.26	0.01	5.33	-0.34	
9/20/21 1:55 PM	23.73	23.62	-0.03	0.02	-0.3	
9/20/21 1:56 PM	**23.78**	**23.67**	-0.02	-0.01	0.49	
9/20/21 1:57 PM	0.76	1.05	20.78	13.75	**-0.12**	**Z**
9/20/21 1:58 PM	0.24	0.48	20.65	15.25	9.31	
9/20/21 1:59 PM	-0.03	-0.55	20.78	0.11	**9.87**	M
9/20/21 2:00 PM	-0.02	-0.51	20.78	0.02	9.92	
9/20/21 2:01 PM	-0.04	-0.49	20.79	0.01	9.85	

GE Power **Post 3**
Greenleaf1 GT1
Base Load

	NOx ppmvc	CO ppmvd	O2%	CO2%	JHC ppmvw	
9/20/21 3:34 PM	0.07	-0.06	-0.02	0	-0.33	
9/20/21 3:35 PM	**0.06**	**-0.05**	**-0.03**	**0.02**	-0.25	**Z**
9/20/21 3:36 PM	-0.02	-0.74	10.2	2.21	-0.26	
9/20/21 3:37 PM	-0.09	-0.83	10.28	9.81	-0.21	
9/20/21 3:38 PM	-0.03	-0.81	**10.27**	**9.95**	-0.26	**M**
9/20/21 3:39 PM	23.48	23.86	-0.03	0.4	-0.31	
9/20/21 3:40 PM	24.33	23.9	-0.04	0.01	-0.3	
9/20/21 3:41 PM	**24.38**	**23.99**	-0.05	0.02	-0.12	
9/20/21 3:42 PM	0.19	0.33	20.81	16.85	-0.06	
9/20/21 3:43 PM	-0.02	-0.94	20.82	18.7	**-0.06**	**Z**
9/20/21 3:44 PM	0.07	-0.53	20.76	10.49	9.92	
9/20/21 3:45 PM	-0.01	-0.37	20.78	0.03	**9.8**	**M**
9/20/21 3:46 PM	-0.08	-0.25	21.04	0.01	0.79	

MONTROSE
AIR QUALITY SERVICES

Relative Accuracy Test Audit Analyzer Data

Client:	GE Power	Test Start Date:	Tuesday, September 21, 2021
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 2		
Test Location:	Stack	Reference Method Measurement Basis	Dry - Extractive
Condition/Load:	Base	CEMS Analyzer Measurement Basis	-
Project Number:	PROJ-011221		

Analyzer Information

Reference Method Analyzers

Pollutant Measured	Make	Model	Serial Number
CO	Thermo	48i	1160990031
NO_x	Thermo	42i	1160990029
O_2	Teledyne	T803	88
CO_2	Teledyne	T803	88

MONTROSE
AIR QUALITY SERVICES

Method 25A Analyzer Data

Client:	GE	Test Start Date:	Tuesday, September 21, 2021
Facility:	Greenleaf 1	Operator:	Tom Cassin
Test Location:	Stack GT2		
Condition/Load:	Base Load		
Project Number:	PROJ-011221		

Analyzer Information

Reference Method Analyzers

Source	Make	Model	Serial Number
Source 1	JUM	FID 3-500	20013023-35

MONTROSE AIR QUALITY SERVICES

Initial Analyzer Calibration Error Check

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 2
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	9/21/2021
Operator:	Tom Cassin

Initial Linearity Calibration Data

Pollutant Measured	Calibration Gas Level	Calibration Gas Cylinder Data			Absolute Difference	Analyzer Response	Calibration Error Percentage	Pass/Fail Status
		Expiration Date	Serial Number	Concentration (C_v)				
CO	High	2/7/2023	CC192422	48.64	0.38	49.02	0.78	Pass
	Mid	2/1/2024	EB0080203	23.82	0.15	23.97	0.31	Pass
	Low	1/10/2025	CC95867	0.00	0.00	0.00	0.00	Pass
NO_x	High	2/7/2023	CC192422	46.48	0.00	46.48	0.00	Pass
	Mid	2/1/2024	EB0080203	24.04	0.09	23.95	0.19	Pass
	Low	1/10/2025	CC95867	0.00	0.13	-0.13	0.28	Pass
O_2	High	1/15/2026	EB0088291	20.87	0.10	20.97	0.48	Pass
	Mid	5/10/2029	CC100657	10.32	0.03	10.35	0.14	Pass
	Low	1/10/2025	CC95867	0.00	0.02	-0.02	0.10	Pass
CO_2	High	1/15/2026	EB0088291	19.50	0.01	19.49	0.05	Pass
	Mid	5/10/2029	CC100657	10.01	0.03	10.04	0.15	Pass
	Low	1/10/2025	CC95867	0.00	0.01	0.01	0.05	Pass

MONTROSE AIR QUALITY SERVICES

Method 25A Analyzer Data

Client:	GE	Test Start Date:	9/21/2021
Facility:	Greenleaf 1	Operator:	Tom Cassin
Test Location:	Stack GT2		
Condition/Load:	Base Load	Gas Used for Calibration:	Propane
Project Number:	PROJ-011221	Gas Used for Zero:	Air

RM Analyzer Linearity Calibration Data

Sampling Location	Calibration Gas Cylinder Values			Calibration Gas Level	Range	Predicted Response	System Response	Calibration Error Percentage	Pass/Fail <±5%
	Cylinder ID	Exp Date	Concentration						
Source 1	CC145376	3/19/2026	16.92	High	20		16.99	0.35	Pass
	CC431837	10/20/2028	9.87	Mid		9.88	9.91	0.29	Pass
	CC287500	4/10/2029	5.98	Low		5.95	6.00	0.86	Pass
	EB0039484	4/5/2027	0.00	Zero			-0.08	-0.40	Pass

Predicted Response Calculations

GE Power **Linearity**
Greenleaf1 GT2
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/21/21 5:49	-0.15	0.21	21.18	0.01	1.29	
9/21/21 5:50	-0.18	0.26	0.05	0.02	-0.19	
9/21/21 5:51	**-0.13**	**0**	**-0.02**	**0.01**	-0.18	**Z**
9/21/21 5:52	-0.14	-0.07	-0.01	0.01	-0.2	
9/21/21 5:53	-0.11	-1.12	20.96	14.6	0.1	
9/21/21 5:54	-0.12	-0.92	20.96	18.83	0.16	
9/21/21 5:55	-0.11	-0.96	**20.97**	**19.49**	0.11	**H**
9/21/21 5:56	-0.11	-1.02	20.98	19.46	-0.06	
9/21/21 5:57	-0.12	-0.76	10.38	11.12	-0.08	
9/21/21 5:58	-0.13	-0.77	**10.35**	**10.04**	-0.04	**M**
9/21/21 5:59	-0.09	-0.77	10.37	10	-0.16	
9/21/21 6:00	48.73	48.48	-0.01	1.07	-0.19	
9/21/21 6:01	**46.48**	**49.02**	-0.01	0	-0.13	**H**
9/21/21 6:02	46.62	49	0	-0.01	-0.15	
9/21/21 6:03	25.21	26.45	-0.01	0	-0.2	
9/21/21 6:04	23.93	23.94	-0.03	0.02	-0.2	
9/21/21 6:05	**23.95**	**23.97**	-0.03	0	-0.14	**M**
9/21/21 6:06	1.22	1.44	-0.01	0.01	-0.19	
9/21/21 6:19	-0.09	-1	21.01	17.86	0.01	
9/21/21 6:20	-0.06	-0.9	21.01	18.87	**-0.08**	**Z**
9/21/21 6:21	-0.08	-0.9	21.03	18.93	0.07	
9/21/21 6:22	0.01	-0.28	21.32	7.38	**16.99**	**H**
9/21/21 6:23	-0.1	-0.11	21.34	0	17.09	
9/21/21 6:24	-0.06	-0.19	21	0	9.95	
9/21/21 6:25	-0.06	-0.32	20.99	0.01	**9.91**	**M**
9/21/21 6:26	-0.06	-0.33	21.47	0.02	6.02	
9/21/21 6:27	-0.11	-0.23	21.49	0.01	**6**	**L**
9/21/21 6:28	-0.07	-0.12	21.22	0.01	-0.02	

MONTROSE AIR QUALITY SERVICES

Measurement System Response Time Test

Client:	GE Power	Response TimeTest Date:	9/21/21
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 2		
Test Location:	Stack		
Project Number:	PROJ-011221		

Upscale Response Time Test

Pollutant Measured	Calibraton Gas Used (Mid or High)	Calibration Gas Concentration	Stable Response	Start Time	Time to Target Value	Upscale Target Value	Response Time
CO	Mid	23.82	23.75	6:13:00	6:14:00	22.56	0:01:00
NO_x	Mid	24.04	23.78	6:13:00	6:14:00	22.59	0:01:00
O_2	Mid	10.32	10.34	6:09:00	6:10:00	9.82	0:01:00

Downscale Response Time Test

Pollutant Measured	Calibraton Gas Used (Mid or High)	Calibration Gas Concentration	Start Time	Time to Target Value	Downscale Target Value[1]	Response Time
CO	Mid	23.82	6:16:00	6:17:00	1.19	0:01:00
NO_x	Mid	24.04	6:16:00	6:17:00	1.20	0:01:00
O_2	Mid	10.32	6:11:00	6:12:00	0.52	0:01:00

[1] The calculated downscale is 5% of the upscale. 0.5ppm may also be used if less restrictive.

MONTROSE
AIR QUALITY SERVICES

Measurement System Response Time Test

Client:	GE	Response TimeTest Date:	9/21/2021
Facility:	Greenleaf 1	Operator:	Tom Cassin
Test Location:	Stack GT2		
Project Number:	PROJ-011221		

Upscale Response Time Test

Pollutant Measured	Calibraton Gas Used	Calibration Gas Concentration	Target Response	Start Time	Time to Target Value	Upscale Target Value	Response Time
Source 1	Mid	9.873	9.91	6:30:00	6:31:00	9.41	0:01:00

Downscale Response Time Test

Pollutant Measured	Calibraton Gas Used	Calibration Gas Concentration	Start Time	Time to Target Value	Downscale Target Value[1]	Response Time
Source 1	Mid	9.873	6:32:00	6:33:00	0.49	0:01:00

GE Power **Response Time**
Greenleaf1 GT2
Base Load

	NOx ppmvd	CO ppmvd	O2%	UHC ppmvw
9/21/21 6:07	0.01	0.02	-0.01	-0.19
9/21/21 6:08	-0.05	-0.04	-0.03	-0.26
9/21/21 6:09	**-0.09**	**0.02**	**-0.02**	-0.01
9/21/21 6:10	-0.11	-0.77	**10.34**	-0.05
9/21/21 6:11	-0.1	-0.79	**10.38**	-0.18
9/21/21 6:12	-0.06	-0.12	**0**	-0.26
9/21/21 6:13	**-0.12**	**-0.08**	-0.02	-0.23
9/21/21 6:14	**23.78**	**23.75**	-0.01	-0.23
9/21/21 6:15	**23.99**	**23.95**	-0.01	-0.24
9/21/21 6:16	**24**	**23.94**	-0.03	-0.32
9/21/21 6:17	**-0.02**	**0.02**	-0.02	-0.24
9/21/21 6:18	-0.11	-0.03	14.68	0.17
9/21/21 6:28	-0.07	-0.12	21.22	-0.02
9/21/21 6:29	-0.1	-1.02	21.04	-0.04
9/21/21 6:30	-0.13	-0.97	21.05	**-0.05**
9/21/21 6:31	-0.12	-0.34	20.99	**9.91**
9/21/21 6:32	-0.11	-0.31	21	**9.87**
9/21/21 6:33	-0.09	-0.63	21.05	**-0.04**

Measurement Ranges

Day 1	CO (ppm)	NO_x (ppm)	SO_2 (ppm)	O_2 (% vol)	CO_2 (% vol)
Measurement Ranges Based on Calibration Gas	48.64	46.48	-	20.87	19.50

Low-Level or Zero Calibration Gas System Responses

Day 1 = A Day 2 =B	Run Number	Test Date	CO (ppm)		NO_x (ppm)		SO_2 (ppm)		O_2 (% vol)		CO_2 (% vol)	
			Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal
A	1	09/21/21	0.02	-0.07	-0.09	0.15	-	-	-0.02	-0.02	0.02	0.01
A	2	09/21/21	-0.07	-0.10	0.15	0.07	-	-	-0.02	-0.02	0.01	0.01
A	3	09/21/21	-0.10	-0.03	0.07	0.13	-	-	-0.02	-0.02	0.01	0.01

Day 1	CO (ppm)	NO_x (ppm)	SO_2 (ppm)	O_2 (% vol)	CO_2 (% vol)
High or Mid	Mid	Mid	-	Mid	Mid
C_{MA}	23.82	24.04	-	10.32	10.01

High-Level Calibration Gas System Responses

Day 1 = A Day 2 =B	Run Number	Test Date	CO (ppm)		NO_x (ppm)		SO_2 (ppm)		O_2 (% vol)		CO_2 (% vol)	
			Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal	Pre Cal	Post Cal
A	1	09/21/21	23.94	23.77	24.00	24.02	-	-	10.34	10.34	9.93	9.94
A	2	09/21/21	23.77	23.50	24.02	23.85	-	-	10.34	10.29	9.94	9.94
A	3	09/21/21	23.50	23.73	23.85	23.94	-	-	10.29	10.28	9.94	9.94

MONTROSE
AIR QUALITY SERVICES

Calibration Error and Drift Summary

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 2
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Tuesday, September 21, 2021
Operator:	Tom Cassin

Carbon Monoxide (CO) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (ppm)	Direct Response (ppm)	System Response (ppm)	System Bias % of Span	System Response (ppm)	System Bias % of Span	% of Span (D)
1	Low	48.64	0.00	0.02	0.0	-0.07	-0.1	0.2
	Upscale	48.64	23.97	23.94	-0.1	23.77	-0.4	0.3
2	Low	48.64	0.00	-0.07	-0.1	-0.10	-0.2	0.1
	Upscale	48.64	23.97	23.77	-0.4	23.50	-1.0	0.6
3	Low	48.64	0.00	-0.10	-0.2	-0.03	-0.1	0.1
	Upscale	48.64	23.97	23.50	-1.0	23.73	-0.5	0.5

Nitrogen Oxides (NO_x) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (ppm)	Direct Response (ppm)	System Response (ppm)	System Bias % of Span	System Response (ppm)	System Bias % of Span	% of Span (D)
1	Low	46.48	-0.13	-0.09	0.1	0.15	0.6	0.5
	Upscale	46.48	23.95	24.00	0.1	24.02	0.2	0.0
2	Low	46.48	-0.13	0.15	0.6	0.07	0.4	0.2
	Upscale	46.48	23.95	24.02	0.2	23.85	-0.2	0.4
3	Low	46.48	-0.13	0.07	0.4	0.13	0.6	0.1
	Upscale	46.48	23.95	23.85	-0.2	23.94	0.0	0.2

Oxygen (O_2) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (%vol)	Direct Response (%vol)	System Response (ppm)	System Bias % of Span	System Response (%vol)	System Bias % of Span	% of Span (D)
1	Low	20.87	-0.02	-0.02	0.0	-0.02	0.0	0.0
	Upscale	20.87	10.35	10.34	0.0	10.34	0.0	0.0
2	Low	20.87	-0.02	-0.02	0.0	-0.02	0.0	0.0
	Upscale	20.87	10.35	10.34	0.0	10.29	-0.3	0.2
3	Low	20.87	-0.02	-0.02	0.0	-0.02	0.0	0.0
	Upscale	20.87	10.35	10.29	-0.3	10.28	-0.3	0.0

Carbon Dioxide (CO_2) Bias and Drift Data

Run Number	Cal Gas Level	C_v	C_{Dir}	System Initial Values		System Final Values		Drift Assesment
	Low & Upscale	Span Gas Concentration (%vol)	Direct Response (%vol)	System Response (ppm)	System Bias % of Span	System Response (%vol)	System Bias % of Span	% of Span (D)
1	Low	19.50	0.01	0.02	0.1	0.01	0.0	0.1
	Upscale	19.50	10.04	9.93	-0.6	9.94	-0.5	0.1
2	Low	19.50	0.01	0.01	0.0	0.01	0.0	0.0
	Upscale	19.50	10.04	9.94	-0.5	9.94	-0.5	0.0
3	Low	19.50	0.01	0.01	0.0	0.01	0.0	0.0
	Upscale	19.50	10.04	9.94	-0.5	9.94	-0.5	0.0

MONTROSE
AIR QUALITY SERVICES

Method 25A Calibration Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack GT2
Project Number:	PROJ-011221
Test Date:	9/21/2021
Operator:	Tom Cassin

Upscale Calibration Gas Used	
	Source 1
Calibration Gas Type	Propane
Upscale Gas Used	Mid
Upscale Gas Concentration	9.87

Upscale System Response

	Source 1	
Test Run Number	Pre Cal	Post Cal
1	9.91	9.91
2	9.91	9.90
3	9.91	9.97

Zero System Response

	Source 1	
Test Run Number	Pre Cal	Post Cal
1	-0.05	-0.01
2	-0.05	-0.07
3	-0.05	-0.07

Method 25A Drift Calculations

Source 1						
Run	Span Gas Concentration (ppm)	Calibration Gas Level	System Response (ppm) Initial	System Response (ppm) Final	Drift %	Acceptability +/- 3%
1	9.87	Upscale	9.91	9.91	0.00	Pass
		Zero	-0.05	-0.01	0.20	Pass
2	9.87	Upscale	9.91	9.90	-0.05	Pass
		Zero	-0.05	-0.07	-0.10	Pass
3	9.87	Upscale	9.91	9.97	0.30	Pass
		Zero	-0.05	-0.07	-0.10	Pass

GE Power **Pre 1**

Greenleaf1 GT2

Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/21/21 6:07	0.01	0.02	-0.01	0.01	-0.19	
9/21/21 6:08	-0.05	-0.04	-0.03	0	-0.26	
9/21/21 6:09	**-0.09**	**0.02**	**-0.02**	**0.02**	-0.01	**Z**
9/21/21 6:10	-0.11	-0.77	**10.34**	9.25	-0.05	**M**
9/21/21 6:11	-0.1	-0.79	10.38	**9.93**	-0.18	**M**
9/21/21 6:12	-0.06	-0.12	0	1.68	-0.26	
9/21/21 6:13	-0.12	-0.08	-0.02	0.01	-0.23	
9/21/21 6:14	23.78	23.75	-0.01	0	-0.23	
9/21/21 6:15	23.99	23.95	-0.01	-0.01	-0.24	
9/21/21 6:16	**24**	**23.94**	-0.03	0.01	-0.32	**M**
9/21/21 6:17	-0.02	0.02	-0.02	0.02	-0.24	
9/21/21 6:28	-0.07	-0.12	21.22	0.01	-0.02	
9/21/21 6:29	-0.1	-1.02	21.04	17.83	-0.04	
9/21/21 6:30	-0.13	-0.97	21.05	18.92	**-0.05**	**Z**
9/21/21 6:31	-0.12	-0.34	20.99	4.65	**9.91**	**M**

GE Power **Post1/Pre2**

Greenleaf1 GT2

Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/21/21 9:40 AM	6.36	0.91	0.05	1.92	-0.57	
9/21/21 9:41 AM	0.26	-0.05	-0.02	0.02	-0.56	
9/21/21 9:42 AM	**0.15**	**-0.07**	**-0.02**	**0.01**	-0.46	**Z**
9/21/21 9:43 AM	0.07	-0.84	10.31	8.13	-0.51	
9/21/21 9:44 AM	0.06	-0.85	10.32	9.9	-0.47	
9/21/21 9:45 AM	0.01	-0.89	**10.34**	**9.94**	-0.49	**M**
9/21/21 9:46 AM	4.07	6.39	18.87	5.6	0.61	
9/21/21 9:47 AM	6.61	3.99	18.97	1.25	0.4	
9/21/21 9:48 AM	15.4	17.9	3.32	1	-0.65	
9/21/21 9:49 AM	23.94	23.66	-0.01	0.08	-0.62	
9/21/21 9:50 AM	**24.02**	**23.77**	5.82	0	-0.3	**M**
9/21/21 9:51 AM	0.16	-0.55	20.9	17.64	**-0.01**	**Z**
9/21/21 9:52 AM	1.75	1.17	20.82	8.47	**9.91**	**M**
9/21/21 9:53 AM	3.07	2.84	19.06	0.24	1.93	

GE Power **Post2/Pre3**

Greenleaf1 GT2

Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/21/21 11:17 AM	0.18	-0.1	-0.02	0.01	-0.41	
9/21/21 11:18 AM	**0.07**	**-0.1**	**-0.02**	**0.01**	-0.43	**Z**
9/21/21 11:19 AM	0.01	-0.91	10.29	8.81	-0.43	
9/21/21 11:20 AM	-0.02	-0.88	10.29	9.93	-0.41	
9/21/21 11:21 AM	-0.07	-0.95	**10.29**	**9.94**	-0.46	**M**
9/21/21 11:22 AM	23.74	23.5	-0.03	0.62	-0.49	
9/21/21 11:23 AM	23.87	23.63	-0.01	0.01	-0.51	
9/21/21 11:24 AM	**23.85**	**23.5**	10.52	0.01	-0.23	**M**
9/21/21 11:25 AM	0.14	-0.67	20.87	17.71	**-0.07**	**Z**
9/21/21 11:26 AM	9.88	4.64	20.67	13.5	9.79	
9/21/21 11:27 AM	-0.02	-0.41	20.81	0.04	**9.9**	**M**
9/21/21 11:28 AM	13.79	10.64	15.1	0.82	0.72	

GE Power **Post 3**
Greenleaf1 GT2
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw	
9/21/21 1:00 PM	0.37	-0.09	-0.01	0.12	-0.31	
9/21/21 1:01 PM	**0.13**	**-0.03**	**-0.02**	**0.01**	-0.31	**Z**
9/21/21 1:02 PM	0	-0.08	-0.01	0.01	-0.23	
9/21/21 1:03 PM	-0.02	-0.87	10.27	8.77	-0.22	
9/21/21 1:04 PM	-0.04	-0.83	**10.28**	**9.94**	-0.32	**M**
9/21/21 1:05 PM	-0.07	-0.82	10.27	9.94	-0.25	
9/21/21 1:06 PM	0.02	-0.82	10.29	10.01	-0.3	
9/21/21 1:07 PM	4.6	9.13	0.17	9.82	-0.35	
9/21/21 1:08 PM	23.5	23.68	-0.03	0.02	-0.31	
9/21/21 1:09 PM	23.93	23.68	-0.05	0	-0.29	
9/21/21 1:10 PM	23.92	23.84	-0.03	0	-0.32	
9/21/21 1:11 PM	**23.94**	**23.73**	11.21	0.02	-0.19	**M**
9/21/21 1:12 PM	0.1	-0.58	20.8	17.77	-0.14	
9/21/21 1:13 PM	-0.07	-0.91	20.82	18.82	**-0.07**	**Z**
9/21/21 1:14 PM	-0.09	-0.28	20.76	4.46	**9.97**	**M**

MONTROSE AIR QUALITY SERVICES

NO_2 to NO Conversion Efficiency Test

Client:	GE Power	RATA Test Date:	9/21/2021
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 2		
Test Location:	Stack	NO_2 to NO Conversion Efficiency Test Date:	9/21/2021
Project Number:	PROJ-011221		

Analyzer Information

NO_x Analyzer Make:	Thermo
NO_x Analyzer Model:	42i
NO_x Analyzer S/N:	1160990029
NO_x Converter Temp:	625

Direct Calibration Mode Utilizing NO_2 Calibration Gas

NO_2 Cal Gas Cylinder ID:	CC507398
NO_2 Cal Gas Cylinder Expiration Date :	2/19/2022
NO_2 Cal Gas Cylinder Certified Concentration:	62.64
Analyzer Response to NO_2 Calibration Gas:	59.19
Calculated Converter Efficiency (EFF_{NO2}):	94.49%
Status of Converter Efficiency (>90%):	PASS

GE Power
Greenleaf1 GT2
Base Load

NOx Conv
Check

	NOx ppmvd
9/21/21 1:16 PM	-0.09
9/21/21 1:17 PM	26.08
9/21/21 1:18 PM	58.15
9/21/21 1:19 PM	58.52
9/21/21 1:20 PM	58.62
9/21/21 1:21 PM	58.79
9/21/21 1:22 PM	58.92
9/21/21 1:23 PM	**59.19**

Appendix A.3
Span Gas Certificates

Airgas
an Air Liquide company

Airgas Mid-West region
Airgas USA, LLC
1601 Nicholas Blvd
Elk Grove, IL 60007
Airgas.com

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: CEM-CAL ZERO

Part Number:	NI CZ15A	Reference Number:	136-402150787-1
Cylinder Analyzed:	EB0039474	Cylinder Volume:	142.0 CF
Laboratory:	192 - Elk Grove (SAP) - IL	Cylinder Pressure:	2000 PSIG
Analysis Date:	Jun 24, 2021	Valve Outlet:	580
Lot Number:	136-402150787-1		

Expiration Date: Jun 24, 2029

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
NITROGEN	99.9995 %	99.9995 %
CARBON DIOXIDE	< 1.0 PPM	0.49 PPM
NOx	< 0.1 PPM	< 0.1 PPM
SO2	< 0.1 PPM	< 0.1 PPM
THC	< 0.1 PPM	0.08 PPM
CARBON MONOXIDE	< 0.5 PPM	0.49 PPM

Permanent Notes: Airgas certifies that the contents of this cylinder meet the requirements of 40 CFR 72.2

Cylinders in Batch:

ALM-049054*, CC129202, CC164767, CC222236, CC234570@, CC256937, CC276927, CC357508, CC440071*, CC49785, CC95867, EB0021600, EB0031368, EB0039359, EB0039474, EB0046038, EB0088084, SG9120165BAL, SG9199908, XC028948B

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Signature on file
Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E03NI80E15A0138	Reference Number:	54-402107992-1
Cylinder Number:	CC100657	Cylinder Volume:	150.9 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2015 PSIG
PGVP Number:	B12021	Valve Outlet:	590
Gas Code:	CO2,O2,BALN	Certification Date:	May 10, 2021

Expiration Date: May 10, 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.

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 %	10.01 %	G1	+/- 0.6% NIST Traceable	05/10/2021
OXYGEN	10.00 %	10.32 %	G1	+/- 0.3% NIST Traceable	05/10/2021
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	08010601	K002531	13.94 % CARBON DIOXIDE/NITROGEN	+/- 0.6%	Jan 30, 2024

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
CO2-1 HORIBA VIA-510 V1E3H7P5	NDIR	Apr 29, 2021
O2-1 HORIBA MPA-510 3VUYL9NR	Paramagnetic	Apr 29, 2021

Triad Data Available Upon Request

Signature on file
Approved for Release

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E03NI60E15A0286	Reference Number:	54-401095141-1
Cylinder Number:	EB0088291	Cylinder Volume:	159.6 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2015 PSIG
PGVP Number:	B12018	Valve Outlet:	590
Gas Code:	CO2,O2,BALN	Certification Date:	Jan 15, 2018

Expiration Date: Jan 15, 2026

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
CARBON DIOXIDE	20.00 %	19.50 %	G1	+/- 0.7% NIST Traceable	01/15/2018
OXYGEN	20.00 %	20.87 %	G1	+/- 0.7% NIST Traceable	01/15/2018
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	08061324	CC255485	20.09 % CARBON DIOXIDE/NITROGEN	+/- 0.6%	Jun 28, 2018
NTRM	09061418	CC273593	22.53 % OXYGEN/NITROGEN	+/- 0.4%	Mar 08, 2019

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
CO2-1 HORIBA VIA-510 V1E3H7P5	NDIR	Jan 08, 2018
O2-1 HORIBA MPA-510 3VUYL9NR	Paramagnetic	Jan 08, 2018

Triad Data Available Upon Request

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Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E03NI99E15A04D9	Reference Number:	54-402013394-1
Cylinder Number:	EB0080203	Cylinder Volume:	144.3 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2015 PSIG
PGVP Number:	B12021	Valve Outlet:	660
Gas Code:	CO,NO,NOX,BALN	Certification Date:	Feb 01, 2021

Expiration Date: Feb 01, 2024

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	24.00 PPM	24.04 PPM	G1	+/- 1.3% NIST Traceable	01/25/2021, 02/01/2021
CARBON MONOXIDE	24.00 PPM	23.82 PPM	G1	+/- 0.4% NIST Traceable	01/25/2021
NITRIC OXIDE	24.00 PPM	24.04 PPM	G1	+/- 1.1% NIST Traceable	01/25/2021, 02/01/2021
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	150102	KAL004704	24.35 PPM CARBON MONOXIDE/NITROGEN	+/- 0.3%	Sep 04, 2021
NTRM	120104-02	KAL004843	19.94 PPM NITRIC OXIDE/NITROGEN	+/- 1.1%	Feb 13, 2024
NTRM	120104-02	KAL004843 NOX	19.94 PPM NOx/NITROGEN	+/- 1.1%	Feb 13, 2024

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
(CO-4) Thermo 48i-TLE 1406960657	NDIR	Jan 07, 2021
EC-1 Eco Physics nCLD 844S 844n0131 NO	Chemilluminescence	Jan 07, 2021
EC-1 Eco Physics nCLD 844S 844n0131 NOX	Chemilluminescence	Jan 07, 2021

Triad Data Available Upon Request

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Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E03NI99E15A00H0	Reference Number:	54-401708715-1A
Cylinder Number:	CC192422	Cylinder Volume:	144.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2016 PSIG
PGVP Number:	B12020	Valve Outlet:	660
Gas Code:	CO,NO,NOX,BALN	Certification Date:	Feb 07, 2020

Expiration Date: Feb 07, 2023

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	48.00 PPM	46.48 PPM	G1	+/- 1.0% NIST Traceable	01/31/2020, 02/07/2020
CARBON MONOXIDE	48.00 PPM	48.64 PPM	G1	+/- 0.6% NIST Traceable	01/31/2020
NITRIC OXIDE	48.00 PPM	46.48 PPM	G1	+/- 1.0% NIST Traceable	01/31/2020, 02/07/2020
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	14060728	CC434350	49.88 PPM CARBON MONOXIDE/NITROGEN	+/- 0.6%	Feb 22, 2020
PRM	12386	D685025	9.91 PPM NITROGEN DIOXIDE/AIR	+/- 2.0%	Feb 20, 2020
NTRM	16060650	CC442691	50.42 PPM NITRIC OXIDE/NITROGEN	+/- 0.8%	Jun 27, 2020
GMIS	401203436102	CC502639	4.801 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.1%	May 02, 2022
GMIS	7302017104	CC506604	4.426 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.1%	Jul 03, 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

Triad Data Available Upon Request

Signature on file
Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E02NI99E15W0076	Reference Number:	54-401419351-1
Cylinder Number:	CC507398	Cylinder Volume:	144.0 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2016 PSIG
PGVP Number:	B12019	Valve Outlet:	660
Gas Code:	NO2,BALN	Certification Date:	Feb 19, 2019

Expiration Date: Feb 19, 2022

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
NITROGEN DIOXIDE	60.00 PPM	62.64 PPM	G1	+/- 2.0% NIST Traceable	02/12/2019, 02/19/2019
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
GMIS	7272017112	CC511382	99.42 PPM NITROGEN DIOXIDE/NITROGEN	+/- 1.1%	Sep 03, 2021
PRM	12378	D562913	100.1 PPM NITROGEN DIOXIDE/AIR	+/- 1.0%	Sep 04, 2018

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
MKS FTIR NO2 017707558	FTIR	Feb 05, 2019

Triad Data Available Upon Request

PERMANENT NOTES:OXYGEN ADDED TO MAINTAIN STABILITY

Signature on file
Approved for Release

Airgas Mid-West region
Airgas USA, LLC
1601 Nicholas Blvd
Elk Grove, IL 60007
Airgas.com

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: CEM-CAL ZERO

Part Number:	AI CZ15A	Reference Number:	136-401467808-1
Cylinder Analyzed:	CC303413	Cylinder Volume:	146.0 CF
Laboratory:	192 - Elk Grove (SAP) - IL	Cylinder Pressure:	2000 PSIG
Analysis Date:	Apr 05, 2019	Valve Outlet:	590
Lot Number:	136-401467808-1		

Expiration Date: Apr 05, 2027

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
AIR		
Carbon Dioxide	< 1.0 PPM	<LDL 0.16 PPM
NOx	< 0.1 PPM	< 0.1 PPM
Sulfur Dioxide	< 0.1 PPM	< 0.1 PPM
THC	< 0.1 PPM	0.06 PPM
Percent Oxygen	20-21 %	20.50 %
Carbon Monoxide	< 0.5 PPM	<LDL 0.16 PPM

Permanent Notes: Airgas certifies that the contents of this cylinder meet the requirements of 40 CFR 72.2

Cylinders in Batch:

CC148938, CC176793, CC17790, CC179114, CC210591, CC23123, CC275986, CC303413, CC31207, CC323590, CC410714, CC455719, EB0004600, EB0031318, EB0039484, EB0039602, SG9163891, XC007703B

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Signature on file
Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E02AI99E15A1475	Reference Number:	54-402079097-1
Cylinder Number:	CC287500	Cylinder Volume:	146.2 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2015 PSIG
PGVP Number:	B12021	Valve Outlet:	590
Gas Code:	PPN,BALA	Certification Date:	Apr 10, 2021

Expiration Date: Apr 10, 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.

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
PROPANE	6.000 PPM	5.975 PPM	G1	+/- 0.7% NIST Traceable	04/10/2021
AIR	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	10010119	K023771	9.60 PPM PROPANE/AIR	+/- 0.6%	Jan 19, 2022

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 AHR0801332	FTIR	Mar 27, 2021

Triad Data Available Upon Request

Signature on file
Approved for Release

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E02AI99E15A1734	Reference Number:	54-401938207-1
Cylinder Number:	CC431837	Cylinder Volume:	146.2 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2015 PSIG
PGVP Number:	B12020	Valve Outlet:	590
Gas Code:	PPN,BALA	Certification Date:	Oct 20, 2020

Expiration Date: Oct 20, 2028

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
PROPANE	10.00 PPM	9.873 PPM	G1	+/- 0.8% NIST Traceable	10/20/2020
AIR	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	11061013	CC322931	3.431 PPM PROPANE/AIR	+/- 0.6%	Jul 28, 2023

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 AHR0801332	FTIR	Oct 09, 2020

Triad Data Available Upon Request

Signature on file
Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
12722 S. Wentworth Ave.
Chicago, IL 60628
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E02AI99E15A00E7	Reference Number:	54-401149701-1
Cylinder Number:	CC145376	Cylinder Volume:	146.2 CF
Laboratory:	124 - Chicago (SAP) - IL	Cylinder Pressure:	2015 PSIG
PGVP Number:	B12018	Valve Outlet:	590
Gas Code:	PPN,BALA	Certification Date:	Mar 19, 2018

Expiration Date: Mar 19, 2026

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
PROPANE	17.00 PPM	16.92 PPM	G1	+/- 1.0% NIST Traceable	03/19/2018
AIR	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	16061113	EB0081680	50.06 PPM PROPANE/AIR	+/- 0.4%	Jul 26, 2022

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 AHR0801332	FTIR	Feb 21, 2018

Triad Data Available Upon Request

Signature on file
Approved for Release

Appendix A.4
Equipment Calibration Data

MONTROSE
ENVIRONMENTAL

EPA Method 5

Meter Box Calibration by Calibrated Critical Orifice, Leak Check, and Thermocouple Calibration Check

English Meter Box Units, English K' Factor

Meter box ID:	CB-04
Meter ID (If applicable):	CB-04
Orifice set ID:	Antioch
Calibrated by:	KA
Expires:	**10/8/21**

Date:	4/8/21
Location:	Antioch
No. of orifices used (min. 3)	5
Barometric pressure (in. Hg):	30.01 in. Hg
Theoretical critical vacuum	14.16 in. Hg

Yd:	**1.026**
ΔH@:	**1.890**

Meter Box Orifice Calibration

IMPORTANT For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above
IMPORTANT The Critical Orifice Coefficient, K', must be entered in English units, (ft)^3*(deg R)^0.5/((in.Hg)*(min))

		Volume			Initial Temps.		Final Temps.		Orifice	K' Orifice		Ambient Temperature		
ΔH (in H2O)	Time (min)	Initial (cu ft)	Final (cu ft)	Net (cu ft)	Inlet (deg F)	Outlet (deg F)	Inlet (deg F)	Outlet (deg F)	Serial# (number)	Coefficient (see above)	Vacuum (in Hg)	Initial (deg F)	Final (deg F)	Average (deg F)
0.32	19.00	560.303	565.913	5.610	72.0	72.0	72.0	72.0	RG-40	0.2355	16.0	75.0	75.0	75.0
0.67	14.00	554.186	560.303	6.117	72.0	72.0	73.0	73.0	RG-48	0.3461	16.0	75.0	75.0	75.0
1.10	11.00	535.189	541.156	5.967	66.0	66.0	68.0	68.0	RG-55	0.4320	16.0	75.0	75.0	75.0
2.00	8.00	541.156	547.192	6.036	68.0	68.0	71.0	71.0	RG-63	0.5959	16.0	75.0	75.0	75.0
3.35	7.00	547.192	554.186	6.994	71.0	71.0	72.0	72.0	RG-73	0.7849	16.0	75.0	75.0	75.0

— SAMPLE RATE —
INDICATED VS. ACTUAL

ΔH (in. H2O)	Sample Rate (scfm)
0.32	0.306
0.67	0.449
1.10	0.560
2.00	0.773
3.35	1.018

— DRY GAS METER —
VOLUME CORRECTED

Vm(std) (cu ft)
5.587
6.091
6.010
6.064
7.023

— ORIFICE —

VOLUME CORRECTED Vcr(std) (cu ft)	VOLUME NOMINAL Vcr (cu ft)
5.805	5.867
6.287	6.353
6.165	6.231
6.185	6.251
7.129	7.204

— DRY GAS METER —
CALIBRATION FACTOR Yd

Value (number)	Variation (number)
1.0391	0.013
1.0321	0.006
1.0259	-0.001
1.020	-0.006
1.015	-0.011

— ORIFICE —
CALIBRATION FACTOR ΔH@

Value (in H2O)	Variation (in H2O)
1.919	0.029
1.859	-0.031
1.979	0.089
1.882	-0.008
1.810	-0.080

For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +/-0.02.

For Orifice Calibration Factor ΔH@, the orifice differential pressure in inches of H20 that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +/-0.2.

QA Criteria:	
Average Yd	1.0264
Average ΔH@	1.8900
Variation of Yd's	PASS
Variation of ΔH@	PASS
Vacuum Criteria	PASS

Meter Box Pressure Leak Check

Test Pressure, (in H_2O):	6	Should be 5-7 in. H_2O
Leak Rate, (in H_2O/min):	0	Must be zero (manometer level stable for 1 minute)

Meter Box Vacuum Leak Check

Test Vacuum, (in. Hg):	25	Coarse adjust valve fully open, fine adjust fully closed, sample inlet plugged
Leak Rate, (cfm):	0	Must be zero (meter dial stable for 1 minute)

Meter Box Thermocouple Readout Calibration Check

Input Temperature	Allowable Temp. Dev.*	Low	High
30	7	23	37
70	8	62	78
120	9	111	129
250	11	239	261
350	12	338	362
500	14	486	514
700	17	683	717
900	20	880	920

Stack	Probe	Filter	Exit	Aux.
27	27	26	27	27
66	66	66	66	66
116	116	116	116	116
248	248	248		
347	347	347		
495				
698				
898				

Thermocouple simulator	
Make:	Omega
Model:	CL125
Serial Number	16200736
Cal Date:	12/18/2020

* Reading values must be within 1.5% of reference thermometer values (based on absolute temperature scale) for calibration to be acceptable.

Performed by: Name: ~~Raul Moreno~~ Kyle Andersen Signature: _____ Date: KA 04/08/21 ~~10/19/20~~ 4/8/21

Approved by: Name: Andrew Kobayashi Signature: _____ Date: _____

MONTROSE
ENVIRONMENTAL

EPA Method 5

Meter Box Calibration by Calibrated Critical Orifice, Leak Check, and Thermocouple Calibration Check

English Meter Box Units, English K' Factor

Meter box ID:	CB 04
Meter ID (if applicable):	CB 04
Orifice set ID:	Antioch
Calibrated by:	RM
Expires:	4/15/22

Date:	10/15/21
Location:	Antioch
No. of orifices used (min. 3)	5
Barometric pressure (in. Hg):	30.16 in. Hg
Theoretical critical vacuum	14.23 in. Hg

Yd:	1.019
ΔH@:	1.871

Meter Box Orifice Calibration

IMPORTANT For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above
IMPORTANT The Critical Orifice Coefficient, K', must be entered in English units, (ft)^3*(deg R)^0.5/((in.Hg)*(min)).

		Volume			Initial Temps.		Final Temps.		Orifice	K' Orifice		– Ambient Temperature –		
ΔH (in H2O)	Time (min)	Initial (cu ft)	Final (cu ft)	Net (cu ft)	Inlet (deg F)	Outlet (deg F)	Inlet (deg F)	Outlet (deg F)	Serial# (number)	Coefficient (see above)	Vacuum (in Hg)	Initial (deg F)	Final (deg F)	Average (deg F)
0.33	18.00	872.502	877.825	5.323	67.0	67.0	68.0	68.0	RG-40	0.2355	16.0	71.0	71.0	71.0
0.68	12.00	877.825	883.092	5.267	68.0	68.0	68.0	68.0	RG-48	0.3461	16.0	71.0	71.0	71.0
1.10	10.00	883.092	888.584	5.492	68.0	68.0	69.0	69.0	RG-55	0.4320	16.0	71.0	71.0	71.0
1.90	7.00	888.584	893.940	5.356	69.0	69.0	69.0	69.0	RG-63	0.5959	16.0	71.0	71.0	71.0
3.30	6.00	850.255	856.212	5.957	62.0	62.0	64.0	64.0	RG-73	0.7849	16.0	71.0	71.0	71.0

— SAMPLE RATE — INDICATED VS. ACTUAL

ΔH (in. H2O)	Sample Rate (scfm)
0.33	0.308
0.68	0.453
1.10	0.565
1.90	0.780
3.30	1.027

— DRY GAS METER — VOLUME CORRECTED

Vm(std) (cu ft)
5.373
5.316
5.543
5.412
6.109

— ORIFICE — VOLUME CORRECTED / VOLUME NOMINAL

Vcr(std) (cu ft)	Vcr (cu ft)
5.548	5.537
5.436	5.426
5.654	5.643
5.460	5.449
6.164	6.152

– DRY GAS METER – CALIBRATION FACTOR Yd

Value (number)	Variation (number)
1.0326	0.014
1.0226	0.004
1.0200	0.001
1.009	-0.010
1.009	-0.010

— ORIFICE — CALIBRATION FACTOR ΔH@

Value (in H2O)	Variation (in H2O)
1.971	0.100
1.879	0.008
1.949	0.078
1.768	-0.104
1.790	-0.081

For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +/-0.02.

For Orifice Calibration Factor ΔH@, the orifice differential pressure in inches of H20 that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +/-0.2.

QA Criteria:	
Average Yd	1.0186
Average ΔH@	1.8714
Variation of Yd's	PASS
Variation of ΔH@	PASS
Vacuum Criteria	PASS

Meter Box Pressure Leak Check

Test Pressure, (in H_2O):	6	Should be 5-7 in. H_2O
Leak Rate, (In H_2O/min):	0	Must be zero (manometer level stable for 1 minute)

Meter Box Vacuum Leak Check

Test Vacuum, (in. Hg):	25	Coarse adjust valve fully open, fine adjust fully closed, sample inlet plugged
Leak Rate, (cfm):	0	Must be zero (meter dial stable for 1 minute)

Meter Box Thermocouple Readout Calibration Check

Input Temperature	Allowable Temp. Dev.*	Low	High
30	7	23	37
70	8	62	78
120	9	111	129
250	11	239	261
350	12	338	362
500	14	486	514
700	17	683	717
900	20	880	920

Stack	Probe	Filter	Exit	Aux.
27	27	27	28	28
66	66	67	67	66
117	117	118	117	117
249	248	249		
348	348	348		
495				
698				
898				

Thermocouple simulator	
Make:	Omega
Model:	CL125
Serial Numbe	16200736
Cal Date:	12/18/2020

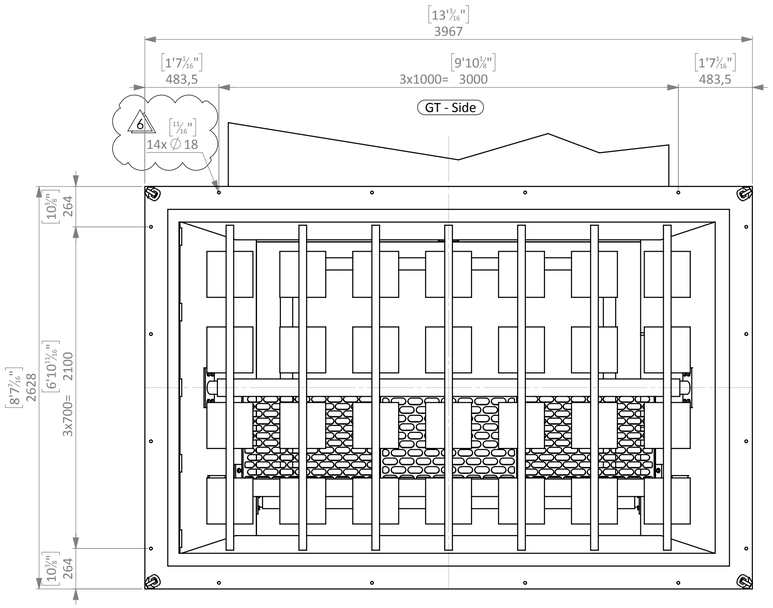
* Reading values must be within 1.5% of reference thermometer values (based on absolute temperature scale) for calibration to be acceptable.

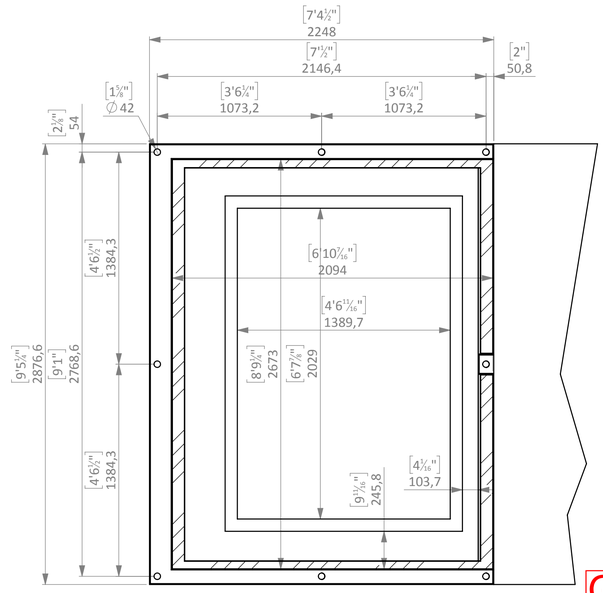
Performed by: Name: Raul Moreno Signature: _____ Date: 10/15/21

Approved by: Name: Dan Duncan Signature: _____ Date: 10/15/21

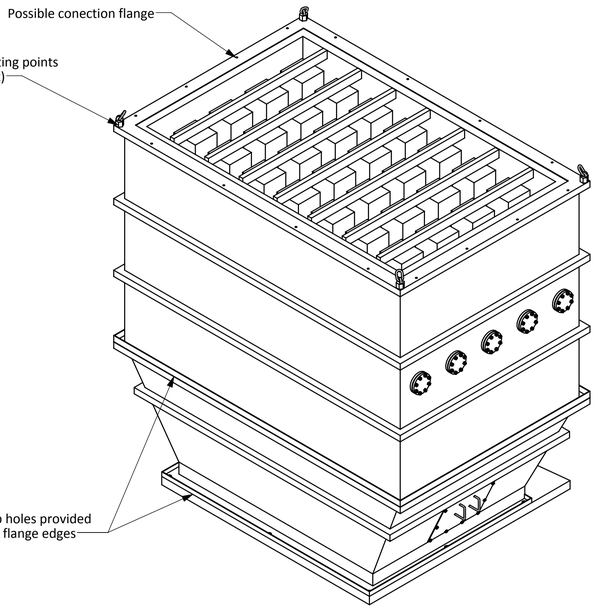
APPENDIX B
DATA SHEETS

Appendix B.1
Sampling Locations



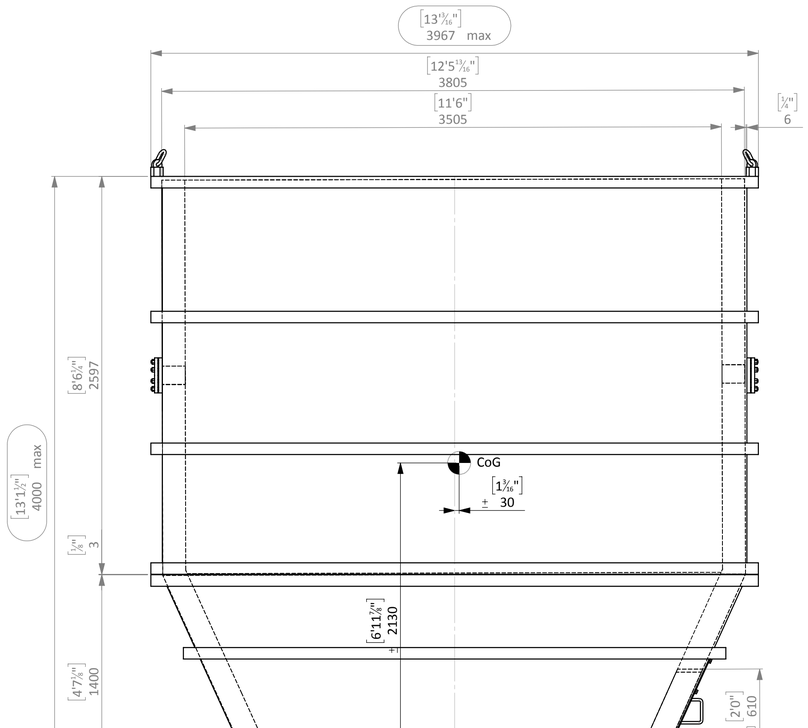


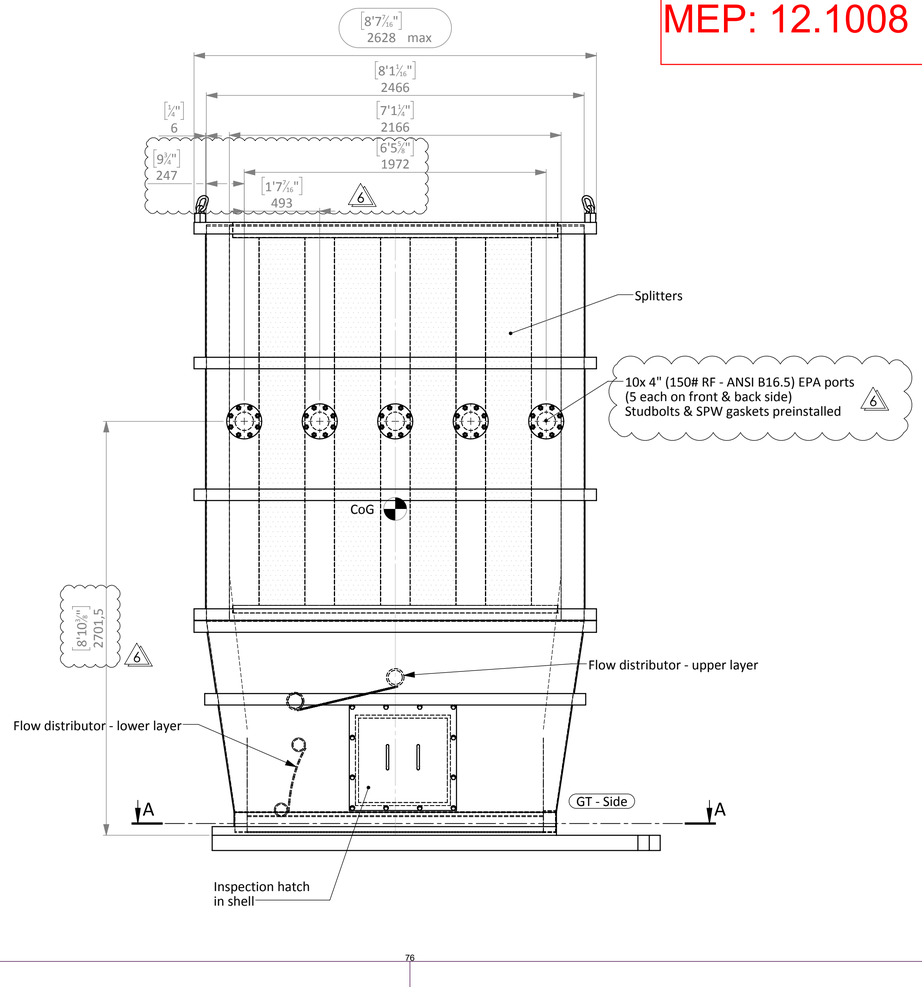
SECTION A-A



GE P/N: 390A4670P0001

MEP: 12.1008





S:
- 52x Hexagon bolt, 5/8" UNC L=1¾"
- 52x Flat washer - type B, 5/8" Regular
- 52x Flat washer - type B, 5/8" Narrow
- 52x Hexagon nut, 5/8" UNC
- 1x Glassfibre gasket (shipped loose, to be installed on site)

Hardware (except for gasket) to be preinstalled on bottom duct

General:

Max Flow conditions
Design flow GT - 232.33 [PPS] / 105.38 [kg/s]
Design flow vent - 56.87 [PPS] / 25.80 [kg/s]
Design temp GT - 884 [F] / 473 [C]
Ambient temp vent - -30 [F] / -34 [C]

Max Velocity conditions
Design flow GT - 219.9 [PPS] / 99.74 [kg/s]
Design flow vent - 42.7 [PPS] / 19.37 [kg/s]
Design temp GT - 1045 [F] / 563 [C]
Ambient temp vent - 40 [F] / 4 [C]

Painting Procedure:

Inside ducting (insulated) &
Outside ducted (non-insulated)

- Shotblasting Sa 2½
- Primer: 1 layer Sigmazinc 158 - DFT 75µm
- Top coat: 1 layer Sigmatherm 540 - DFT 25-40µm

Materials:

Shell - S355, t=6mm
Internal lining - AISI 409, t=2-3mm
Splitterframe - AISI 409, t=2mm
Perforated sheet - AISI 409, t=1½mm
Wool (inside insulation) - Basaltwool 120kg/m³
Wool (splitters) - Basaltwool 100kg/m³ (minimum)

Estimated weight:

Top duct (excl. splitters) - ±3250kg
Splitters - ±2500kg
Bottom duct - ±2250kg
Total - ±8000kg

Reference Drawings:

021 - Transport & Lifting plan
100 - Assembly drawing
200 - Shell bottom duct - production
210 - Inspection hatch bottom duct - production
220 - Internal insulation bottom duct - production
300 - Shell top duct - production
310 - Internal insulation top duct - production
400 - Flow distributor - production
500 - Silencer splitter & supports - production

Rev.:	Date:	Reason for Issue:	By:	Chkd:	Appd:
6	29/08/16	Client Comments	MSm	CLo	MPo
5	12/07/16	As Built	MSm	CLo	MPo
4	10/06/16	Final	MSm	CLo	MPo
3	09/06/16	Client Comments	MSm	CLo	MPo
2	01/06/16	Revised Flowplates	MSm	CLo	MPo
1	15/04/16	Adjusted for DDR phase	MSm	CLo	MPo

General tolerances according to:

Drawn by: MSm	Date: 30/03/16	Customer: GE Packaged Power, L.P. Exhaust Stack TM2500 Gen 8
Checked by: CLo	Approved by: MPo	
Drawing No.: 020 Sheet 1 of 1	Revision: 06	Title: General Arrangement General Arrangement DDR PHASE
Am.Proj.	Scale: 1:20	
Order no.: 12-1008		

Royal Dahlman
Noordzee 6-8, 3144 DB Maassluis
P.O. box 438, 3140 AK Maassluis
The Netherlands
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MONTROSE AIR QUALITY SERVICES

40 CFR Part 75 Sample Point Selection and Stratification Check

Client:	GE Power	Test Date:	9/21/2021
Facility:	Green Leaf 1	Operator:	Tom Cassin
Source:	TM 2500 GT 2		
Test Location:	Stack		
Condition/Load:	Base		
Project Number:	PROJ-011221		

Sample Location Information

Shape of Sample Location	Rectangular		Port Length:	6.50
Depth:	11.60	Ft.		
Width:	7.10	Ft.		

Peformace Specification 2 Traverse Point Guidance

Is the test location downstream of wet scrubbers
or at points where two streams with different pollutant concentrations are combined? No

Calculated Sample Points

Short Line Points With Port Length Added	
Point	Point Distance (in.)
1	85.25
2	53.75
3	22.25

Long Line Points (16.7, 50.0, and 83.3%)	
Point	Point Distance (in.)
1	122.45
2	76.10
3	29.75

Alt Method 1 Short Line Points With Port Length Added	
Point	Point Distance (in.)
1	47.7
2	26.8
3	12.6

Method 1 Points - Six (6) Per Port - Round With Port Length Added	
1	139.6
2	125.4
3	104.5
4	47.7
5	26.8
6	12.6

Appendix B.2
Plant Process Data

GE Trend Test 1 Unit 1

DATETIME	MW	TE_2024	PGASA	TE_2037	PT_2074A	FT_2003	FT_2000
#!Min	10	0	410	400	-100	-100	800
#!Max	50	100	480	900	300	500	1700
#!Units	MW	F	psig	F		gpm	ACFM

#!Description	MW SELECT	FUEL SUPPLY TEMPERATURE A	GAS FUEL SUPPLY PRESSURE	DE-MIN WATER SUPPLY TEMP(x10)	DE-MIN WATER SUPPLY PRESS(x10)	NOX WATER INJECTION FLOW(x10)	GAS FLOW FT2000(x10)
10:26:22 AM	32.2455	742	497.9292	831	659	393	1431
10:26:52 AM	32.2455	743	498.0047	830	657	393	1432
10:27:22 AM	32.2455	744	498.0497	830	658	393	1433
10:27:51 AM	32.2455	743	498.0165	831	664	393	1432
10:28:21 AM	32.2455	744	498.4251	831	664	392	1429
10:28:51 AM	32.121	744	498.4171	830	656	393	1428
10:29:21 AM	32.121	745	498.6143	830	660	393	1424
10:29:50 AM	32.121	744	498.7681	831	657	393	1425
10:30:20 AM	32.2455	745	498.2302	831	657	392	1426
10:30:50 AM	32.121	746	498.4621	831	655	392	1427
10:31:20 AM	32.2455	746	498.5865	831	658	393	1426
10:31:49 AM	32.2455	747	498.3599	831	657	392	1431
10:32:19 AM	32.121	747	498.5045	831	658	392	1427
10:32:49 AM	32.121	747	498.4556	831	652	392	1428
10:33:18 AM	31.9965	748	499.0446	831	649	392	1423
10:33:48 AM	32.121	748	498.4865	831	660	393	1428
10:34:18 AM	32.121	749	498.263	831	656	393	1429
10:34:48 AM	32.121	749	498.2328	831	659	393	1431
10:35:17 AM	32.121	749	498.4431	831	648	392	1429
10:35:47 AM	32.121	749	497.9402	831	649	393	1437
10:36:17 AM	32.121	750	497.6618	831	655	393	1447
10:36:46 AM	32.121	750	496.7661	831	659	395	1461
10:37:16 AM	32.121	750	495.7647	831	663	395	1476
10:37:46 AM	32.121	750	494.4777	831	662	397	1499
10:38:16 AM	32.121	751	492.6962	830	662	399	1530
10:38:45 AM	31.9965	752	490.8495	830	653	400	1551
10:39:15 AM	31.9965	752	489.041	830	653	400	1574
10:39:45 AM	31.872	752	487.0768	830	656	400	1606
10:40:14 AM	31.623	752	486.685	830	662	401	1613
10:40:44 AM	31.374	753	486.7064	830	657	401	1618
10:41:14 AM	31.374	753	486.5667	830	659	400	1619
10:41:44 AM	31.4985	753	486.7239	830	660	401	1618
10:42:13 AM	31.374	754	486.8505	830	657	401	1620
10:42:43 AM	31.374	754	486.8627	830	659	401	1620
10:43:13 AM	31.4985	754	487.1126	830	660	400	1616
10:43:43 AM	31.7475	754	487.1115	831	657	401	1615
10:44:12 AM	31.7475	755	487.0317	830	659	400	1615
10:44:42 AM	31.872	756	487.385	830	652	400	1614
10:45:12 AM	31.872	756	488.1693	831	654	400	1599
10:45:41 AM	31.9965	756	489.0569	831	658	400	1583
10:46:11 AM	31.872	756	490.1136	831	654	400	1568
10:46:41 AM	31.9965	756	490.027	831	657	400	1569
10:46:41 AM	31.9965	756	490.027	831	657	400	1569
10:47:11 AM	32.121	757	490.4112	831	654	400	1566
10:47:40 AM	31.9965	757	491.1669	831	651	400	1555
10:48:10 AM	31.9965	758	491.9897	831	652	399	1543
10:48:40 AM	32.121	758	493.0853	831	656	398	1528
10:49:09 AM	32.121	758	494.2949	831	649	398	1510
10:49:39 AM	32.121	758	495.3649	831	661	396	1494
10:50:09 AM	31.9965	759	496.3835	832	660	395	1477
10:50:39 AM	32.121	759	497.1998	832	650	394	1464
10:51:08 AM	31.872	760	498.3293	832	661	393	1447
10:51:38 AM	31.872	760	499.0942	832	662	393	1439
10:52:08 AM	31.9965	760	499.1724	832	657	392	1431

10:52:38 AM	31.872	760	499.3456	832	663	392	1430
10:53:07 AM	31.872	761	499.7805	832	658	392	1422
10:53:37 AM	31.7475	761	499.7633	833	662	392	1421
10:54:07 AM	31.7475	762	500.0414	833	652	392	1421
10:54:36 AM	31.7475	762	500.3439	833	649	392	1419
10:55:06 AM	31.872	762	499.9014	833	655	392	1423
10:55:36 AM	31.872	763	499.8957	833	662	392	1419
10:56:06 AM	31.872	763	500.054	833	659	392	1422
10:56:35 AM	31.7475	762	500.189	833	653	392	1417
10:57:05 AM	31.623	763	500.7646	832	658	392	1412
10:57:35 AM	31.623	764	500.8436	833	659	391	1409
10:58:04 AM	31.7475	764	500.7543	833	659	392	1415
10:58:34 AM	31.623	764	501.0012	833	647	391	1409
10:59:04 AM	31.623	765	500.91	833	659	391	1408
10:59:34 AM	31.623	765	501.1591	834	659	391	1409
11:00:03 AM	31.623	765	501.4379	834	655	391	1407
11:00:33 AM	31.623	766	501.4425	834	656	391	1411
11:01:03 AM	31.7475	766	501.0759	834	651	392	1414
11:01:32 AM	31.872	766	501.2098	833	652	392	1415
11:02:02 AM	31.623	766	501.5474	834	662	392	1411
11:02:32 AM	31.4985	767	501.8301	834	658	391	1406
11:03:02 AM	31.4985	767	501.6691	834	649	390	1404
11:03:31 AM	31.4985	768	502.0731	833	654	391	1403
11:04:01 AM	31.623	768	501.6115	834	654	391	1408
11:04:31 AM	31.623	768	501.6775	834	656	391	1408
11:05:01 AM	31.4985	768	501.8331	834	651	391	1404
11:05:30 AM	31.623	769	501.7683	834	654	391	1407
11:06:00 AM	31.623	769	501.3788	834	660	391	1407
11:06:30 AM	31.623	770	501.5822	834	654	392	1410
11:06:59 AM	31.623	770	501.4543	835	658	391	1407
11:07:29 AM	31.623	770	501.4857	835	654	391	1409
11:07:59 AM	31.623	771	501.5173	834	663	392	1410
11:08:29 AM	31.623	771	501.3884	835	654	392	1413
11:08:58 AM	31.4985	771	501.7843	834	657	391	1407
11:09:28 AM	31.7475	772	501.2812	834	666	392	1419
11:09:58 AM	31.623	772	500.8463	834	658	392	1423
11:10:27 AM	31.623	772	500.6044	834	662	393	1428
11:10:27 AM	31.623	772	500.6044	834	659	393	1428
11:10:57 AM	31.623	773	499.1968	834	659	393	1453
11:11:27 AM	31.4985	774	497.4737	834	655	395	1479
11:11:57 AM	31.623	773	496.1794	834	659	397	1501
11:12:26 AM	31.4985	774	496.1744	833	653	397	1500
11:12:56 AM	31.623	774	497.6133	834	659	395	1479
11:13:26 AM	31.623	774	498.4106	834	652	394	1458
11:13:55 AM	31.4985	775	499.3666	834	660	393	1442
11:14:25 AM	31.4985	775	500.6124	834	658	392	1422
11:14:55 AM	31.4985	775	500.9935	834	663	392	1417
11:15:25 AM	31.4985	776	501.2487	834	660	391	1414
11:15:54 AM	31.4985	776	501.6676	835	652	391	1408
11:16:24 AM	31.374	776	502.0029	835	661	390	1405
11:16:54 AM	31.2495	776	502.1642	835	664	390	1398
11:17:24 AM	31.125	776	502.9093	835	656	389	1393
11:17:53 AM	31.2495	777	502.4019	835	655	390	1399
11:18:23 AM	31.125	777	502.7193	835	654	389	1392
11:18:53 AM	31.125	778	502.8994	835	663	389	1392
11:19:22 AM	31.2495	778	502.9241	836	662	390	1392
11:19:52 AM	31.374	779	502.6259	836	644	390	1401
11:20:22 AM	31.2495	779	502.6098	835	659	390	1399
11:20:52 AM	31.4985	779	502.2566	835	654	391	1408
11:21:21 AM	31.374	780	502.1845	835	656	391	1405
11:21:51 AM	31.374	779	502.3676	835	655	391	1404
11:22:21 AM	31.374	780	502.632	836	651	391	1403
11:22:50 AM	31.374	780	502.4328	835	656	391	1404
11:23:20 AM	31.4985	780	502.2444	835	658	390	1404
11:23:50 AM	31.374	781	502.3443	836	667	390	1405

11:24:20 AM	31.125	781	502.7624	835	651	390	1395
11:24:49 AM	31.4985	781	502.038	836	650	391	1405
11:25:19 AM	31.374	782	502.2688	835	658	391	1404
11:25:49 AM	31.374	783	502.6003	835	656	390	1403
11:26:18 AM	31.374	782	502.5823	835	660	391	1401
11:26:48 AM	31.2495	783	502.9413	836	665	390	1397
11:27:18 AM	31.2495	783	502.8494	835	654	390	1395
11:27:48 AM	31.2495	783	503.0653	836	652	390	1397
11:28:17 AM	31.125	784	502.7285	836	653	390	1397
11:28:47 AM	31.2495	784	502.6423	835	661	390	1398
11:29:17 AM	31.125	784	502.9627	835	645	390	1393
11:29:47 AM	31.2495	784	502.6033	836	660	390	1395
11:30:16 AM	31.0005	785	502.8742	836	656	389	1392
11:30:46 AM	31.125	785	503.1458	836	652	389	1391
11:31:16 AM	31.0005	786	503.0882	836	660	389	1391
11:31:45 AM	31.2495	786	502.5808	836	657	390	1397
11:32:15 AM	31.2495	787	502.83	836	662	390	1397
11:32:45 AM	31.0005	787	503.0489	836	653	389	1389
11:33:15 AM	31.125	787	503.0924	836	652	389	1394
11:33:44 AM	31.125	787	502.656	836	655	390	1397
11:34:14 AM	31.2495	788	502.6846	836	658	390	1399
11:34:14 AM	31.2495	788	502.6846	836	655	390	1399
11:34:44 AM	31.125	788	502.6209	837	653	390	1397
11:35:13 AM	31.2495	788	502.4016	836	643	390	1398
11:35:43 AM	31.0005	789	502.701	836	653	388	1389
11:36:13 AM	31.0005	790	503.2137	836	654	388	1388
11:36:43 AM	31.0005	789	503.1874	837	654	389	1389
11:37:12 AM	31.0005	790	503.0104	837	656	389	1393
11:37:42 AM	31.0005	791	502.8387	837	654	389	1393
11:38:12 AM	30.876	791	503.0947	836	655	388	1389
11:38:42 AM	30.876	791	503.3091	837	657	386	1383
11:39:11 AM	30.876	791	503.1718	838	651	387	1385
11:39:41 AM	30.876	792	503.4926	838	659	384	1380
11:40:11 AM	31.0005	792	502.8521	838	659	389	1390
11:40:40 AM	31.0005	792	502.6781	837	657	389	1391
11:41:10 AM	30.876	793	503.2389	837	657	386	1384
11:41:40 AM	30.7515	793	503.7791	838	646	383	1380
11:42:10 AM	30.876	793	503.6814	838	652	386	1385
11:42:39 AM	31.0005	794	503.0996	838	656	389	1388
11:43:09 AM	30.876	794	503.5719	838	659	387	1384
11:43:39 AM	30.876	795	503.5887	838	660	387	1384
11:44:08 AM	31.0005	795	503.2545	838	655	389	1391
11:44:38 AM	31.125	795	502.7166	837	657	389	1394
11:45:08 AM	31.0005	795	503.1813	837	650	389	1395
11:45:38 AM	31.0005	795	503.5197	837	656	388	1391
11:46:07 AM	31.125	796	502.9978	837	641	389	1393
11:46:37 AM	30.876	796	503.6097	837	657	387	1386
11:47:07 AM	30.876	796	503.9186	838	658	384	1381
11:47:36 AM	30.627	797	504.5466	839	652	377	1374
11:48:06 AM	30.627	797	504.6107	839	656	381	1378
11:48:36 AM	30.7515	797	504.3093	839	660	379	1375
11:49:06 AM	30.7515	798	504.5206	839	660	381	1378
11:49:35 AM	30.876	798	504.04	840	658	385	1381
11:50:05 AM	30.876	799	504.3093	839	654	385	1382
11:50:35 AM	30.876	799	504.8391	839	653	382	1379
11:51:05 AM	30.7515	799	504.8201	839	657	378	1374
11:51:34 AM	30.7515	800	504.2333	840	663	381	1378
11:52:04 AM	30.876	800	504.1792	840	651	384	1380
11:52:34 AM	30.7515	800	504.4302	839	651	383	1382
11:53:03 AM	30.7515	801	504.923	839	662	382	1379
11:53:33 AM	30.7515	801	505.0444	840	655	380	1375
11:54:03 AM	31.0005	802	504.381	839	652	387	1384
11:54:33 AM	31.0005	802	504.3997	839	650	386	1383
11:55:02 AM	31.0005	802	504.2357	839	660	387	1387
11:55:32 AM	31.0005	803	504.106	839	659	388	1385

11:56:02 AM	31.0005	802	504.1357	839	659	387	1384
11:56:31 AM	30.876	803	504.5374	839	654	385	1383
11:57:01 AM	30.876	804	504.3993	839	649	384	1381
11:57:31 AM	30.7515	803	505.168	840	660	376	1371
11:58:01 AM	30.627	804	505.1832	840	651	375	1370
11:58:01 AM	30.627	804	505.1832	840	651	375	1370
11:58:30 AM	30.7515	804	505.1351	841	658	379	1375
Average	**31.46591**	**773.6649215**	**499.96925**	**834.41885**	**656.20942**	**390.94764**	**1430.560209**

Montrose corrected - GE Trend Test 1 Unit 1

ACFM	SCFM(68F)	lb/sec	lb/sec	ND	BTU/SCF (68F)	MM BTU/Hr		BTU/KWH
GAS FLOW	**GAS FLOW**	**Gas Flow**	**NOX WATER INJECTION FLOW**	**Water/Fuel Ratio**	**HHV**	**Heat Input**	**Kw**	**Heat Rate**
143.1	4,990	3.78	5.466	1.447	1,064	318	32,246	9,876
143.2	4,995	3.78	5.466	1.445	1,064	319	32,246	9,885
143.3	4,998	3.78	5.466	1.444	1,064	319	32,246	9,892
143.2	4,995	3.78	5.466	1.445	1,064	319	32,246	9,885
142.9	4,988	3.78	5.452	1.444	1,064	318	32,246	9,872
142.8	4,985	3.77	5.466	1.448	1,064	318	32,121	9,903
142.4	4,973	3.76	5.466	1.452	1,064	317	32,121	9,879
142.5	4,977	3.77	5.466	1.450	1,064	318	32,121	9,889
142.6	4,976	3.77	5.452	1.447	1,064	318	32,246	9,848
142.7	4,982	3.77	5.452	1.445	1,064	318	32,121	9,897
142.6	4,979	3.77	5.466	1.450	1,064	318	32,246	9,854
143.1	4,994	3.78	5.452	1.442	1,064	319	32,246	9,885
142.7	4,982	3.77	5.452	1.445	1,064	318	32,121	9,898
142.8	4,985	3.77	5.452	1.444	1,064	318	32,121	9,904
142.3	4,973	3.77	5.452	1.448	1,064	317	31,997	9,919
142.8	4,985	3.77	5.466	1.448	1,064	318	32,121	9,905
142.9	4,987	3.78	5.466	1.448	1,064	318	32,121	9,907
143.1	4,993	3.78	5.466	1.446	1,064	319	32,121	9,920
142.9	4,988	3.78	5.452	1.444	1,064	318	32,121	9,911
143.7	5,011	3.79	5.466	1.441	1,064	320	32,121	9,956
144.7	5,043	3.82	5.466	1.431	1,064	322	32,121	10,020
146.1	5,083	3.85	5.494	1.427	1,064	324	32,121	10,099
147.6	5,125	3.88	5.494	1.416	1,064	327	32,121	10,183
149.9	5,192	3.93	5.522	1.405	1,064	331	32,121	10,316
153.0	5,281	4.00	5.549	1.388	1,064	337	32,121	10,492
155.1	5,334	4.04	5.563	1.378	1,064	340	31,997	10,639
157.4	5,394	4.08	5.563	1.362	1,064	344	31,997	10,758
160.6	5,482	4.15	5.563	1.340	1,064	350	31,872	10,977
161.3	5,502	4.17	5.577	1.339	1,064	351	31,623	11,103
161.8	5,519	4.18	5.577	1.335	1,064	352	31,374	11,226
161.9	5,521	4.18	5.563	1.331	1,064	352	31,374	11,230
161.8	5,519	4.18	5.577	1.335	1,064	352	31,499	11,182
162.0	5,527	4.19	5.577	1.333	1,064	353	31,374	11,243
162.0	5,527	4.19	5.577	1.333	1,064	353	31,374	11,243
161.6	5,517	4.18	5.563	1.332	1,064	352	31,499	11,177
161.5	5,513	4.17	5.577	1.336	1,064	352	31,748	11,082
161.5	5,512	4.17	5.563	1.333	1,064	352	31,748	11,080
161.4	5,513	4.17	5.563	1.333	1,064	352	31,872	11,038
159.9	5,470	4.14	5.563	1.343	1,064	349	31,872	10,953
158.3	5,425	4.11	5.563	1.354	1,064	346	31,997	10,820
156.8	5,385	4.08	5.563	1.365	1,064	344	31,872	10,782
156.9	5,387	4.08	5.563	1.364	1,064	344	31,997	10,745
156.9	5,387	4.08	5.563	1.364	1,064	344	31,997	10,745
156.6	5,381	4.07	5.563	1.365	1,064	343	32,121	10,691
155.5	5,351	4.05	5.563	1.373	1,064	341	31,997	10,673
154.3	5,319	4.03	5.549	1.378	1,064	339	31,997	10,608
152.8	5,278	4.00	5.536	1.385	1,064	337	32,121	10,487
151.0	5,228	3.96	5.536	1.398	1,064	334	32,121	10,388
149.4	5,184	3.93	5.508	1.403	1,064	331	32,121	10,299
147.7	5,135	3.89	5.494	1.413	1,064	328	31,997	10,242
146.4	5,098	3.86	5.480	1.420	1,064	325	32,121	10,129
144.7	5,050	3.82	5.466	1.430	1,064	322	31,872	10,112
143.9	5,030	3.81	5.466	1.435	1,064	321	31,872	10,071
143.1	5,002	3.79	5.452	1.439	1,064	319	31,997	9,977

143.0	5,001	3.79	5.452	1.440	1,064	319	31,872	10,013
142.2	4,977	3.77	5.452	1.447	1,064	318	31,872	9,965
142.1	4,973	3.77	5.452	1.448	1,064	317	31,748	9,997
142.1	4,976	3.77	5.452	1.447	1,064	318	31,748	10,002
141.9	4,972	3.76	5.452	1.448	1,064	317	31,748	9,994
142.3	4,981	3.77	5.452	1.446	1,064	318	31,872	9,974
141.9	4,967	3.76	5.452	1.450	1,064	317	31,872	9,946
142.2	4,979	3.77	5.452	1.446	1,064	318	31,872	9,970
141.7	4,963	3.76	5.452	1.451	1,064	317	31,748	9,977
141.2	4,951	3.75	5.452	1.454	1,064	316	31,623	9,992
140.9	4,942	3.74	5.438	1.453	1,064	315	31,623	9,972
141.5	4,962	3.76	5.452	1.451	1,064	317	31,748	9,974
140.9	4,943	3.74	5.438	1.453	1,064	315	31,623	9,975
140.8	4,939	3.74	5.438	1.454	1,064	315	31,623	9,966
140.9	4,945	3.74	5.438	1.453	1,064	316	31,623	9,978
140.7	4,940	3.74	5.438	1.454	1,064	315	31,623	9,970
141.1	4,954	3.75	5.438	1.450	1,064	316	31,623	9,998
141.4	4,961	3.76	5.452	1.451	1,064	317	31,748	9,973
141.5	4,966	3.76	5.452	1.450	1,064	317	31,872	9,944
141.1	4,955	3.75	5.452	1.453	1,064	316	31,623	10,000
140.6	4,940	3.74	5.438	1.454	1,064	315	31,499	10,009
140.4	4,932	3.73	5.424	1.453	1,064	315	31,499	9,992
140.3	4,932	3.73	5.438	1.456	1,064	315	31,499	9,993
140.8	4,945	3.74	5.438	1.452	1,064	316	31,623	9,980
140.8	4,946	3.74	5.438	1.452	1,064	316	31,623	9,981
140.4	4,933	3.74	5.438	1.456	1,064	315	31,499	9,995
140.7	4,943	3.74	5.438	1.453	1,064	315	31,623	9,976
140.7	4,940	3.74	5.438	1.454	1,064	315	31,623	9,968
141.0	4,952	3.75	5.452	1.454	1,064	316	31,623	9,994
140.7	4,940	3.74	5.438	1.454	1,064	315	31,623	9,970
140.9	4,948	3.75	5.438	1.452	1,064	316	31,623	9,985
141.0	4,951	3.75	5.452	1.454	1,064	316	31,623	9,992
141.3	4,961	3.76	5.452	1.452	1,064	317	31,623	10,011
140.7	4,943	3.74	5.438	1.453	1,064	315	31,499	10,016
141.9	4,981	3.77	5.452	1.446	1,064	318	31,748	10,012
142.3	4,991	3.78	5.452	1.443	1,064	318	31,623	10,071
142.8	5,006	3.79	5.466	1.442	1,064	319	31,623	10,102
142.8	5,006	3.79	5.466	1.442	1,064	319	31,623	10,102
145.3	5,080	3.85	5.466	1.421	1,064	324	31,623	10,251
147.9	5,153	3.90	5.494	1.408	1,064	329	31,499	10,440
150.1	5,217	3.95	5.522	1.398	1,064	333	31,623	10,527
150.0	5,213	3.95	5.522	1.399	1,064	333	31,499	10,562
147.9	5,154	3.90	5.494	1.408	1,064	329	31,623	10,402
145.8	5,089	3.85	5.480	1.422	1,064	325	31,623	10,270
144.2	5,043	3.82	5.466	1.432	1,064	322	31,499	10,217
142.2	4,985	3.77	5.452	1.445	1,064	318	31,499	10,099
141.7	4,971	3.76	5.452	1.449	1,064	317	31,499	10,071
141.4	4,963	3.76	5.438	1.447	1,064	317	31,499	10,055
140.8	4,946	3.74	5.438	1.452	1,064	316	31,499	10,021
140.5	4,939	3.74	5.424	1.451	1,064	315	31,374	10,045
139.8	4,915	3.72	5.424	1.457	1,064	314	31,250	10,038
139.3	4,905	3.71	5.410	1.457	1,064	313	31,125	10,057
139.9	4,921	3.73	5.424	1.456	1,064	314	31,250	10,050
139.2	4,900	3.71	5.410	1.458	1,064	313	31,125	10,046
139.2	4,901	3.71	5.410	1.458	1,064	313	31,125	10,049
139.2	4,902	3.71	5.424	1.462	1,064	313	31,250	10,010
140.1	4,930	3.73	5.424	1.453	1,064	315	31,374	10,029
139.9	4,923	3.73	5.424	1.455	1,064	314	31,250	10,054
140.8	4,952	3.75	5.438	1.451	1,064	316	31,499	10,032
140.5	4,940	3.74	5.438	1.454	1,064	315	31,374	10,049
140.4	4,939	3.74	5.438	1.454	1,064	315	31,374	10,045
140.3	4,938	3.74	5.438	1.455	1,064	315	31,374	10,043
140.4	4,939	3.74	5.438	1.454	1,064	315	31,374	10,047
140.4	4,937	3.74	5.424	1.451	1,064	315	31,499	10,003
140.5	4,942	3.74	5.424	1.450	1,064	315	31,374	10,052

139.5	4,911	3.72	5.424	1.459	1,064	313	31,125	10,068
140.5	4,939	3.74	5.438	1.454	1,064	315	31,499	10,006
140.4	4,938	3.74	5.438	1.455	1,064	315	31,374	10,043
140.3	4,937	3.74	5.424	1.451	1,064	315	31,374	10,043
140.1	4,930	3.73	5.438	1.457	1,064	315	31,374	10,028
139.7	4,919	3.72	5.424	1.456	1,064	314	31,250	10,046
139.5	4,911	3.72	5.424	1.459	1,064	313	31,250	10,030
139.7	4,921	3.73	5.424	1.456	1,064	314	31,250	10,049
139.7	4,917	3.72	5.424	1.457	1,064	314	31,125	10,082
139.8	4,920	3.73	5.424	1.456	1,064	314	31,250	10,048
139.3	4,905	3.71	5.424	1.460	1,064	313	31,125	10,058
139.5	4,909	3.72	5.424	1.459	1,064	313	31,250	10,025
139.2	4,901	3.71	5.410	1.458	1,064	313	31,001	10,089
139.1	4,900	3.71	5.410	1.458	1,064	313	31,125	10,047
139.1	4,900	3.71	5.410	1.458	1,064	313	31,001	10,086
139.7	4,916	3.72	5.424	1.457	1,064	314	31,250	10,039
139.7	4,918	3.72	5.424	1.457	1,064	314	31,250	10,044
138.9	4,892	3.70	5.410	1.461	1,064	312	31,001	10,071
139.4	4,910	3.72	5.410	1.455	1,064	313	31,125	10,068
139.7	4,917	3.72	5.424	1.457	1,064	314	31,125	10,081
139.9	4,924	3.73	5.424	1.455	1,064	314	31,250	10,056
139.9	4,924	3.73	5.424	1.455	1,064	314	31,250	10,056
139.7	4,916	3.72	5.424	1.457	1,064	314	31,125	10,080
139.8	4,918	3.72	5.424	1.457	1,064	314	31,250	10,043
138.9	4,889	3.70	5.396	1.458	1,064	312	31,001	10,064
138.8	4,890	3.70	5.396	1.457	1,064	312	31,001	10,067
138.9	4,894	3.71	5.410	1.460	1,064	312	31,001	10,074
139.3	4,906	3.71	5.410	1.457	1,064	313	31,001	10,099
139.3	4,904	3.71	5.410	1.457	1,064	313	31,001	10,096
138.9	4,893	3.70	5.396	1.457	1,064	312	30,876	10,112
138.3	4,874	3.69	5.369	1.455	1,064	311	30,876	10,073
138.5	4,879	3.69	5.383	1.457	1,064	311	30,876	10,085
138.0	4,865	3.68	5.341	1.450	1,064	310	30,876	10,055
139.0	4,894	3.71	5.410	1.460	1,064	312	31,001	10,074
139.1	4,896	3.71	5.410	1.460	1,064	312	31,001	10,078
138.4	4,876	3.69	5.369	1.454	1,064	311	30,876	10,079
138.0	4,867	3.69	5.327	1.445	1,064	311	30,752	10,101
138.5	4,884	3.70	5.369	1.452	1,064	312	30,876	10,095
138.8	4,889	3.70	5.410	1.462	1,064	312	31,001	10,065
138.4	4,880	3.69	5.383	1.457	1,064	311	30,876	10,085
138.4	4,880	3.69	5.383	1.457	1,064	311	30,876	10,086
139.1	4,901	3.71	5.410	1.458	1,064	313	31,001	10,089
139.4	4,907	3.72	5.410	1.456	1,064	313	31,125	10,060
139.5	4,915	3.72	5.410	1.454	1,064	314	31,001	10,117
139.1	4,904	3.71	5.396	1.453	1,064	313	31,001	10,095
139.3	4,906	3.71	5.410	1.457	1,064	313	31,125	10,059
138.6	4,887	3.70	5.383	1.455	1,064	312	30,876	10,101
138.1	4,872	3.69	5.341	1.448	1,064	311	30,876	10,070
137.4	4,853	3.67	5.243	1.427	1,064	310	30,627	10,113
137.8	4,868	3.69	5.299	1.438	1,064	311	30,627	10,144
137.5	4,855	3.68	5.271	1.434	1,064	310	30,752	10,075
137.8	4,867	3.69	5.299	1.438	1,064	311	30,752	10,101
138.1	4,873	3.69	5.355	1.451	1,064	311	30,876	10,073
138.2	4,879	3.69	5.355	1.449	1,064	311	30,876	10,085
137.9	4,874	3.69	5.313	1.440	1,064	311	30,876	10,074
137.4	4,856	3.68	5.257	1.430	1,064	310	30,752	10,077
137.8	4,865	3.68	5.299	1.439	1,064	310	30,752	10,095
138.0	4,871	3.69	5.341	1.448	1,064	311	30,876	10,068
138.2	4,881	3.70	5.327	1.442	1,064	311	30,752	10,128
137.9	4,875	3.69	5.313	1.440	1,064	311	30,752	10,116
137.5	4,862	3.68	5.285	1.436	1,064	310	30,752	10,089
138.4	4,887	3.70	5.383	1.455	1,064	312	31,001	10,061
138.3	4,884	3.70	5.369	1.452	1,064	312	31,001	10,054
138.7	4,896	3.71	5.383	1.452	1,064	312	31,001	10,080
138.5	4,888	3.70	5.396	1.458	1,064	312	31,001	10,062

138.4	4,885	3.70	5.383	1.455	1,064	312	31,001	10,056
138.3	4,885	3.70	5.355	1.448	1,064	312	30,876	10,097
138.1	4,877	3.69	5.341	1.446	1,064	311	30,876	10,080
137.1	4,849	3.67	5.230	1.425	1,064	309	30,752	10,062
137.0	4,845	3.67	5.216	1.422	1,064	309	30,627	10,096
137.0	4,845	3.67	5.216	1.422	1,064	309	30,627	10,096
137.5	4,862	3.68	5.271	1.432	1,064	310	30,752	10,091
143.056021	**5006.549427**	**3.790725048**	**5.437430148**	**1.435547483**	**1063.616864**	**319.503024**	**31465.90838**	**10153.51927**

187643.9801

Montrose corrected - GE Trend Test 2 Unit 1

DATETIME	MW	TE_2024	PGASA	TE_2037	PT_2074A	FT_2003	FT_2000
#!Min	10	0	410	400	-100	-100	800
#!Max	50	100	480	900	300	500	1700
#!Units	MW	F	psig	F		gpm	ACFM

#!Description	MW SELECT	FUEL SUPPLY TEMPERATURE A	GAS FUEL SUPPLY PRESSURE	DE-MIN WATER SUPPLY TEMP(x10)	DE-MIN WATER SUPPLY PRESS(x10)	NOX WATER INJECTION FLOW(x10)	GAS FLOW FT2000(x10)
12:19:19 PM	30.5025	814	506.4669	843	663	367	1363
12:19:48 PM	30.5025	815	506.4238	843	659	370	1364
12:20:18 PM	30.627	815	506.3234	844	660	373	1367
12:20:48 PM	30.5025	815	506.7064	844	659	369	1363
12:21:17 PM	30.5025	815	506.6	844	642	368	1362
12:21:47 PM	30.627	816	506.2277	844	654	376	1370
12:21:47 PM	30.627	816	506.2277	844	660	376	1370
12:22:17 PM	30.7515	817	505.9683	843	657	379	1374
12:22:47 PM	30.627	817	506.2856	842	662	375	1369
12:23:16 PM	30.5025	817	506.3303	843	650	371	1365
12:23:46 PM	30.5025	817	506.6431	844	660	369	1363
12:24:16 PM	30.5025	817	506.7106	844	659	370	1364
12:24:46 PM	30.5025	817	506.8422	844	648	367	1360
12:25:15 PM	30.5025	818	506.84	844	658	369	1364
12:25:45 PM	30.5025	818	506.7297	845	649	370	1363
12:26:15 PM	30.5025	818	506.4177	845	661	372	1367
12:26:44 PM	30.378	818	506.909	845	656	367	1360
12:27:14 PM	30.5025	819	506.6469	845	660	368	1362
12:27:44 PM	30.378	819	506.5283	845	659	367	1361
12:28:14 PM	30.5025	819	506.3536	845	638	373	1367
12:28:43 PM	30.378	820	506.5695	845	649	369	1364
12:29:13 PM	30.378	819	506.5195	845	660	368	1363
12:29:43 PM	30.5025	820	506.9075	845	659	368	1363
12:30:12 PM	30.378	821	506.9734	845	662	365	1359
12:30:42 PM	30.129	820	507.7944	845	637	356	1348
12:31:12 PM	30.2535	821	507.3206	847	647	361	1352
12:31:42 PM	30.129	821	507.5887	848	671	355	1347
12:32:11 PM	30.129	822	507.6014	848	652	358	1350
12:32:41 PM	30.0045	822	507.8913	848	665	352	1342
12:33:11 PM	30.129	823	507.9786	849	665	352	1344
12:33:40 PM	30.129	822	507.7112	849	659	356	1350
12:34:10 PM	30.2535	823	507.1905	849	662	360	1352
12:34:40 PM	30.2535	823	507.5114	848	660	361	1353
12:35:10 PM	30.2535	824	507.5884	848	659	359	1352
12:35:39 PM	30.0045	824	508.0141	848	655	353	1345
12:36:09 PM	30.2535	824	507.6193	849	660	359	1350
12:36:39 PM	30.2535	824	507.8089	849	676	358	1352
12:37:09 PM	30.129	825	507.7703	849	657	356	1348
12:37:38 PM	30.129	825	507.9786	849	652	354	1345
12:38:08 PM	30.2535	825	507.6711	849	655	358	1349
12:38:38 PM	30.2535	826	507.279	849	664	363	1357
12:39:07 PM	30.2535	826	507.5582	849	659	362	1357
12:39:37 PM	30.2535	826	507.451	849	677	360	1353
12:40:07 PM	30.2535	827	507.501	849	652	361	1353
12:40:37 PM	30.2535	827	507.9016	849	665	360	1354
12:41:06 PM	30.0045	827	509.0109	849	667	349	1338
12:41:36 PM	30.0045	827	507.8829	850	645	352	1339
12:42:06 PM	30.129	828	507.369	850	651	355	1348
12:42:35 PM	30.2535	828	506.9792	850	660	359	1354
12:43:05 PM	30.2535	828	506.7316	849	660	362	1359
12:43:35 PM	30.378	829	505.8309	849	648	368	1364
12:44:05 PM	30.378	829	506.2342	848	666	370	1366
12:44:34 PM	30.2535	829	506.5733	848	652	361	1358
12:45:04 PM	30.2535	830	506.3127	848	664	363	1358
12:45:34 PM	30.2535	830	506.3341	849	666	359	1354
12:45:34 PM	30.2535	830	506.3482	849	654	359	1354
12:46:03 PM	30.378	830	506.13	849	655	367	1361

12:46:33 PM	30.378	830	506.4482	848	658	364	1362
12:47:03 PM	30.2535	830	506.0786	848	656	363	1359
12:47:33 PM	30.2535	831	506.0308	848	645	367	1362
12:48:02 PM	30.2535	831	506.1361	848	652	360	1355
12:48:32 PM	30.378	831	506.204	848	659	365	1361
12:49:02 PM	30.129	831	506.6164	848	661	359	1356
12:49:32 PM	30.129	831	506.3646	848	645	359	1354
12:50:01 PM	30.129	832	506.4482	849	657	358	1353
12:50:31 PM	30.378	832	505.8977	849	651	368	1365
12:51:01 PM	30.378	832	505.5979	848	640	368	1365
12:51:30 PM	30.378	833	505.1378	848	657	370	1367
12:52:00 PM	30.378	832	505.5135	847	659	368	1365
12:52:30 PM	30.2535	833	505.6993	847	666	364	1362
12:53:00 PM	30.129	832	506.3029	848	661	357	1353
12:53:29 PM	30.129	833	506.3387	848	661	359	1358
12:53:59 PM	30.129	833	506.338	849	664	356	1350
12:54:29 PM	30.0045	834	506.579	850	657	354	1348
12:54:58 PM	30.129	834	506.4977	850	666	358	1355
12:55:28 PM	30.2535	834	505.9305	850	658	362	1358
12:55:58 PM	30.129	834	506.2624	850	650	359	1356
12:56:28 PM	30.129	834	506.1628	849	658	359	1355
12:56:57 PM	30.129	834	505.9652	850	651	358	1353
12:57:27 PM	30.2535	835	505.7493	850	660	363	1360
12:57:57 PM	30.378	835	505.2984	849	664	367	1364
12:58:26 PM	30.2535	835	506.2475	849	653	360	1358
12:58:56 PM	30.2535	836	506.1098	849	678	364	1363
12:59:26 PM	30.2535	835	506.2128	849	663	360	1358
12:59:56 PM	30.129	836	506.1762	849	660	360	1357
1:00:25 PM	30.0045	836	506.0171	850	659	358	1355
1:00:55 PM	30.129	836	506.2822	850	665	356	1351
1:01:25 PM	30.129	836	506.1346	850	650	358	1355
1:01:55 PM	30.0045	837	506.6393	850	662	355	1350
1:02:24 PM	30.129	837	506.5923	851	663	356	1350
1:02:54 PM	30.0045	837	506.5214	850	651	355	1349
1:03:24 PM	29.88	837	506.8083	851	660	350	1344
1:03:53 PM	30.0045	838	506.4123	852	660	353	1346
1:04:23 PM	30.0045	838	506.5462	851	662	352	1348
1:04:53 PM	29.631	838	507.2988	851	671	347	1335
1:05:23 PM	29.88	838	507.0322	852	650	350	1342
1:05:52 PM	30.0045	839	506.827	853	649	355	1349
1:06:22 PM	29.88	839	507.0547	853	652	349	1342
1:06:52 PM	29.7555	839	506.9692	852	638	347	1338
1:07:21 PM	29.88	839	506.661	853	671	350	1344
1:07:51 PM	30.0045	840	506.5195	852	666	356	1349
1:08:21 PM	30.0045	840	506.7602	852	646	353	1345
1:08:51 PM	30.0045	840	506.5496	852	653	355	1352
1:09:20 PM	29.631	840	507.4061	852	673	345	1333
1:09:50 PM	29.7555	841	507.5689	853	645	345	1333
1:10:20 PM	29.631	841	507.5792	854	672	343	1330
1:10:49 PM	29.631	842	507.7352	854	664	341	1326
1:11:19 PM	29.88	842	507.1581	855	651	351	1339
1:11:49 PM	30.0045	842	507.1638	853	648	351	1345
1:12:19 PM	30.0045	842	507.0829	853	647	354	1349
1:12:48 PM	29.88	843	507.4556	852	668	350	1344
1:13:18 PM	29.631	843	508.148	853	679	344	1331
1:13:48 PM	29.631	843	508.1045	854	674	343	1329
1:14:18 PM	29.631	844	508.2945	854	653	345	1332
1:14:47 PM	29.7555	844	507.9943	855	639	347	1333
1:15:17 PM	29.631	844	508.3658	855	656	344	1330
1:15:47 PM	29.7555	845	507.939	854	653	346	1333
1:16:16 PM	29.88	845	507.5331	855	656	348	1341
1:16:46 PM	29.88	845	507.5327	855	657	350	1341

1:17:16 PM	29.7555	845	507.9519	854	657	347	1336
1:17:46 PM	29.631	846	507.8684	855	672	344	1330
1:18:15 PM	29.7555	846	507.7173	855	641	345	1331
1:18:45 PM	29.7555	846	507.5403	855	647	346	1336
1:19:15 PM	29.7555	846	507.2599	855	657	347	1335
1:19:44 PM	29.7555	847	507.5544	854	652	348	1340
1:20:14 PM	29.631	847	507.572	855	643	345	1334
1:20:44 PM	29.7555	847	507.1421	855	663	349	1337
1:21:14 PM	29.5065	848	508.4822	855	658	341	1327
1:21:43 PM	29.5065	848	508.2991	855	670	341	1327
1:22:13 PM	29.382	848	508.7324	856	644	337	1319
1:22:43 PM	29.382	848	508.5115	857	633	338	1320
1:23:12 PM	29.5065	849	508.4703	857	653	341	1324
1:23:42 PM	29.5065	849	508.2354	857	653	341	1326
1:24:12 PM	29.631	850	508.0851	856	667	344	1331
1:24:42 PM	29.5065	850	508.3983	857	647	341	1326
1:25:11 PM	29.631	850	508.4242	857	656	342	1328
1:25:41 PM	29.382	850	508.729	856	667	339	1322
1:26:11 PM	29.382	851	508.6191	857	636	337	1317
1:26:41 PM	29.382	851	509.0883	857	659	335	1316
1:27:10 PM	29.382	851	508.5093	858	658	339	1321
1:27:40 PM	29.382	852	508.8575	858	657	337	1319
1:28:10 PM	29.382	852	508.6207	857	659	340	1323
1:28:39 PM	29.5065	852	508.515	858	652	340	1324
1:29:09 PM	29.382	853	508.7068	857	638	337	1321
1:29:39 PM	29.382	853	508.7431	858	660	340	1320
1:30:09 PM	29.382	853	508.6584	858	626	339	1323
1:30:38 PM	29.382	854	508.4158	857	654	339	1322
1:31:08 PM	29.382	854	508.8999	858	675	336	1319
1:31:38 PM	29.5065	854	508.5188	858	662	340	1327
1:32:07 PM	29.631	855	507.9042	857	672	342	1328
1:32:37 PM	29.631	855	507.9138	857	675	346	1334
1:33:07 PM	29.7555	856	507.91	857	658	346	1332
1:33:07 PM	29.7555	856	507.9371	857	658	346	1332
1:33:37 PM	29.7555	856	507.9027	856	663	347	1337
1:34:06 PM	29.5065	856	507.7196	856	670	342	1330
1:34:36 PM	29.5065	856	507.9084	857	665	343	1330
1:35:06 PM	29.5065	856	508.1938	857	665	340	1327
1:35:36 PM	29.631	856	508.2548	857	653	344	1332
1:36:05 PM	29.7555	857	508.0156	857	655	346	1334
1:36:35 PM	29.631	857	508.251	856	656	343	1330
1:37:05 PM	29.382	857	508.3101	856	658	340	1326
1:37:34 PM	29.382	857	508.3906	857	646	340	1323
1:38:04 PM	29.382	858	508.5314	858	661	338	1322
1:38:34 PM	29.382	858	508.3269	858	661	339	1324
1:39:04 PM	29.5065	858	507.548	858	668	343	1330
1:39:33 PM	29.5065	858	507.8245	857	662	342	1329
1:40:03 PM	29.5065	859	507.6704	857	651	342	1329
1:40:33 PM	29.5065	859	507.5926	858	665	343	1327
1:41:02 PM	29.5065	859	507.6177	857	652	344	1331
1:41:32 PM	29.5065	860	508.1221	857	654	340	1327
1:42:02 PM	29.382	860	508.0343	858	660	339	1326
1:42:32 PM	29.382	860	507.7734	858	660	341	1326
1:43:01 PM	29.382	860	508.048	858	665	339	1326
1:43:31 PM	29.2575	860	508.6691	858	635	336	1320
1:44:01 PM	29.382	860	507.9317	859	652	338	1322
1:44:30 PM	29.382	861	507.5876	858	646	340	1327
1:45:00 PM	29.5065	861	507.5502	858	650	342	1329
1:45:30 PM	29.631	862	507.015	858	657	345	1336
1:46:00 PM	29.631	862	507.1299	858	662	344	1334
1:46:29 PM	29.5065	862	507.7307	857	644	341	1330
1:46:59 PM	29.631	862	507.4366	857	652	345	1335
1:47:29 PM	29.5065	862	507.34	856	660	343	1333
1:47:59 PM	29.382	863	508.0519	857	653	338	1326
Average	**29.94531**	**838.4644809**	**507.267321**	**851.65574**	**657.01639**	**353.098361**	**1344.060109**

Montrose corrected - GE Trend Test 2 Unit 1

ACFM	SCFM(68F)	lb/sec	lb/sec	ND	BTU/SCF (68F)	MM BTU/Hr		BTU/KWH
GAS FLOW	**GAS FLOW**	**Gas Flow**	**NOX WATER INJECTION FLOW**	**Water/Fuel Ratio**	**HHV**	**Heat Input**	**Kw**	**Heat Rate**
136.3	4,832	3.66	5.104	1.395	1,064	308	30,503	10,110
136.4	4,835	3.66	5.146	1.406	1,064	309	30,503	10,117
136.7	4,845	3.67	5.188	1.414	1,064	309	30,627	10,096
136.3	4,835	3.66	5.132	1.402	1,064	309	30,503	10,115
136.2	4,830	3.66	5.118	1.400	1,064	308	30,503	10,105
137.0	4,855	3.68	5.230	1.423	1,064	310	30,627	10,116
137.0	4,855	3.68	5.230	1.423	1,064	310	30,627	10,116
137.4	4,867	3.68	5.271	1.431	1,064	311	30,752	10,100
136.9	4,852	3.67	5.216	1.420	1,064	310	30,627	10,110
136.5	4,838	3.66	5.160	1.409	1,064	309	30,503	10,122
136.3	4,834	3.66	5.132	1.402	1,064	308	30,503	10,114
136.4	4,838	3.66	5.146	1.405	1,064	309	30,503	10,122
136.0	4,825	3.65	5.104	1.397	1,064	308	30,503	10,095
136.4	4,839	3.66	5.132	1.401	1,064	309	30,503	10,125
136.3	4,835	3.66	5.146	1.406	1,064	309	30,503	10,115
136.7	4,846	3.67	5.174	1.410	1,064	309	30,503	10,139
136.0	4,826	3.65	5.104	1.397	1,064	308	30,378	10,138
136.2	4,830	3.66	5.118	1.399	1,064	308	30,503	10,106
136.1	4,826	3.65	5.104	1.397	1,064	308	30,378	10,138
136.7	4,845	3.67	5.188	1.414	1,064	309	30,503	10,138
136.4	4,837	3.66	5.132	1.401	1,064	309	30,378	10,161
136.3	4,833	3.66	5.118	1.399	1,064	308	30,378	10,153
136.3	4,836	3.66	5.118	1.398	1,064	309	30,503	10,119
135.9	4,823	3.65	5.077	1.390	1,064	308	30,378	10,132
134.8	4,791	3.63	4.951	1.365	1,064	306	30,129	10,149
135.2	4,801	3.64	5.021	1.381	1,064	306	30,254	10,128
134.7	4,786	3.62	4.937	1.363	1,064	305	30,129	10,137
135.0	4,797	3.63	4.979	1.371	1,064	306	30,129	10,160
134.2	4,771	3.61	4.896	1.355	1,064	304	30,005	10,147
134.4	4,779	3.62	4.896	1.353	1,064	305	30,129	10,122
135.0	4,798	3.63	4.951	1.363	1,064	306	30,129	10,162
135.2	4,800	3.63	5.007	1.378	1,064	306	30,254	10,125
135.3	4,806	3.64	5.021	1.380	1,064	307	30,254	10,139
135.2	4,804	3.64	4.993	1.373	1,064	307	30,254	10,133
134.5	4,783	3.62	4.910	1.356	1,064	305	30,005	10,172
135.0	4,797	3.63	4.993	1.375	1,064	306	30,254	10,118
135.2	4,806	3.64	4.979	1.368	1,064	307	30,254	10,137
134.8	4,791	3.63	4.951	1.365	1,064	306	30,129	10,148
134.5	4,782	3.62	4.924	1.360	1,064	305	30,129	10,130
134.9	4,794	3.63	4.979	1.372	1,064	306	30,254	10,112
135.7	4,819	3.65	5.049	1.384	1,064	308	30,254	10,164
135.7	4,821	3.65	5.035	1.379	1,064	308	30,254	10,170
135.3	4,806	3.64	5.007	1.376	1,064	307	30,254	10,138
135.3	4,806	3.64	5.021	1.380	1,064	307	30,254	10,139
135.4	4,814	3.64	5.007	1.374	1,064	307	30,254	10,154
133.8	4,767	3.61	4.854	1.345	1,064	304	30,005	10,139
133.9	4,760	3.60	4.896	1.358	1,064	304	30,005	10,124
134.8	4,787	3.62	4.937	1.362	1,064	306	30,129	10,140
135.4	4,805	3.64	4.993	1.372	1,064	307	30,254	10,136
135.9	4,821	3.65	5.035	1.379	1,064	308	30,254	10,169
136.4	4,830	3.66	5.118	1.400	1,064	308	30,378	10,147
136.6	4,841	3.67	5.146	1.404	1,064	309	30,378	10,169
135.8	4,816	3.65	5.021	1.377	1,064	307	30,254	10,158
135.8	4,813	3.64	5.049	1.385	1,064	307	30,254	10,153
135.4	4,799	3.63	4.993	1.374	1,064	306	30,254	10,123
135.4	4,799	3.63	4.993	1.374	1,064	306	30,254	10,124
136.1	4,822	3.65	5.104	1.398	1,064	308	30,378	10,130

136.2	4,829	3.66	5.063	1.385	1,064	308	30,378	10,144
135.9	4,815	3.65	5.049	1.385	1,064	307	30,254	10,156
136.2	4,825	3.65	5.104	1.397	1,064	308	30,254	10,177
135.5	4,801	3.64	5.007	1.377	1,064	306	30,254	10,127
136.1	4,823	3.65	5.077	1.390	1,064	308	30,378	10,132
135.6	4,809	3.64	4.993	1.371	1,064	307	30,129	10,186
135.4	4,799	3.63	4.993	1.374	1,064	306	30,129	10,166
135.3	4,797	3.63	4.979	1.371	1,064	306	30,129	10,160
136.5	4,834	3.66	5.118	1.398	1,064	308	30,378	10,155
136.5	4,831	3.66	5.118	1.399	1,064	308	30,378	10,150
136.7	4,834	3.66	5.146	1.406	1,064	309	30,378	10,155
136.5	4,831	3.66	5.118	1.399	1,064	308	30,378	10,148
136.2	4,822	3.65	5.063	1.387	1,064	308	30,254	10,171
135.3	4,795	3.63	4.965	1.368	1,064	306	30,129	10,157
135.8	4,813	3.64	4.993	1.370	1,064	307	30,129	10,195
135.0	4,785	3.62	4.951	1.367	1,064	305	30,129	10,135
134.8	4,780	3.62	4.924	1.360	1,064	305	30,005	10,167
135.5	4,804	3.64	4.979	1.369	1,064	307	30,129	10,176
135.8	4,810	3.64	5.035	1.383	1,064	307	30,254	10,145
135.6	4,806	3.64	4.993	1.372	1,064	307	30,129	10,179
135.5	4,801	3.64	4.993	1.374	1,064	306	30,129	10,169
135.3	4,792	3.63	4.979	1.372	1,064	306	30,129	10,151
136.0	4,815	3.65	5.049	1.385	1,064	307	30,254	10,157
136.4	4,825	3.65	5.104	1.397	1,064	308	30,378	10,136
135.8	4,813	3.64	5.007	1.374	1,064	307	30,254	10,152
136.3	4,829	3.66	5.063	1.385	1,064	308	30,254	10,186
135.8	4,812	3.64	5.007	1.374	1,064	307	30,254	10,151
135.7	4,808	3.64	5.007	1.375	1,064	307	30,129	10,185
135.5	4,800	3.63	4.979	1.370	1,064	306	30,005	10,209
135.1	4,788	3.63	4.951	1.366	1,064	306	30,129	10,142
135.5	4,801	3.64	4.979	1.370	1,064	306	30,129	10,169
135.0	4,788	3.63	4.937	1.362	1,064	306	30,005	10,183
135.0	4,787	3.62	4.951	1.366	1,064	306	30,129	10,140
134.9	4,783	3.62	4.937	1.363	1,064	305	30,005	10,173
134.4	4,768	3.61	4.868	1.348	1,064	304	29,880	10,184
134.6	4,772	3.61	4.910	1.359	1,064	305	30,005	10,149
134.8	4,780	3.62	4.896	1.353	1,064	305	30,005	10,166
133.5	4,741	3.59	4.826	1.345	1,064	303	29,631	10,210
134.2	4,763	3.61	4.868	1.350	1,064	304	29,880	10,173
134.9	4,786	3.62	4.937	1.363	1,064	305	30,005	10,179
134.2	4,763	3.61	4.854	1.346	1,064	304	29,880	10,173
133.8	4,748	3.60	4.826	1.342	1,064	303	29,756	10,184
134.4	4,767	3.61	4.868	1.349	1,064	304	29,880	10,181
134.9	4,783	3.62	4.951	1.367	1,064	305	30,005	10,173
134.5	4,771	3.61	4.910	1.359	1,064	304	30,005	10,148
135.2	4,794	3.63	4.937	1.360	1,064	306	30,005	10,197
133.3	4,734	3.58	4.798	1.339	1,064	302	29,631	10,197
133.3	4,736	3.59	4.798	1.338	1,064	302	29,756	10,157
133.0	4,725	3.58	4.771	1.333	1,064	302	29,631	10,177
132.6	4,713	3.57	4.743	1.329	1,064	301	29,631	10,150
133.9	4,754	3.60	4.882	1.356	1,064	303	29,880	10,152
134.5	4,775	3.62	4.882	1.350	1,064	305	30,005	10,156
134.9	4,788	3.63	4.924	1.358	1,064	306	30,005	10,184
134.4	4,774	3.61	4.868	1.347	1,064	305	29,880	10,196
133.1	4,734	3.58	4.784	1.335	1,064	302	29,631	10,196
132.9	4,727	3.58	4.771	1.333	1,064	302	29,631	10,180
133.2	4,739	3.59	4.798	1.337	1,064	302	29,631	10,206
133.3	4,740	3.59	4.826	1.345	1,064	302	29,756	10,166
133.0	4,733	3.58	4.784	1.335	1,064	302	29,631	10,193
133.3	4,739	3.59	4.812	1.341	1,064	302	29,756	10,164
134.1	4,764	3.61	4.840	1.342	1,064	304	29,880	10,175
134.1	4,764	3.61	4.868	1.350	1,064	304	29,880	10,175

133.6	4,750	3.60	4.826	1.342	1,064	303	29,756	10,188
133.0	4,728	3.58	4.784	1.337	1,064	302	29,631	10,183
133.1	4,730	3.58	4.798	1.340	1,064	302	29,756	10,145
133.6	4,746	3.59	4.812	1.339	1,064	303	29,756	10,180
133.5	4,740	3.59	4.826	1.345	1,064	303	29,756	10,166
134.0	4,761	3.60	4.840	1.343	1,064	304	29,756	10,210
133.4	4,740	3.59	4.798	1.337	1,064	302	29,631	10,208
133.7	4,746	3.59	4.854	1.351	1,064	303	29,756	10,179
132.7	4,723	3.58	4.743	1.326	1,064	301	29,507	10,215
132.7	4,721	3.57	4.743	1.327	1,064	301	29,507	10,211
131.9	4,697	3.56	4.687	1.318	1,064	300	29,382	10,201
132.0	4,698	3.56	4.701	1.322	1,064	300	29,382	10,204
132.4	4,712	3.57	4.743	1.329	1,064	301	29,507	10,191
132.6	4,717	3.57	4.743	1.328	1,064	301	29,507	10,202
133.1	4,734	3.58	4.784	1.335	1,064	302	29,631	10,195
132.6	4,719	3.57	4.743	1.328	1,064	301	29,507	10,205
132.8	4,726	3.58	4.757	1.329	1,064	302	29,631	10,178
132.2	4,707	3.56	4.715	1.323	1,064	300	29,382	10,224
131.7	4,689	3.55	4.687	1.320	1,064	299	29,382	10,183
131.6	4,689	3.55	4.659	1.312	1,064	299	29,382	10,185
132.1	4,702	3.56	4.715	1.324	1,064	300	29,382	10,212
131.9	4,698	3.56	4.687	1.318	1,064	300	29,382	10,203
132.3	4,710	3.57	4.729	1.326	1,064	301	29,382	10,230
132.4	4,712	3.57	4.729	1.325	1,064	301	29,507	10,192
132.1	4,704	3.56	4.687	1.316	1,064	300	29,382	10,216
132.0	4,700	3.56	4.729	1.329	1,064	300	29,382	10,209
132.3	4,710	3.57	4.715	1.322	1,064	301	29,382	10,230
132.2	4,704	3.56	4.715	1.324	1,064	300	29,382	10,218
131.9	4,698	3.56	4.673	1.314	1,064	300	29,382	10,204
132.7	4,723	3.58	4.729	1.322	1,064	301	29,507	10,215
132.8	4,721	3.57	4.757	1.331	1,064	301	29,631	10,168
133.4	4,743	3.59	4.812	1.340	1,064	303	29,631	10,214
133.2	4,735	3.59	4.812	1.342	1,064	302	29,756	10,156
133.2	4,736	3.59	4.812	1.342	1,064	302	29,756	10,157
133.7	4,753	3.60	4.826	1.341	1,064	303	29,756	10,194
133.0	4,727	3.58	4.757	1.329	1,064	302	29,507	10,223
133.0	4,728	3.58	4.771	1.333	1,064	302	29,507	10,227
132.7	4,720	3.57	4.729	1.323	1,064	301	29,507	10,209
133.2	4,739	3.59	4.784	1.334	1,064	302	29,631	10,206
133.4	4,744	3.59	4.812	1.340	1,064	303	29,756	10,174
133.0	4,731	3.58	4.771	1.332	1,064	302	29,631	10,190
132.6	4,718	3.57	4.729	1.324	1,064	301	29,382	10,247
132.3	4,708	3.56	4.729	1.327	1,064	300	29,382	10,225
132.2	4,706	3.56	4.701	1.319	1,064	300	29,382	10,220
132.4	4,711	3.57	4.715	1.322	1,064	301	29,382	10,232
133.0	4,725	3.58	4.771	1.333	1,064	302	29,507	10,220
132.9	4,724	3.58	4.757	1.330	1,064	301	29,507	10,217
132.9	4,723	3.58	4.757	1.330	1,064	301	29,507	10,214
132.7	4,715	3.57	4.771	1.336	1,064	301	29,507	10,197
133.1	4,729	3.58	4.784	1.336	1,064	302	29,507	10,229
132.7	4,720	3.57	4.729	1.323	1,064	301	29,507	10,208
132.6	4,715	3.57	4.715	1.321	1,064	301	29,382	10,241
132.6	4,713	3.57	4.743	1.329	1,064	301	29,382	10,236
132.6	4,715	3.57	4.715	1.321	1,064	301	29,382	10,242
132.0	4,700	3.56	4.673	1.313	1,064	300	29,258	10,251
132.2	4,700	3.56	4.701	1.321	1,064	300	29,382	10,209
132.7	4,715	3.57	4.729	1.325	1,064	301	29,382	10,240
132.9	4,722	3.57	4.757	1.331	1,064	301	29,507	10,212
133.6	4,742	3.59	4.798	1.337	1,064	303	29,631	10,212
133.4	4,736	3.59	4.784	1.334	1,064	302	29,631	10,199
133.0	4,727	3.58	4.743	1.325	1,064	302	29,507	10,223
133.5	4,742	3.59	4.798	1.336	1,064	303	29,631	10,213
133.3	4,734	3.58	4.771	1.331	1,064	302	29,507	10,238
132.6	4,715	3.57	4.701	1.317	1,064	301	29,382	10,242
134.406011	**4772.407153**	**3.61344347**	**4.911009699**	**1.358817224**	**1063.616864**	**304.5607638**	**29945.31148**	**10170.97757**

GE Trend Test 1 Unit 1

DATETIME	MW	TE_2024	PGASA	TE_2037	PT_2074A	FT_2003	FT_2000
#!Min	10	0	410	400	-100	-100	800
#!Max	50	100	480	900	300	500	1700
#!Units	MW	F	psig	F		gpm	ACFM
#!Description	**MW SELECT**	**FUEL SUPPLY TEMPERATURE A**	**GAS FUEL SUPPLY PRESSURE**	**DE-MIN WATER SUPPLY TEMP(x10)**	**DE-MIN WATER SUPPLY PRESS(x10)**	**NOX WATER INJECTION FLOW(x10)**	**GAS FLOW FT2000(x10)**
2:05:19 PM	29.2575	871	508.7031	863	672	336	1319
2:05:48 PM	29.2575	872	508.5581	863	644	336	1321
2:06:18 PM	29.2575	872	508.4421	862	684	337	1322
2:06:48 PM	29.382	873	508.2361	862	654	338	1325
2:07:18 PM	29.2575	872	508.0156	862	657	338	1324
2:07:47 PM	29.382	873	507.8417	861	651	337	1324
2:08:17 PM	29.2575	873	507.5285	862	685	337	1322
2:08:47 PM	29.2575	873	508.3185	861	670	336	1322
2:09:16 PM	29.382	873	507.6201	861	663	339	1324
2:09:46 PM	29.382	874	507.3134	861	654	341	1329
2:10:16 PM	29.382	873	507.7646	861	663	337	1325
2:10:46 PM	29.382	874	507.786	861	656	340	1327
2:11:15 PM	29.2575	874	508.0305	860	646	337	1326
2:11:45 PM	29.382	874	508.2109	861	649	337	1321
2:12:15 PM	29.2575	874	507.9157	861	647	336	1322
2:12:45 PM	29.2575	875	508.0698	862	666	337	1325
2:13:14 PM	29.133	875	508.6614	861	648	334	1319
2:13:44 PM	29.133	874	508.7168	862	671	331	1316
2:14:14 PM	29.2575	875	508.3776	862	676	336	1320
2:14:43 PM	29.2575	875	508.6202	862	649	335	1318
2:15:13 PM	29.133	875	508.5108	862	622	333	1316
2:15:43 PM	29.133	875	509.03	862	684	331	1314
2:16:13 PM	29.0085	875	509.4824	863	639	330	1310
2:16:42 PM	29.0085	875	509.4561	863	686	328	1309
2:17:12 PM	28.884	876	509.6312	864	661	326	1301
2:17:42 PM	29.133	877	509.7071	863	651	331	1313
2:18:11 PM	29.0085	877	509.4355	864	664	329	1309
2:18:41 PM	29.0085	877	509.6628	864	639	328	1304
2:19:11 PM	28.884	877	510.3666	865	684	327	1305
2:19:41 PM	29.0085	878	509.9459	865	681	330	1308
2:20:10 PM	28.884	878	509.9398	865	684	328	1307
2:20:40 PM	29.0085	878	510.3185	865	670	330	1311
2:21:10 PM	29.0085	878	510.0408	864	655	331	1311
2:21:39 PM	29.0085	879	510.5963	865	659	328	1305
2:22:09 PM	29.0085	879	510.5131	865	679	329	1305
2:22:39 PM	28.884	879	511.1864	865	682	325	1300
2:23:09 PM	28.884	879	510.7756	865	667	327	1302
2:23:38 PM	29.133	879	510.5143	866	669	331	1312
2:24:08 PM	29.0085	880	510.5352	865	665	330	1309
2:24:38 PM	29.0085	880	510.6451	865	677	330	1310
2:25:08 PM	28.884	880	510.9819	865	666	327	1303
2:25:37 PM	28.7595	881	510.967	865	651	325	1299
2:26:07 PM	29.0085	881	510.5253	866	662	328	1304
2:26:37 PM	29.0085	881	510.3529	865	651	329	1307
2:27:06 PM	28.884	881	510.9202	865	656	327	1304
2:27:36 PM	28.884	882	510.7561	865	655	327	1301
2:28:06 PM	28.884	882	510.6425	866	664	328	1306
2:28:36 PM	29.0085	882	510.7958	866	668	329	1308
2:29:05 PM	29.133	882	509.7849	866	628	332	1313
2:29:35 PM	28.884	882	510.6993	865	660	328	1306
2:30:05 PM	29.133	883	510.1519	865	652	331	1313
2:30:34 PM	29.133	883	510.3853	865	695	333	1316
2:31:04 PM	29.133	883	509.6354	865	639	335	1318
2:31:34 PM	29.0085	883	509.934	865	662	332	1316
2:32:04 PM	29.0085	883	510.0691	865	662	331	1316
2:32:33 PM	29.133	883	509.3485	864	662	336	1326

2:33:03 PM	29.133	884	508.7957	864	667	339	1334
2:33:33 PM	29.133	884	508.2167	863	673	343	1351
2:33:33 PM	29.133	884	508.2403	863	673	343	1351
2:34:03 PM	29.0085	884	507.8008	862	663	344	1359
2:34:32 PM	29.0085	884	507.2489	862	659	345	1367
2:35:02 PM	28.884	884	507.1611	862	659	347	1375
2:35:32 PM	28.884	885	507.4774	861	651	346	1377
2:36:01 PM	28.884	885	507.0921	861	668	348	1384
2:36:31 PM	29.0085	885	506.373	861	654	352	1388
2:37:01 PM	28.7595	885	506.7087	861	659	349	1388
2:37:31 PM	29.0085	885	506.0255	860	662	356	1401
2:38:00 PM	28.884	886	505.533	859	643	358	1407
2:38:30 PM	28.884	886	504.8799	859	650	360	1415
2:39:00 PM	28.884	886	504.7983	859	658	360	1416
2:39:29 PM	28.7595	886	504.511	859	676	362	1421
2:39:59 PM	28.7595	887	504.2338	859	673	361	1425
2:40:29 PM	28.7595	887	503.8359	859	642	362	1425
2:40:59 PM	28.884	887	503.5829	859	655	370	1435
2:41:28 PM	28.884	887	503.0588	858	652	370	1436
2:41:58 PM	28.884	887	503.2629	857	648	368	1435
2:42:28 PM	29.0085	888	502.8193	857	650	372	1439
2:42:57 PM	28.7595	888	503.4189	857	646	367	1433
2:43:27 PM	28.7595	888	504.4271	858	659	360	1425
2:43:57 PM	28.5105	888	503.9953	859	645	356	1419
2:44:27 PM	28.5105	888	504.0999	859	656	356	1418
2:44:56 PM	28.7595	888	503.8645	859	648	365	1431
2:45:26 PM	28.7595	889	503.5406	860	653	363	1429
2:45:56 PM	28.884	889	503.1645	859	654	368	1435
2:46:26 PM	28.884	889	503.4521	859	659	368	1435
2:46:55 PM	28.884	890	503.2289	859	648	368	1435
2:47:25 PM	28.7595	890	503.9225	858	649	363	1429
2:47:55 PM	28.635	890	503.723	858	651	359	1425
2:48:24 PM	28.635	891	503.327	859	645	362	1429
2:48:54 PM	28.7595	891	502.8971	859	649	365	1433
2:49:24 PM	28.7595	891	503.2274	859	665	361	1428
2:49:54 PM	28.884	891	502.5472	859	648	369	1437
2:50:23 PM	28.7595	891	503.4296	858	659	364	1433
2:50:53 PM	28.7595	891	502.7903	858	653	367	1435
2:51:23 PM	28.7595	892	502.8188	858	650	367	1436
2:51:52 PM	28.7595	892	503.1984	859	646	361	1428
2:52:22 PM	28.884	892	502.8269	859	650	367	1436
2:52:52 PM	28.7595	893	503.0325	859	655	365	1434
2:53:22 PM	28.884	893	502.096	858	656	372	1443
2:53:51 PM	28.884	893	502.0834	858	652	374	1446
2:54:21 PM	28.884	893	502.9322	858	651	367	1437
2:54:51 PM	28.7595	893	502.5862	858	657	367	1436
2:55:20 PM	28.884	893	502.7128	858	668	366	1434
2:55:50 PM	28.884	894	502.7105	859	650	369	1440
2:56:20 PM	28.884	894	502.6636	859	647	368	1438
2:56:50 PM	28.7595	893	503.1359	859	642	365	1433
2:57:19 PM	28.7595	894	503.0775	859	646	364	1430
2:57:19 PM	28.7595	894	503.0775	859	664	363	1430
2:57:49 PM	28.884	894	503.0336	860	651	369	1438
2:58:19 PM	28.7595	895	503.5002	859	651	367	1436
2:58:49 PM	28.635	895	503.6345	860	642	359	1424
2:59:18 PM	28.7595	895	503.7634	860	648	364	1432
2:59:48 PM	28.884	895	503.4475	860	643	365	1433
3:00:18 PM	28.884	895	503.1035	860	654	368	1436
3:00:47 PM	28.7595	896	503.0516	860	656	364	1432
3:01:17 PM	29.0085	896	502.8837	860	654	371	1440
3:01:47 PM	29.0085	895	502.1471	860	639	375	1445
3:02:17 PM	28.884	896	502.6594	859	653	371	1441
3:02:46 PM	28.7595	897	503.1443	859	637	363	1433
3:03:16 PM	28.7595	897	503.0165	860	648	361	1428
3:03:46 PM	28.884	896	502.6594	860	658	369	1439

3:04:15 PM	28.884	897	503.1157	860	657	368	1435
3:04:45 PM	28.7595	897	502.6674	860	649	366	1434
3:05:15 PM	28.7595	897	502.7842	858	656	366	1435
3:05:45 PM	28.7595	897	503.1431	860	656	362	1430
3:06:14 PM	28.884	898	502.7083	860	658	366	1432
3:06:44 PM	28.884	898	502.5194	860	654	368	1438
3:07:14 PM	28.884	898	502.3382	860	660	366	1433
3:07:43 PM	28.884	898	502.7079	860	659	367	1435
3:08:13 PM	28.7595	899	502.894	860	663	362	1431
3:08:43 PM	28.7595	899	502.9287	860	659	362	1431
3:09:13 PM	28.635	899	503.0931	860	651	359	1429
3:09:42 PM	28.884	899	501.9221	861	657	370	1437
3:10:12 PM	28.635	899	502.9272	861	658	361	1430
3:10:42 PM	28.7595	899	502.5728	861	644	366	1434
3:11:12 PM	28.884	899	502.2405	861	645	368	1440
3:11:41 PM	28.7595	899	502.3546	860	655	362	1431
3:12:11 PM	28.635	899	502.8467	861	651	357	1424
3:12:41 PM	28.7595	899	502.2562	862	651	361	1430
3:13:10 PM	28.7595	900	502.5701	862	652	365	1434
3:13:40 PM	28.884	900	502.2871	862	641	367	1436
3:14:10 PM	28.7595	900	502.3947	861	663	366	1433
3:14:40 PM	28.7595	900	502.4027	861	637	361	1430
3:15:09 PM	28.7595	900	502.5507	861	668	363	1432
3:15:39 PM	28.7595	900	502.5396	861	654	362	1428
3:16:09 PM	28.7595	901	502.7746	861	672	361	1428
3:16:38 PM	28.7595	900	502.7888	862	645	360	1429
3:17:08 PM	28.7595	901	502.7162	862	659	365	1434
3:17:38 PM	28.635	901	503.0142	861	659	361	1429
3:18:08 PM	28.884	901	502.4214	862	640	368	1436
3:18:37 PM	28.884	901	501.9007	861	636	370	1440
3:19:07 PM	28.884	902	502.1986	861	657	371	1442
3:19:37 PM	29.0085	901	501.6695	860	650	372	1443
3:20:06 PM	28.884	902	502.0223	860	647	369	1441
3:20:36 PM	29.0085	902	501.9144	860	645	374	1445
3:21:06 PM	28.884	902	502.1082	860	661	372	1442
3:21:36 PM	29.0085	902	502.093	860	645	370	1441
3:22:05 PM	29.0085	902	501.2552	860	647	373	1443
3:22:35 PM	29.0085	902	501.415	860	638	372	1443
3:23:05 PM	29.0085	903	501.4952	860	651	372	1443
3:23:35 PM	28.884	902	501.3113	860	652	373	1446
3:24:04 PM	28.884	902	501.4113	860	646	370	1444
3:24:34 PM	28.884	902	501.4311	860	653	370	1443
3:25:04 PM	28.7595	902	501.5978	860	647	369	1439
3:25:33 PM	28.884	903	501.6252	861	639	368	1441
3:26:03 PM	28.884	902	501.3063	861	657	369	1439
3:26:33 PM	28.7595	903	501.7863	861	653	364	1433
3:27:03 PM	28.7595	903	502.0437	862	660	361	1431
3:27:32 PM	28.7595	903	502.17	862	655	361	1430
3:27:32 PM	28.7595	903	502.1784	862	655	361	1430
3:28:02 PM	28.7595	903	501.9152	862	646	363	1433
3:28:32 PM	28.884	903	501.967	861	652	367	1440
3:29:01 PM	28.635	903	502.7109	862	658	358	1425
3:29:31 PM	28.7595	904	501.9419	863	656	364	1432
3:30:01 PM	28.7595	904	501.935	863	660	365	1432
3:30:31 PM	28.7595	904	502.0353	862	662	363	1431
3:31:00 PM	28.635	904	502.4889	863	660	359	1427
3:31:30 PM	28.7595	904	502.0991	863	647	365	1433
Average	**28.9133764**	**889.5674157**	**505.15275**	**861.174157**	**655.9213483**	**353.780899**	**1391.8764**

Montrose corrected - GE Trend Test 3 Unit 1

ACFM	SCFM(68F)	lb/sec	lb/sec	ND	BTU/SCF (68F)	MM BTU/Hr		BTU/KWH
GAS FLOW	**GAS FLOW**	**Gas Flow**	**NOX WATER INJECTION FLOW**	**Water/Fuel Ratio**	**HHV**	**Heat Input**	**Kw**	**Heat Rate**
131.9	4,696	3.56	4.673	1.314	1,064	300	29,258	10,244
132.1	4,702	3.56	4.673	1.313	1,064	300	29,258	10,257
132.2	4,705	3.56	4.687	1.316	1,064	300	29,258	10,262
132.5	4,714	3.57	4.701	1.317	1,064	301	29,382	10,238
132.4	4,708	3.56	4.701	1.319	1,064	300	29,258	10,269
132.4	4,706	3.56	4.687	1.315	1,064	300	29,382	10,222
132.2	4,697	3.56	4.687	1.318	1,064	300	29,258	10,244
132.2	4,704	3.56	4.673	1.312	1,064	300	29,258	10,260
132.4	4,704	3.56	4.715	1.324	1,064	300	29,382	10,218
132.9	4,719	3.57	4.743	1.327	1,064	301	29,382	10,250
132.5	4,709	3.57	4.687	1.315	1,064	301	29,382	10,228
132.7	4,717	3.57	4.729	1.324	1,064	301	29,382	10,244
132.6	4,715	3.57	4.687	1.313	1,064	301	29,258	10,285
132.1	4,699	3.56	4.687	1.317	1,064	300	29,382	10,206
132.2	4,700	3.56	4.673	1.313	1,064	300	29,258	10,252
132.5	4,712	3.57	4.687	1.314	1,064	301	29,258	10,278
131.9	4,696	3.56	4.645	1.306	1,064	300	29,133	10,287
131.6	4,686	3.55	4.604	1.298	1,064	299	29,133	10,264
132.0	4,697	3.56	4.673	1.314	1,064	300	29,258	10,245
131.8	4,692	3.55	4.659	1.312	1,064	299	29,258	10,234
131.6	4,684	3.55	4.631	1.306	1,064	299	29,133	10,260
131.4	4,682	3.54	4.604	1.299	1,064	299	29,133	10,255
131.0	4,671	3.54	4.590	1.298	1,064	298	29,009	10,277
130.9	4,667	3.53	4.562	1.291	1,064	298	29,009	10,268
130.1	4,641	3.51	4.534	1.290	1,064	296	28,884	10,253
131.3	4,684	3.55	4.604	1.298	1,064	299	29,133	10,260
130.9	4,667	3.53	4.576	1.295	1,064	298	29,009	10,268
130.4	4,651	3.52	4.562	1.295	1,064	297	29,009	10,233
130.5	4,661	3.53	4.548	1.289	1,064	297	28,884	10,299
130.8	4,668	3.53	4.590	1.299	1,064	298	29,009	10,270
130.7	4,665	3.53	4.562	1.292	1,064	298	28,884	10,306
131.1	4,682	3.55	4.590	1.295	1,064	299	29,009	10,301
131.1	4,680	3.54	4.604	1.299	1,064	299	29,009	10,295
130.5	4,663	3.53	4.562	1.292	1,064	298	29,009	10,259
130.5	4,663	3.53	4.576	1.296	1,064	298	29,009	10,257
130.0	4,651	3.52	4.520	1.284	1,064	297	28,884	10,275
130.2	4,654	3.52	4.548	1.291	1,064	297	28,884	10,283
131.2	4,688	3.55	4.604	1.297	1,064	299	29,133	10,268
130.9	4,677	3.54	4.590	1.296	1,064	298	29,009	10,289
131.0	4,682	3.54	4.590	1.295	1,064	299	29,009	10,299
130.3	4,660	3.53	4.548	1.289	1,064	297	28,884	10,295
129.9	4,645	3.52	4.520	1.285	1,064	296	28,760	10,308
130.4	4,659	3.53	4.562	1.293	1,064	297	29,009	10,250
130.7	4,668	3.53	4.576	1.295	1,064	298	29,009	10,270
130.4	4,663	3.53	4.548	1.288	1,064	298	28,884	10,302
130.1	4,650	3.52	4.548	1.292	1,064	297	28,884	10,275
130.6	4,667	3.53	4.562	1.291	1,064	298	28,884	10,312
130.8	4,676	3.54	4.576	1.292	1,064	298	29,009	10,287
131.3	4,685	3.55	4.618	1.302	1,064	299	29,133	10,262
130.6	4,668	3.53	4.562	1.291	1,064	298	28,884	10,313
131.3	4,688	3.55	4.604	1.297	1,064	299	29,133	10,269
131.6	4,701	3.56	4.631	1.301	1,064	300	29,133	10,297
131.8	4,701	3.56	4.659	1.309	1,064	300	29,133	10,298
131.6	4,697	3.56	4.618	1.298	1,064	300	29,009	10,333
131.6	4,698	3.56	4.604	1.294	1,064	300	29,009	10,335
132.6	4,727	3.58	4.673	1.306	1,064	302	29,133	10,355

133.4	4,751	3.60	4.715	1.311	1,064	303	29,133	10,406
135.1	4,806	3.64	4.771	1.311	1,064	307	29,133	10,527
135.1	4,806	3.64	4.771	1.311	1,064	307	29,133	10,528
135.9	4,830	3.66	4.784	1.308	1,064	308	29,009	10,627
136.7	4,854	3.68	4.798	1.306	1,064	310	29,009	10,678
137.5	4,881	3.70	4.826	1.306	1,064	312	28,884	10,785
137.7	4,891	3.70	4.812	1.299	1,064	312	28,884	10,807
138.4	4,913	3.72	4.840	1.301	1,064	314	28,884	10,854
138.8	4,920	3.73	4.896	1.314	1,064	314	29,009	10,824
138.8	4,923	3.73	4.854	1.302	1,064	314	28,760	10,925
140.1	4,963	3.76	4.951	1.318	1,064	317	29,009	10,918
140.7	4,979	3.77	4.979	1.321	1,064	318	28,884	11,002
141.5	5,001	3.79	5.007	1.322	1,064	319	28,884	11,050
141.6	5,004	3.79	5.007	1.321	1,064	319	28,884	11,056
142.1	5,019	3.80	5.035	1.325	1,064	320	28,760	11,137
142.5	5,030	3.81	5.021	1.318	1,064	321	28,760	11,163
142.5	5,027	3.81	5.035	1.323	1,064	321	28,760	11,154
143.5	5,059	3.83	5.146	1.343	1,064	323	28,884	11,178
143.6	5,058	3.83	5.146	1.344	1,064	323	28,884	11,175
143.5	5,056	3.83	5.118	1.337	1,064	323	28,884	11,172
143.9	5,066	3.84	5.174	1.349	1,064	323	29,009	11,145
143.3	5,051	3.82	5.104	1.335	1,064	322	28,760	11,208
142.5	5,032	3.81	5.007	1.314	1,064	321	28,760	11,167
141.9	5,007	3.79	4.951	1.306	1,064	320	28,511	11,208
141.8	5,004	3.79	4.951	1.307	1,064	319	28,511	11,202
143.1	5,048	3.82	5.077	1.328	1,064	322	28,760	11,202
142.9	5,038	3.81	5.049	1.324	1,064	322	28,760	11,179
143.5	5,055	3.83	5.118	1.337	1,064	323	28,884	11,169
143.5	5,058	3.83	5.118	1.336	1,064	323	28,884	11,176
143.5	5,056	3.83	5.118	1.337	1,064	323	28,884	11,171
142.9	5,042	3.82	5.049	1.323	1,064	322	28,760	11,187
142.5	5,026	3.81	4.993	1.312	1,064	321	28,635	11,200
142.9	5,036	3.81	5.035	1.320	1,064	321	28,635	11,223
143.3	5,046	3.82	5.077	1.329	1,064	322	28,760	11,196
142.8	5,031	3.81	5.021	1.318	1,064	321	28,760	11,164
143.7	5,056	3.83	5.132	1.341	1,064	323	28,884	11,172
143.3	5,051	3.82	5.063	1.324	1,064	322	28,760	11,208
143.5	5,052	3.82	5.104	1.335	1,064	322	28,760	11,210
143.6	5,055	3.83	5.104	1.334	1,064	323	28,760	11,218
142.8	5,031	3.81	5.021	1.318	1,064	321	28,760	11,164
143.6	5,056	3.83	5.104	1.333	1,064	323	28,884	11,170
143.4	5,051	3.82	5.077	1.328	1,064	322	28,760	11,207
144.3	5,073	3.84	5.174	1.347	1,064	324	28,884	11,208
144.6	5,083	3.85	5.202	1.351	1,064	324	28,884	11,232
143.7	5,060	3.83	5.104	1.332	1,064	323	28,884	11,180
143.6	5,053	3.83	5.104	1.334	1,064	322	28,760	11,213
143.4	5,047	3.82	5.090	1.332	1,064	322	28,884	11,152
144.0	5,069	3.84	5.132	1.337	1,064	323	28,884	11,198
143.8	5,061	3.83	5.118	1.336	1,064	323	28,884	11,182
143.3	5,048	3.82	5.077	1.328	1,064	322	28,760	11,201
143.0	5,037	3.81	5.063	1.327	1,064	321	28,760	11,177
143.0	5,037	3.81	5.049	1.324	1,064	321	28,760	11,177
143.8	5,065	3.83	5.132	1.338	1,064	323	28,884	11,190
143.6	5,062	3.83	5.104	1.332	1,064	323	28,760	11,233
142.4	5,021	3.80	4.993	1.313	1,064	320	28,635	11,190
143.2	5,051	3.82	5.063	1.324	1,064	322	28,760	11,207
143.3	5,051	3.82	5.077	1.327	1,064	322	28,884	11,160
143.6	5,058	3.83	5.118	1.336	1,064	323	28,884	11,176
143.2	5,044	3.82	5.063	1.326	1,064	322	28,760	11,192
144.0	5,070	3.84	5.160	1.344	1,064	324	29,009	11,154
144.5	5,081	3.85	5.216	1.356	1,064	324	29,009	11,177
144.1	5,072	3.84	5.160	1.344	1,064	324	28,884	11,205
143.3	5,048	3.82	5.049	1.321	1,064	322	28,760	11,202
142.8	5,029	3.81	5.021	1.319	1,064	321	28,760	11,160
143.9	5,064	3.83	5.132	1.338	1,064	323	28,884	11,190

143.5	5,055	3.83	5.118	1.337	1,064	323	28,884	11,168
143.4	5,047	3.82	5.090	1.332	1,064	322	28,760	11,199
143.5	5,052	3.82	5.090	1.331	1,064	322	28,760	11,210
143.0	5,038	3.81	5.035	1.320	1,064	321	28,760	11,178
143.2	5,040	3.82	5.090	1.334	1,064	322	28,884	11,136
143.8	5,060	3.83	5.118	1.336	1,064	323	28,884	11,179
143.3	5,040	3.82	5.090	1.334	1,064	322	28,884	11,136
143.5	5,051	3.82	5.104	1.335	1,064	322	28,884	11,160
143.1	5,039	3.82	5.035	1.320	1,064	322	28,760	11,181
143.1	5,039	3.82	5.035	1.320	1,064	322	28,760	11,181
142.9	5,034	3.81	4.993	1.310	1,064	321	28,635	11,218
143.7	5,050	3.82	5.146	1.346	1,064	322	28,884	11,158
143.0	5,035	3.81	5.021	1.317	1,064	321	28,635	11,222
143.4	5,046	3.82	5.090	1.332	1,064	322	28,760	11,197
144.0	5,064	3.83	5.118	1.335	1,064	323	28,884	11,188
143.1	5,033	3.81	5.035	1.321	1,064	321	28,760	11,169
142.4	5,014	3.80	4.965	1.308	1,064	320	28,635	11,173
143.0	5,029	3.81	5.021	1.319	1,064	321	28,760	11,159
143.4	5,046	3.82	5.077	1.329	1,064	322	28,760	11,197
143.6	5,050	3.82	5.104	1.335	1,064	322	28,884	11,158
143.3	5,041	3.82	5.090	1.334	1,064	322	28,760	11,185
143.0	5,030	3.81	5.021	1.318	1,064	321	28,760	11,162
143.2	5,039	3.82	5.049	1.323	1,064	322	28,760	11,181
142.8	5,025	3.80	5.035	1.323	1,064	321	28,760	11,150
142.8	5,027	3.81	5.021	1.319	1,064	321	28,760	11,155
142.9	5,031	3.81	5.007	1.315	1,064	321	28,760	11,163
143.4	5,047	3.82	5.077	1.328	1,064	322	28,760	11,200
142.9	5,033	3.81	5.021	1.318	1,064	321	28,635	11,216
143.6	5,052	3.82	5.118	1.338	1,064	322	28,884	11,161
144.0	5,061	3.83	5.146	1.343	1,064	323	28,884	11,181
144.2	5,071	3.84	5.160	1.344	1,064	324	28,884	11,203
144.3	5,069	3.84	5.174	1.348	1,064	323	29,009	11,151
144.1	5,065	3.84	5.132	1.338	1,064	323	28,884	11,191
144.5	5,078	3.85	5.202	1.353	1,064	324	29,009	11,172
144.2	5,070	3.84	5.174	1.348	1,064	324	28,884	11,201
144.1	5,066	3.84	5.146	1.342	1,064	323	29,009	11,145
144.3	5,065	3.83	5.188	1.353	1,064	323	29,009	11,142
144.3	5,066	3.84	5.174	1.349	1,064	323	29,009	11,146
144.3	5,067	3.84	5.174	1.349	1,064	323	29,009	11,147
144.6	5,076	3.84	5.188	1.350	1,064	324	28,884	11,215
144.4	5,070	3.84	5.146	1.341	1,064	324	28,884	11,201
144.3	5,067	3.84	5.146	1.341	1,064	323	28,884	11,194
143.9	5,054	3.83	5.132	1.341	1,064	323	28,760	11,215
144.1	5,061	3.83	5.118	1.336	1,064	323	28,884	11,183
143.9	5,051	3.82	5.132	1.342	1,064	322	28,884	11,160
143.3	5,035	3.81	5.063	1.328	1,064	321	28,760	11,172
143.1	5,030	3.81	5.021	1.318	1,064	321	28,760	11,162
143.0	5,028	3.81	5.021	1.319	1,064	321	28,760	11,157
143.0	5,028	3.81	5.021	1.319	1,064	321	28,760	11,157
143.3	5,036	3.81	5.049	1.324	1,064	321	28,760	11,175
144.0	5,061	3.83	5.104	1.332	1,064	323	28,884	11,182
142.5	5,016	3.80	4.979	1.311	1,064	320	28,635	11,178
143.2	5,033	3.81	5.063	1.329	1,064	321	28,760	11,168
143.2	5,033	3.81	5.077	1.332	1,064	321	28,760	11,168
143.1	5,030	3.81	5.049	1.326	1,064	321	28,760	11,162
142.7	5,021	3.80	4.993	1.313	1,064	320	28,635	11,189
143.3	5,038	3.81	5.077	1.331	1,064	322	28,760	11,179
139.18764	**4921.050201**	**3.725989033**	**4.920502669**	**1.320111038**	**1063.616864**	**314.0467189**	**28913.3764**	**10863.66225**

GE Trend Test 1 Unit 2

Time	7268816_U1_RX3i.MWSEL	7268816_U1_RX3i.TE_2032	7268816_U1_RX3i.PT_2027	7268816_U1_RX3i.CNT_OPHRS	7268816_U1_RX3i.TE_2037	7268816_U1_RX3i.PT_2074	7268816_U1_RX3i.FT_2003	7268816_U1_RX3i.FT_2000
#!Min	10	0	410	-10000	400	-100	-100	800
#!Max	50	100	480	30000	900	300	500	1700
#!Units	MW	F	psig		F		gpm	ACFM
#!Description	MW SELECT	FUEL SUPPLY TEMPERATURE A	GAS FUEL SUPPLY PRESSURE	TOTAL OPERATIONAL HOURS	DE-MIN WATER SUPPLY TEMP(x10)	DE-MIN WATER SUPPLY PRESS(x10)	NOX WATER INJECTION FLOW(x10)	GAS FLOW FT2000(x10)
8:27:00 AM	35.233498	65.52653503	530.83667	28502	812	645	383	1478
8:28:00 AM	35.233498	65.63156128	531.01141	28562	812	652	384	1478
8:29:00 AM	35.357998	65.70693207	531.02856	28622	812	639	384	1480
8:30:00 AM	35.233498	65.79548645	530.76343	28682	813	637	385	1479
8:31:00 AM	35.233498	65.85810852	531.12775	28742	813	645	385	1474
8:32:00 AM	35.109001	65.98950195	531.5611	28802	812	638	386	1468
8:33:00 AM	35.109001	66.00862122	530.84967	28862	812	634	385	1486
8:34:00 AM	35.109001	66.11540222	528.27893	28922	812	644	389	1530
8:35:00 AM	34.984501	66.05805969	522.42987	28982	812	645	392	1588
8:36:00 AM	34.860001	66.05519867	518.32562	29042	812	642	393	1617
8:37:00 AM	34.860001	66.10969543	517.40588	29102	812	639	393	1625
8:38:00 AM	34.860001	66.25427246	517.69922	29162	812	639	393	1625
8:39:00 AM	34.860001	66.44235229	517.96704	29222	812	646	393	1621
8:40:00 AM	34.984501	66.70053101	518.29626	29282	812	644	392	1607
8:41:00 AM	34.860001	66.88928223	521.00238	29342	812	641	390	1576
8:42:00 AM	34.860001	67.10988617	521.9549	29402	812	640	389	1556
8:43:00 AM	34.860001	67.31510925	523.0238	29462	813	635	389	1549
8:44:00 AM	34.860001	67.41574097	523.85809	29522	813	645	389	1546
8:45:00 AM	34.860001	67.56669617	523.79169	29582	813	645	388	1544
8:46:00 AM	34.7355	67.65788269	524.67902	29642	812	641	388	1532
8:47:00 AM	34.7355	67.77346039	525.69714	29702	814	641	386	1519
8:48:00 AM	34.7355	67.90771484	527.16083	29762	813	643	386	1490
8:49:00 AM	34.7355	67.95759583	528.61688	29822	814	644	389	1474
8:50:00 AM	34.611	68.10458374	528.63824	29882	813	636	389	1467
8:51:00 AM	34.611	68.18083191	529.40198	29942	813	638	390	1461
8:52:00 AM	34.4865	68.19796753	529.68427	30002	813	643	390	1459
8:53:00 AM	34.4865	68.28762054	530.19769	30062	813	638	389	1451
8:54:00 AM	34.362	68.33068848	530.66235	30122	814	641	390	1445
8:55:00 AM	34.362	68.35946655	530.68866	30182	814	648	389	1443
8:56:00 AM	34.362	68.44978333	531.42529	30242	814	647	389	1441
8:57:00 AM	34.362	68.54667664	531.44171	30302	814	648	389	1439
8:58:00 AM	34.362	68.53898621	531.62744	30362	814	641	390	1440
8:59:00 AM	34.237499	68.55722046	531.70264	30422	814	643	390	1439
9:00:00 AM	34.237499	68.67785645	531.80219	30482	814	643	389	1438
9:01:00 AM	34.237499	68.7527771	532.18518	30542	815	651	389	1436
9:02:00 AM	34.112999	68.84309387	532.33624	30602	814	642	389	1432
9:03:00 AM	34.112999	68.89164734	532.80316	30662	815	640	389	1433
9:04:00 AM	34.112999	68.9806366	532.77722	30722	815	638	390	1431
9:05:00 AM	33.988499	69.11006165	533.2052	30782	815	643	388	1431
9:06:00 AM	33.988499	69.1816864	533.57526	30842	815	637	388	1429
9:07:00 AM	33.864002	69.28979492	533.69312	30902	816	632	388	1424
9:08:00 AM	33.864002	69.36581421	534.20618	30962	816	637	387	1420
9:09:00 AM	33.739502	69.48007202	533.57257	31022	816	646	388	1420
9:10:00 AM	33.864002	69.52511597	534.81958	31082	816	641	388	1418
9:11:00 AM	33.739502	69.66333008	534.60828	31142	816	638	388	1416
9:12:00 AM	33.739502	69.76506042	535.02637	31202	816	644	389	1417
9:13:00 AM	33.739502	69.86129761	535.05725	31262	817	642	388	1416
9:14:00 AM	33.739502	69.90480804	535.19843	31322	817	636	388	1417
9:15:00 AM	33.739502	70.01686859	535.03668	31382	817	644	388	1418
9:16:00 AM	33.615002	70.10058594	535.80682	31442	817	643	389	1416
9:17:00 AM	33.490501	70.15771484	535.71338	31502	817	643	389	1412
9:18:00 AM	33.739502	70.2227478	535.79846	31562	817	635	388	1416
9:19:00 AM	33.739502	70.30867004	535.86829	31622	817	638	388	1414
9:20:00 AM	33.615002	70.39699554	535.87091	31682	817	640	389	1412

9:21:00 AM	33.739502	70.44511414	536.47516	31742	817	634	388	1410
9:22:00 AM	33.615002	70.48071289	536.43512	31802	817	644	389	1410
9:23:00 AM	33.615002	70.58683777	536.34204	31862	817	641	389	1410
9:24:00 AM	33.490501	70.6397934	536.5755	31922	817	638	388	1409
9:25:00 AM	33.490501	70.65429688	536.3512	31982	818	643	388	1411
9:26:00 AM	33.490501	70.73690796	536.3764	32042	818	638	388	1409
9:27:00 AM	33.490501	70.75844574	536.69568	32102	818	641	388	1407
9:28:00 AM	33.490501	70.80195618	536.77844	32162	818	641	387	1407
9:29:00 AM	33.490501	70.86061859	536.66516	32222	818	634	388	1406
9:30:00 AM	33.365997	70.95576477	536.96692	32282	818	639	387	1403
9:31:00 AM	33.365997	71.04057312	536.82001	32342	818	644	387	1403
9:32:00 AM	33.365997	71.08320618	537.09509	32402	818	641	387	1402
9:33:00 AM	33.365997	71.1504364	536.48358	32462	818	642	387	1406
9:34:00 AM	33.117001	71.20910645	537.14618	32522	819	653	388	1399
9:35:00 AM	33.241501	71.31018066	537.14581	32582	819	637	387	1401
9:36:00 AM	33.117001	71.39345551	537.13666	32642	819	638	388	1400
9:37:00 AM	33.241501	71.49914551	537.03137	32702	820	645	388	1400
9:38:00 AM	33.241501	71.53385925	537.05884	32762	819	634	388	1401
9:39:00 AM	33.241501	71.58022308	537.27972	32822	819	634	388	1402
Average	34.16587	68.83036606	531.51584	30662	815.09589	641.109589	388.36986	1457.38356

Montrose corrected - GE Trend Test 1 Unit 2

ACFM	SCFM(68F)	lb/sec	lb/sec	ND	BTU/SCF (68F)	MM BTU/Hr		BTU/KWH
GAS FLOW	**GAS FLOW**	**Gas Flow**	**NOX WATER INJECTION FLOW**	**Water/Fuel Ratio**	**HHV**	**Heat Input**	**Kw**	**Heat Rate**
147.8	5,485	4.06	5.327	1.312	1,024	337	35,233	9,563
147.8	5,487	4.06	5.341	1.315	1,024	337	35,233	9,566
148.0	5,494	4.07	5.341	1.313	1,024	338	35,358	9,545
147.9	5,488	4.06	5.355	1.318	1,024	337	35,233	9,568
147.4	5,473	4.05	5.355	1.322	1,024	336	35,233	9,542
146.8	5,455	4.04	5.369	1.330	1,024	335	35,109	9,544
148.6	5,515	4.08	5.355	1.312	1,024	339	35,109	9,649
153.0	5,651	4.18	5.410	1.294	1,024	347	35,109	9,888
158.8	5,802	4.29	5.452	1.270	1,024	356	34,985	10,188
161.7	5,863	4.34	5.466	1.260	1,024	360	34,860	10,332
162.5	5,882	4.35	5.466	1.256	1,024	361	34,860	10,365
162.5	5,885	4.36	5.466	1.255	1,024	362	34,860	10,371
162.1	5,874	4.35	5.466	1.257	1,024	361	34,860	10,350
160.7	5,827	4.31	5.452	1.264	1,024	358	34,985	10,231
157.6	5,743	4.25	5.424	1.276	1,024	353	34,860	10,120
155.6	5,681	4.20	5.410	1.287	1,024	349	34,860	10,010
154.9	5,666	4.19	5.410	1.290	1,024	348	34,860	9,985
154.6	5,664	4.19	5.410	1.291	1,024	348	34,860	9,981
154.4	5,656	4.19	5.396	1.289	1,024	347	34,860	9,967
153.2	5,621	4.16	5.396	1.297	1,024	345	34,736	9,941
151.9	5,584	4.13	5.369	1.299	1,024	343	34,736	9,875
149.0	5,492	4.06	5.369	1.321	1,024	337	34,736	9,713
147.4	5,448	4.03	5.410	1.342	1,024	335	34,736	9,634
146.7	5,422	4.01	5.410	1.348	1,024	333	34,611	9,623
146.1	5,408	4.00	5.424	1.355	1,024	332	34,611	9,598
145.9	5,403	4.00	5.424	1.356	1,024	332	34,486	9,624
145.1	5,379	3.98	5.410	1.359	1,024	330	34,486	9,580
144.5	5,361	3.97	5.424	1.367	1,024	329	34,362	9,583
144.3	5,354	3.96	5.410	1.366	1,024	329	34,362	9,571
144.1	5,354	3.96	5.410	1.366	1,024	329	34,362	9,570
143.9	5,346	3.96	5.410	1.367	1,024	328	34,362	9,557
144.0	5,352	3.96	5.424	1.370	1,024	329	34,362	9,567
143.9	5,349	3.96	5.424	1.370	1,024	329	34,237	9,597
143.8	5,346	3.96	5.410	1.367	1,024	328	34,237	9,592
143.6	5,342	3.95	5.410	1.368	1,024	328	34,237	9,585
143.2	5,329	3.94	5.410	1.372	1,024	327	34,113	9,596
143.3	5,337	3.95	5.410	1.370	1,024	328	34,113	9,611
143.1	5,330	3.94	5.424	1.375	1,024	327	34,113	9,597
143.1	5,334	3.95	5.396	1.367	1,024	328	33,988	9,640
142.9	5,330	3.94	5.396	1.368	1,024	327	33,988	9,633
142.4	5,312	3.93	5.396	1.373	1,024	326	33,864	9,636
142.0	5,302	3.92	5.383	1.372	1,024	326	33,864	9,618
142.0	5,296	3.92	5.396	1.377	1,024	325	33,740	9,643
141.8	5,301	3.92	5.396	1.376	1,024	326	33,864	9,615
141.6	5,291	3.92	5.396	1.378	1,024	325	33,740	9,634
141.7	5,299	3.92	5.410	1.380	1,024	326	33,740	9,648
141.6	5,296	3.92	5.396	1.377	1,024	325	33,740	9,641
141.7	5,301	3.92	5.396	1.376	1,024	326	33,740	9,651
141.8	5,303	3.92	5.396	1.375	1,024	326	33,740	9,655
141.6	5,303	3.92	5.410	1.379	1,024	326	33,615	9,690
141.2	5,287	3.91	5.410	1.383	1,024	325	33,491	9,697
141.6	5,303	3.92	5.396	1.375	1,024	326	33,740	9,654
141.4	5,296	3.92	5.396	1.377	1,024	325	33,740	9,642
141.2	5,288	3.91	5.410	1.382	1,024	325	33,615	9,664

141.0	5,287	3.91	5.396	1.379	1,024	325	33,740	9,625
141.0	5,286	3.91	5.410	1.383	1,024	325	33,615	9,660
141.0	5,286	3.91	5.410	1.383	1,024	325	33,615	9,659
140.9	5,284	3.91	5.396	1.380	1,024	325	33,491	9,692
141.1	5,289	3.91	5.396	1.379	1,024	325	33,491	9,702
140.9	5,282	3.91	5.396	1.380	1,024	324	33,491	9,688
140.7	5,278	3.91	5.396	1.382	1,024	324	33,491	9,680
140.7	5,278	3.91	5.383	1.378	1,024	324	33,491	9,682
140.6	5,274	3.90	5.396	1.383	1,024	324	33,491	9,673
140.3	5,265	3.90	5.383	1.381	1,024	323	33,366	9,693
140.3	5,264	3.90	5.383	1.382	1,024	323	33,366	9,691
140.2	5,263	3.89	5.383	1.382	1,024	323	33,366	9,689
140.6	5,272	3.90	5.383	1.380	1,024	324	33,366	9,706
139.9	5,252	3.89	5.396	1.388	1,024	323	33,117	9,742
140.1	5,259	3.89	5.383	1.383	1,024	323	33,242	9,719
140.0	5,256	3.89	5.396	1.387	1,024	323	33,117	9,748
140.0	5,255	3.89	5.396	1.388	1,024	323	33,242	9,710
140.1	5,259	3.89	5.396	1.387	1,024	323	33,242	9,717
140.2	5,264	3.90	5.396	1.385	1,024	323	33,242	9,728
145.738356	**5412.916851**	**4.005973899**	**5.401577511**	**1.349715756**	**1023.789904**	**332.5013774**	**34165.8702**	**9730.709803**

GE Trend Test 2 Unit 2

Time	7268816_U1_RX3i.MWSEL	7268816_U1_RX3i.TE_2032	7268816_U1_RX3i.PT_2027	7268816_U1_RX3i.CNT_OPHRS	7268816_U1_RX3i.TE_2037	7268816_U1_RX3i.PT_2074	7268816_U1_RX3i.FT_2003	7268816_U1_RX3i.FT_2000
#!Min	10	0	410	-10000	400	-100	-100	800
#!Max	50	100	480	30000	900	300	500	1700
#!Units	MW	F	psig		F		gpm	ACFM

#!Description	MW SELECT	FUEL SUPPLY TEMPERATURE A	GAS FUEL SUPPLY PRESSURE	TOTAL OPERATIONAL HOURS	DE-MIN WATER SUPPLY TEMP(x10)	DE-MIN WATER SUPPLY PRESS(x10)	NOX WATER INJECTION FLOW(x10)	GAS FLOW FT2000(x10)
9:55:00 AM	32.99250031	72.64523315	535.90906	33782	820	644	389	1408
9:56:00 AM	32.99250031	72.62854004	536.62012	33842	820	643	389	1408
9:57:00 AM	32.86800003	72.79377747	536.54193	33902	821	637	388	1405
9:58:00 AM	32.86800003	72.79860687	536.29437	33962	821	634	388	1405
9:59:00 AM	32.86800003	72.86320496	536.26843	34022	821	633	389	1403
10:00:00 AM	32.86800003	72.94714355	536.24286	34082	821	635	389	1406
10:01:00 AM	32.86800003	72.99196625	536.32678	34142	821	633	388	1403
10:02:00 AM	32.61899948	73.06337738	537.09357	34202	822	638	388	1396
10:03:00 AM	32.61899948	73.16972351	537.31061	34262	822	631	388	1395
10:04:00 AM	32.74349976	73.21147156	537.15228	34322	822	641	389	1398
10:05:00 AM	32.74349976	73.1993866	537.58142	34382	821	631	389	1398
10:06:00 AM	32.61899948	73.33122253	537.47845	34442	822	640	388	1396
10:07:00 AM	32.61899948	73.38461304	536.85321	34502	822	639	388	1401
10:08:00 AM	32.74349976	73.48019409	536.83832	34562	822	643	389	1404
10:09:00 AM	32.74349976	73.53930664	536.41608	34622	822	637	389	1408
10:10:00 AM	32.74349976	73.55249023	536.70709	34682	822	639	389	1411
10:11:00 AM	32.74349976	73.6282959	536.90894	34742	822	638	389	1408
10:12:00 AM	32.61899948	73.75090027	537.0058	34802	823	630	389	1404
10:13:00 AM	32.61899948	73.79968262	537.00311	34862	823	637	389	1405
10:14:00 AM	32.49449921	73.91108704	537.11908	34922	823	635	388	1398
10:15:00 AM	32.36999893	74.00117493	537.32703	34982	823	638	388	1396
10:16:00 AM	32.49449921	74.09565735	537.1618	35042	823	641	388	1394
10:17:00 AM	32.24549866	74.18310547	537.87976	35102	823	640	387	1390
10:18:00 AM	32.24549866	74.29384613	538.26239	35162	824	629	385	1383
10:19:00 AM	32.36999893	74.46237183	538.00409	35222	824	636	387	1385
10:20:00 AM	32.24549866	74.50895691	538.25476	35282	824	639	386	1382
10:21:00 AM	32.24549866	74.56191254	537.41357	35342	824	637	387	1386
10:22:00 AM	32.36999893	74.6656189	537.95453	35402	824	636	387	1388
10:23:00 AM	32.24549866	74.65177917	538.32416	35462	824	633	387	1390
10:24:00 AM	32.36999893	74.71395874	537.86334	35522	825	633	386	1389
10:25:00 AM	32.24549866	74.77043152	538.10406	35582	824	637	386	1390
10:26:00 AM	32.24549866	74.81086731	537.72333	35642	825	649	387	1393
10:27:00 AM	32.24549866	74.87062836	537.90076	35702	825	637	387	1394
10:28:00 AM	32.24549866	74.90908051	537.64441	35762	824	641	387	1395
10:29:00 AM	32.12099838	74.91677094	537.4613	35821	825	644	387	1395
10:30:00 AM	32.24549866	74.98774719	537.58948	35882	825	638	387	1395
10:31:00 AM	32.12099838	75.03915405	537.69739	35942	825	637	388	1396
10:32:00 AM	32.12099838	75.09738159	537.81378	36002	825	639	388	1396
10:33:00 AM	32.12099838	75.17802429	537.55548	36061	826	634	388	1399
10:34:00 AM	32.24549866	75.22505188	537.38916	36121	826	640	388	1404
10:35:00 AM	32.12099838	75.32106781	538.02472	36182	826	639	387	1395
10:36:00 AM	32.12099838	75.39115906	538.12048	36242	826	639	386	1394
10:37:00 AM	31.99650192	75.47444153	537.70087	36301	826	632	383	1390
10:38:00 AM	31.99650192	75.55639648	537.89996	36361	827	638	384	1391
10:39:00 AM	32.12099838	75.63175964	538.06592	36421	827	634	385	1393
10:40:00 AM	31.99650192	75.67240906	538.06439	36481	827	636	382	1388
10:41:00 AM	32.12099838	75.74909973	537.75885	36541	828	641	386	1393
10:42:00 AM	31.99650192	75.83325195	538.15479	36601	827	636	384	1388
10:43:00 AM	31.87199974	75.86775208	538.6709	36661	828	639	376	1378
10:44:00 AM	31.87199974	75.95849609	538.87427	36721	829	638	376	1378
10:45:00 AM	31.74749947	75.96948242	538.94293	36781	830	641	375	1376

10:46:00 AM	31.87199974	76.09472656	538.98566	36841	830	639	377	1380
10:47:00 AM	31.74749947	76.1257019	539.10846	36901	831	633	372	1375
10:48:00 AM	31.87199974	76.26985168	538.8136	36961	831	640	379	1383
10:49:00 AM	31.87199974	76.35510254	538.47253	37021	830	638	381	1388
10:50:00 AM	31.87199974	76.35400391	538.62476	37081	830	633	380	1387
10:51:00 AM	31.74749947	76.40629578	538.534	37141	830	644	377	1381
10:52:00 AM	31.74749947	76.47067261	538.56757	37201	830	645	377	1386
10:53:00 AM	31.87199974	76.53066254	538.48743	37261	830	636	380	1387
10:54:00 AM	31.74749947	76.60075378	538.94598	37321	831	636	374	1380
10:55:00 AM	31.87199974	76.65084839	538.5752	37381	831	642	378	1386
10:56:00 AM	31.62299919	76.68205261	538.99518	37441	831	645	374	1378
10:57:00 AM	31.62299919	76.79675293	538.99896	37501	833	651	368	1372
10:58:00 AM	31.87199974	76.8272934	538.44318	37561	833	640	375	1379
10:59:00 AM	31.49849892	76.86816406	539.38196	37621	833	636	367	1369
11:00:00 AM	31.49849892	76.94528198	539.71307	37681	834	636	362	1362
11:01:00 AM	31.37400055	77.07844543	540.15405	37741	836	630	357	1355
11:02:00 AM	31.49849892	77.12788391	539.94849	37801	836	637	359	1358
11:03:00 AM	31.49849892	77.14941406	540.19489	37861	836	630	357	1354
11:04:00 AM	31.37400055	77.27993011	540.38184	37921	837	633	352	1349
11:05:00 AM	31.62299919	77.30563354	539.82867	37981	837	641	361	1359
11:06:00 AM	31.62299919	77.33332825	539.92444	38041	836	642	362	1361
11:07:00 AM	31.49849892	77.33639526	540.19568	38101	837	647	357	1356
11:08:00 AM	31.49849892	77.43087769	540.19641	38161	838	648	356	1356
11:09:00 AM	31.37400055	77.45768738	540.46613	38221	839	642	354	1350
11:10:00 AM	31.49849892	77.54316711	540.35437	38281	839	636	354	1353
11:11:00 AM	31.49849892	77.60534668	540.21704	38341	839	640	356	1355
11:12:00 AM	31.49849892	77.62313843	540.32764	38401	839	656	356	1353
11:13:00 AM	31.24950027	77.72026062	540.42914	38461	840	643	350	1347
11:14:00 AM	31.37400055	77.72619629	540.54242	38521	840	639	352	1349
11:15:00 AM	31.37400055	77.7134552	540.1167	38581	840	630	353	1352
Average	**32.102555**	**75.31442449**	**538.23703**	**36181.48148**	**827.888889**	**638.23457**	**378.69136**	**1384.74074**

Montrose corrected - GE Trend Test 2 Unit 2

ACFM	SCFM(68F)	lb/sec	lb/sec	ND	BTU/SCF (68F)	MM BTU/Hr		BTU/KWH
GAS FLOW	**GAS FLOW**	**Gas Flow**	**NOX WATER INJECTION FLOW**	**Water/Fuel Ratio**	**HHV**	**Heat Input**	**Kw**	**Heat Rate**
140.8	5,274	3.90	5.410	1.386	1,024	324	32,993	9,819
140.8	5,281	3.91	5.410	1.384	1,024	324	32,993	9,832
140.5	5,269	3.90	5.396	1.384	1,024	324	32,868	9,847
140.5	5,266	3.90	5.396	1.385	1,024	323	32,868	9,842
140.3	5,259	3.89	5.410	1.390	1,024	323	32,868	9,828
140.6	5,270	3.90	5.410	1.387	1,024	324	32,868	9,848
140.3	5,259	3.89	5.396	1.386	1,024	323	32,868	9,829
139.6	5,240	3.88	5.396	1.392	1,024	322	32,619	9,868
139.5	5,238	3.88	5.396	1.392	1,024	322	32,619	9,865
139.8	5,248	3.88	5.410	1.393	1,024	322	32,743	9,846
139.8	5,252	3.89	5.410	1.392	1,024	323	32,743	9,853
139.6	5,244	3.88	5.396	1.391	1,024	322	32,619	9,875
140.1	5,257	3.89	5.396	1.387	1,024	323	32,619	9,899
140.4	5,268	3.90	5.410	1.388	1,024	324	32,743	9,882
140.8	5,279	3.91	5.410	1.385	1,024	324	32,743	9,903
141.1	5,293	3.92	5.410	1.381	1,024	325	32,743	9,929
140.8	5,283	3.91	5.410	1.384	1,024	325	32,743	9,912
140.4	5,269	3.90	5.410	1.387	1,024	324	32,619	9,923
140.5	5,273	3.90	5.410	1.386	1,024	324	32,619	9,930
139.8	5,248	3.88	5.396	1.389	1,024	322	32,494	9,921
139.6	5,242	3.88	5.396	1.391	1,024	322	32,370	9,948
139.4	5,233	3.87	5.396	1.393	1,024	321	32,494	9,893
139.0	5,225	3.87	5.383	1.392	1,024	321	32,245	9,954
138.3	5,202	3.85	5.355	1.391	1,024	320	32,245	9,910
138.5	5,207	3.85	5.383	1.397	1,024	320	32,370	9,882
138.2	5,199	3.85	5.369	1.395	1,024	319	32,245	9,903
138.6	5,206	3.85	5.383	1.397	1,024	320	32,245	9,917
138.8	5,218	3.86	5.383	1.394	1,024	321	32,370	9,903
139.0	5,229	3.87	5.383	1.391	1,024	321	32,245	9,962
138.9	5,221	3.86	5.369	1.389	1,024	321	32,370	9,908
139.0	5,227	3.87	5.369	1.388	1,024	321	32,245	9,958
139.3	5,235	3.87	5.383	1.389	1,024	322	32,245	9,972
139.4	5,240	3.88	5.383	1.388	1,024	322	32,245	9,983
139.5	5,242	3.88	5.383	1.388	1,024	322	32,245	9,985
139.5	5,240	3.88	5.383	1.388	1,024	322	32,121	10,021
139.5	5,241	3.88	5.383	1.388	1,024	322	32,245	9,984
139.6	5,246	3.88	5.396	1.390	1,024	322	32,121	10,032
139.6	5,247	3.88	5.396	1.390	1,024	322	32,121	10,034
139.9	5,256	3.89	5.396	1.387	1,024	323	32,121	10,051
140.4	5,273	3.90	5.396	1.383	1,024	324	32,245	10,045
139.5	5,245	3.88	5.383	1.387	1,024	322	32,121	10,031
139.4	5,242	3.88	5.369	1.384	1,024	322	32,121	10,025
139.0	5,223	3.87	5.327	1.378	1,024	321	31,997	10,028
139.1	5,229	3.87	5.341	1.380	1,024	321	31,997	10,039
139.3	5,238	3.88	5.355	1.381	1,024	322	32,121	10,017
138.8	5,219	3.86	5.313	1.375	1,024	321	31,997	10,020
139.3	5,235	3.87	5.369	1.386	1,024	322	32,121	10,012
138.8	5,220	3.86	5.341	1.382	1,024	321	31,997	10,022
137.8	5,187	3.84	5.230	1.362	1,024	319	31,872	9,998
137.8	5,189	3.84	5.230	1.362	1,024	319	31,872	10,001
137.6	5,182	3.84	5.216	1.360	1,024	318	31,747	10,027

138.0	5,198	3.85	5.243	1.363	1,024	319	31,872	10,018
137.5	5,180	3.83	5.174	1.350	1,024	318	31,747	10,023
138.3	5,208	3.85	5.271	1.368	1,024	320	31,872	10,037
138.8	5,223	3.87	5.299	1.371	1,024	321	31,872	10,067
138.7	5,221	3.86	5.285	1.368	1,024	321	31,872	10,062
138.1	5,197	3.85	5.243	1.363	1,024	319	31,747	10,056
138.6	5,217	3.86	5.243	1.358	1,024	320	31,747	10,093
138.7	5,220	3.86	5.285	1.368	1,024	321	31,872	10,060
138.0	5,197	3.85	5.202	1.352	1,024	319	31,747	10,056
138.6	5,217	3.86	5.257	1.362	1,024	320	31,872	10,054
137.8	5,190	3.84	5.202	1.354	1,024	319	31,623	10,082
137.2	5,168	3.82	5.118	1.338	1,024	317	31,623	10,039
137.9	5,189	3.84	5.216	1.358	1,024	319	31,872	10,001
136.9	5,160	3.82	5.104	1.337	1,024	317	31,498	10,063
136.2	5,137	3.80	5.035	1.324	1,024	316	31,498	10,018
135.5	5,114	3.79	4.965	1.312	1,024	314	31,374	10,014
135.8	5,124	3.79	4.993	1.317	1,024	315	31,498	9,992
135.4	5,111	3.78	4.965	1.313	1,024	314	31,498	9,967
134.9	5,094	3.77	4.896	1.299	1,024	313	31,374	9,973
135.9	5,127	3.79	5.021	1.323	1,024	315	31,623	9,958
136.1	5,135	3.80	5.035	1.325	1,024	315	31,623	9,975
135.6	5,119	3.79	4.965	1.311	1,024	314	31,498	9,982
135.6	5,119	3.79	4.951	1.307	1,024	314	31,498	9,982
135.0	5,098	3.77	4.924	1.305	1,024	313	31,374	9,982
135.3	5,109	3.78	4.924	1.302	1,024	314	31,498	9,963
135.5	5,115	3.79	4.951	1.308	1,024	314	31,498	9,975
135.3	5,109	3.78	4.951	1.310	1,024	314	31,498	9,962
134.7	5,087	3.76	4.868	1.293	1,024	312	31,250	9,999
134.9	5,095	3.77	4.896	1.298	1,024	313	31,374	9,976
135.2	5,103	3.78	4.910	1.300	1,024	313	31,374	9,991
138.474074	**5208.527723**	**3.854710258**	**5.266965638**	**1.366064085**	**1023.789904**	**319.9462859**	**32102.555**	**9967.153284**

GE Trend Test 3 Unit 2

Time	7268816_U1_RX3i.MWSEL	7268816_U1_RX3i.TE_2032	7268816_U1_RX3i.PT_2027	7268816_U1_RX3i.CNT_OPHRS	7268816_U1_RX3i.TE_2037	7268816_U1_RX3i.PT_2074	7268816_U1_RX3i.FT_2003	7268816_U1_RX3i.FT_2000
#!Min	10	0	410	-10000	400	-100	-100	800
#!Max	50	100	480	30000	900	300	500	1700
#!Units	MW	F	psig		F		gpm	ACFM
#!Description	MW SELECT	FUEL SUPPLY TEMPERATURE A	GAS FUEL SUPPLY PRESSURE	TOTAL OPERATIONAL HOURS	DE-MIN WATER SUPPLY TEMP(x10)	DE-MIN WATER SUPPLY PRESS(x10)	NOX WATER INJECTION FLOW(x10)	GAS FLOW FT2000(x10)
11:33:00 AM	31.00049973	78.8683319	539.93585	39661	843	645	350	1356
11:34:00 AM	31.00049973	78.972702	540.27808	39721	844	634	349	1355
11:35:00 AM	31.125	78.9531479	540.0274	39781	844	637	353	1357
11:36:00 AM	30.87599945	78.9953308	540.66486	39841	844	655	347	1350
11:37:00 AM	30.87599945	79.0577393	540.41803	39901	845	654	347	1348
11:38:00 AM	31.00049973	79.1230011	540.58514	39961	844	649	346	1347
11:39:00 AM	30.87599945	79.1331024	540.49512	40021	846	645	344	1342
11:40:00 AM	30.87599945	79.1610107	540.68396	40081	846	639	343	1344
11:41:00 AM	30.87599945	79.2157211	540.96393	40141	847	654	341	1336
11:42:00 AM	30.75150108	79.2739487	541.17603	40201	847	632	340	1336
11:43:00 AM	30.87599945	79.3088837	541.24127	40261	848	626	342	1339
11:44:00 AM	31.00049973	79.3479919	541.12567	40321	847	636	344	1340
11:45:00 AM	31.00049973	79.3449249	540.95441	40381	847	664	343	1341
11:46:00 AM	30.87599945	79.3877716	541.55371	40441	848	634	341	1333
11:47:00 AM	30.75150108	79.4824677	540.94373	40501	848	644	340	1330
11:48:00 AM	30.75150108	79.4416046	541.48157	40561	848	647	340	1332
11:49:00 AM	30.75150108	79.509491	541.34619	40621	849	616	339	1331
11:50:00 AM	30.87599945	79.5789337	541.72461	40681	849	656	340	1329
11:51:00 AM	30.87599945	79.5644226	541.91992	40741	849	642	340	1330
11:52:00 AM	30.75150108	79.5980454	542.27582	40801	849	655	336	1322
11:53:00 AM	30.75150108	79.6217804	542.05072	40861	851	617	337	1324
11:54:00 AM	30.50250053	79.7382355	543.01855	40921	851	650	331	1309
11:55:00 AM	30.75150108	79.7953644	542.21973	40981	852	650	336	1318
11:56:00 AM	30.62700081	79.8705063	542.79535	41041	852	661	332	1312
11:57:00 AM	30.50250053	79.8601837	543.0376	41101	852	647	332	1313
11:58:00 AM	30.50250053	79.9098358	542.76941	41161	852	641	334	1319
11:59:00 AM	30.50250053	79.9124756	542.30023	41221	852	625	335	1327
12:00:00 PM	30.62700081	79.9614716	541.37097	41281	852	670	339	1339
12:01:00 PM	30.50250053	79.9865265	541.79742	41341	851	633	337	1336
12:02:00 PM	30.75150108	79.9944305	540.91394	41401	852	633	341	1342
12:03:00 PM	30.62700081	80.0203552	540.37762	41461	852	647	342	1347
12:04:00 PM	30.62700081	80.0610046	540.28571	41521	851	633	343	1353
12:05:00 PM	30.62700081	80.1326447	539.68713	41581	850	638	349	1364
12:06:00 PM	30.50250053	80.1447296	539.73981	41641	851	637	349	1370
12:07:00 PM	30.50250053	80.1583481	539.33582	41701	850	648	351	1380
12:08:00 PM	30.25349998	80.1603241	539.64673	41761	850	636	347	1375
12:09:00 PM	30.37800026	80.2704086	539.48383	41821	850	618	348	1378
12:10:00 PM	30.25349998	80.3831329	539.12793	41881	852	641	347	1375
12:11:00 PM	30.37800026	80.4321289	538.86621	41941	852	633	349	1381
12:12:00 PM	30.25349998	80.502655	538.8277	42001	852	655	348	1380
12:13:00 PM	30.37800026	80.5747299	538.69	42061	851	641	350	1384
12:14:00 PM	30.25349998	80.6885529	539.01312	42121	851	632	349	1383
12:15:00 PM	30.12900162	80.7762146	538.97076	42181	853	643	344	1374
12:16:00 PM	30.25349998	80.8465271	538.77087	42241	853	634	345	1377
12:17:00 PM	30.25349998	80.8893738	538.513	42301	853	628	346	1377
12:18:00 PM	30.12900162	80.9337616	538.57477	42361	853	626	347	1378
12:19:00 PM	30.12900162	81.0018768	538.71405	42421	853	628	344	1375
12:20:00 PM	30.25349998	81.0827332	538.42566	42481	854	631	348	1381
12:21:00 PM	30.12900162	81.1000977	539.09509	42541	853	633	343	1373
12:22:00 PM	30.25349998	81.1405258	538.77966	42601	854	635	348	1381
12:23:00 PM	30.12900162	81.1873322	538.71252	42661	854	657	345	1378
12:24:00 PM	30.12900162	81.2009506	538.99097	42721	854	641	344	1376
12:25:00 PM	30.12900162	81.2317123	539.00775	42781	855	651	344	1378
12:26:00 PM	30.37800026	81.2525864	538.3009	42841	854	635	352	1388

12:27:00 PM	30.25349998	81.2374268	538.73883	42901	854	633	349	1384
12:28:00 PM	30.25349998	81.2818146	538.78192	42961	854	638	347	1380
12:29:00 PM	30.00450134	81.2974091	539.67841	43021	856	647	342	1372
12:30:00 PM	30.00450134	81.3044434	539.69977	43081	856	647	343	1371
12:31:00 PM	30.12900162	81.3730011	539.57269	43141	857	632	344	1374
12:32:00 PM	30.00450134	81.4165039	540.20789	43201	858	642	341	1367
12:33:00 PM	29.75549889	81.5013123	540.42987	43261	858	627	336	1361
12:34:00 PM	30.00450134	81.5	539.32245	43321	858	637	341	1371
12:35:00 PM	30.12900162	81.536911	539.67456	43381	858	643	342	1370
12:36:00 PM	30.12900162	81.5527344	539.35834	43441	858	634	343	1373
12:37:00 PM	29.88000107	81.5733872	539.38275	43501	858	650	341	1368
12:38:00 PM	29.88000107	81.6733627	539.50708	43561	860	623	339	1366
12:39:00 PM	29.88000107	81.7052231	539.66772	43621	860	642	337	1363
12:40:00 PM	29.88000107	81.7900391	539.33051	43681	860	626	340	1367
12:41:00 PM	29.75549889	81.7950897	539.99841	43741	860	654	336	1359
12:42:00 PM	29.75549889	81.884079	540.0072	43801	861	640	335	1360
12:43:00 PM	29.88000107	81.92099	540.06061	43861	862	634	336	1361
12:44:00 PM	29.63099861	81.9787827	540.16821	43921	861	670	334	1355
12:45:00 PM	29.75549889	82.0559082	540.18878	43981	862	655	335	1355
12:46:00 PM	29.88000107	82.0739288	540.12585	44041	862	657	337	1362
12:47:00 PM	29.88000107	82.1525879	540.27118	44101	862	660	336	1360
12:48:00 PM	29.88000107	82.178299	540.4104	44161	863	659	337	1360
12:49:00 PM	29.75549889	82.1941147	540.32459	44221	863	645	335	1357
12:50:00 PM	29.75549889	82.2222443	540.97882	44281	864	632	333	1352
12:51:00 PM	29.63099861	82.2686005	541.10852	44341	864	651	333	1349
12:52:00 PM	29.50650024	82.3804474	540.87732	44401	864	660	332	1347
12:53:00 PM	29.63099861	81.4591293	500.01581	44461	861	637	368	1468
12:54:00 PM	29.50650024	81.7346649	501.60388	44521	858	631	360	1452
12:55:00 PM	29.50650024	81.8454132	501.86407	44581	859	641	356	1444
12:56:00 PM	29.50650024	81.9519806	502.58276	44641	859	635	350	1431
Average	**30.31575037**	**80.6307371**	**538.38031**	**42151**	**853.5**	**641.35714**	**342.60714**	**1360.7381**

Montrose corrected - GE Trend Test 3 Unit 2

ACFM	SCFM(68F)	lb/sec	lb/sec	ND	BTU/SCF (68F)	MM BTU/Hr		BTU/KWH
GAS FLOW	**GAS FLOW**	**Gas Flow**	**NOX WATER INJECTION FLOW**	**Water/Fuel Ratio**	**HHV**	**Heat Input**	**Kw**	**Heat Rate**
135.6	5,116	3.79	4.868	1.286	1,024	314	31,000	10,138
135.5	5,116	3.79	4.854	1.282	1,024	314	31,000	10,137
135.7	5,121	3.79	4.910	1.295	1,024	315	31,125	10,106
135.0	5,100	3.77	4.826	1.279	1,024	313	30,876	10,147
134.8	5,090	3.77	4.826	1.281	1,024	313	30,876	10,127
134.7	5,088	3.77	4.812	1.278	1,024	313	31,000	10,082
134.2	5,069	3.75	4.784	1.275	1,024	311	30,876	10,084
134.4	5,078	3.76	4.771	1.269	1,024	312	30,876	10,102
133.6	5,050	3.74	4.743	1.269	1,024	310	30,876	10,047
133.6	5,052	3.74	4.729	1.265	1,024	310	30,752	10,092
133.9	5,064	3.75	4.757	1.269	1,024	311	30,876	10,075
134.0	5,067	3.75	4.784	1.276	1,024	311	31,000	10,040
134.1	5,069	3.75	4.771	1.272	1,024	311	31,000	10,044
133.3	5,044	3.73	4.743	1.270	1,024	310	30,876	10,035
133.0	5,027	3.72	4.729	1.271	1,024	309	30,752	10,042
133.2	5,040	3.73	4.729	1.268	1,024	310	30,752	10,067
133.1	5,035	3.73	4.715	1.265	1,024	309	30,752	10,057
132.9	5,031	3.72	4.729	1.270	1,024	309	30,876	10,008
133.0	5,036	3.73	4.729	1.269	1,024	309	30,876	10,019
132.2	5,009	3.71	4.673	1.261	1,024	308	30,752	10,006
132.4	5,015	3.71	4.687	1.263	1,024	308	30,752	10,017
130.9	4,966	3.68	4.604	1.253	1,024	305	30,503	10,001
131.8	4,993	3.70	4.673	1.265	1,024	307	30,752	9,974
131.2	4,976	3.68	4.618	1.254	1,024	306	30,627	9,980
131.3	4,982	3.69	4.618	1.252	1,024	306	30,503	10,032
131.9	5,002	3.70	4.645	1.255	1,024	307	30,503	10,073
132.7	5,028	3.72	4.659	1.252	1,024	309	30,503	10,126
133.9	5,065	3.75	4.715	1.258	1,024	311	30,627	10,159
133.6	5,058	3.74	4.687	1.252	1,024	311	30,503	10,185
134.2	5,072	3.75	4.743	1.263	1,024	312	30,752	10,132
134.7	5,086	3.76	4.757	1.264	1,024	312	30,627	10,201
135.3	5,108	3.78	4.771	1.262	1,024	314	30,627	10,245
136.4	5,144	3.81	4.854	1.275	1,024	316	30,627	10,317
137.0	5,167	3.82	4.854	1.269	1,024	317	30,503	10,406
138.0	5,201	3.85	4.882	1.268	1,024	319	30,503	10,474
137.5	5,185	3.84	4.826	1.258	1,024	319	30,253	10,528
137.8	5,195	3.84	4.840	1.259	1,024	319	30,378	10,505
137.5	5,180	3.83	4.826	1.259	1,024	318	30,253	10,518
138.1	5,201	3.85	4.854	1.261	1,024	319	30,378	10,516
138.0	5,196	3.85	4.840	1.259	1,024	319	30,253	10,551
138.4	5,210	3.86	4.868	1.262	1,024	320	30,378	10,535
138.3	5,209	3.86	4.854	1.259	1,024	320	30,253	10,577
137.4	5,175	3.83	4.784	1.249	1,024	318	30,129	10,551
137.7	5,185	3.84	4.798	1.251	1,024	318	30,253	10,527
137.7	5,182	3.84	4.812	1.255	1,024	318	30,253	10,522
137.8	5,186	3.84	4.826	1.257	1,024	319	30,129	10,574
137.5	5,176	3.83	4.784	1.249	1,024	318	30,129	10,554
138.1	5,196	3.85	4.840	1.259	1,024	319	30,253	10,551
137.3	5,173	3.83	4.771	1.246	1,024	318	30,129	10,546
138.1	5,200	3.85	4.840	1.258	1,024	319	30,253	10,558
137.8	5,188	3.84	4.798	1.250	1,024	319	30,129	10,577
137.6	5,183	3.84	4.784	1.247	1,024	318	30,129	10,567
137.8	5,191	3.84	4.784	1.246	1,024	319	30,129	10,583
138.8	5,222	3.86	4.896	1.267	1,024	321	30,378	10,558

138.4	5,211	3.86	4.854	1.259	1,024	320	30,253	10,580
138.0	5,196	3.85	4.826	1.255	1,024	319	30,253	10,550
137.2	5,174	3.83	4.757	1.242	1,024	318	30,005	10,593
137.1	5,171	3.83	4.771	1.247	1,024	318	30,005	10,586
137.4	5,181	3.83	4.784	1.248	1,024	318	30,129	10,563
136.7	5,160	3.82	4.743	1.242	1,024	317	30,005	10,564
136.1	5,140	3.80	4.673	1.229	1,024	316	29,755	10,610
137.1	5,167	3.82	4.743	1.240	1,024	317	30,005	10,578
137.0	5,167	3.82	4.757	1.244	1,024	317	30,129	10,534
137.3	5,175	3.83	4.771	1.246	1,024	318	30,129	10,551
136.8	5,156	3.82	4.743	1.243	1,024	317	29,880	10,600
136.6	5,150	3.81	4.715	1.237	1,024	316	29,880	10,587
136.3	5,140	3.80	4.687	1.232	1,024	316	29,880	10,567
136.7	5,152	3.81	4.729	1.240	1,024	316	29,880	10,592
135.9	5,128	3.80	4.673	1.231	1,024	315	29,755	10,587
136.0	5,132	3.80	4.659	1.227	1,024	315	29,755	10,594
136.1	5,136	3.80	4.673	1.229	1,024	316	29,880	10,559
135.5	5,115	3.79	4.645	1.227	1,024	314	29,631	10,603
135.5	5,115	3.79	4.659	1.231	1,024	314	29,755	10,559
136.2	5,141	3.80	4.687	1.232	1,024	316	29,880	10,568
136.0	5,134	3.80	4.673	1.230	1,024	315	29,880	10,555
136.0	5,136	3.80	4.687	1.233	1,024	315	29,880	10,558
135.7	5,124	3.79	4.659	1.229	1,024	315	29,755	10,577
135.2	5,111	3.78	4.631	1.225	1,024	314	29,755	10,551
134.9	5,101	3.77	4.631	1.227	1,024	313	29,631	10,574
134.7	5,091	3.77	4.618	1.226	1,024	313	29,507	10,598
146.8	5,140	3.80	5.118	1.345	1,024	316	29,631	10,656
145.2	5,100	3.77	5.007	1.327	1,024	313	29,507	10,617
144.4	5,074	3.76	4.951	1.318	1,024	312	29,507	10,564
143.1	5,036	3.73	4.868	1.306	1,024	309	29,507	10,483
136.07381	**5118.450477**	**3.788046183**	**4.765094345**	**1.257991063**	**1023.789904**	**314.4130754**	**30315.75037**	**10374.25025**

Appendix B.3
Montrose RM Data

MONTROSE
AIR QUALITY SERVICES

Instrumental Reference Method Uncorrected Measurements and Calibration Results

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 1
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	9/20/2021
Operator:	Tom Cassin

F Factor Information

F_c	-
F_d	8615.6

Test Run Average Analyzer Responses and Support Data

Run Number	Test Date	Start Minute	End Minute	CO (ppm)	NO_x (ppm)	SO_2 (ppm)	O_2 (% vol)	CO_2 (% vol)	Volumetric Flowrate DSCFM		Moisture Fraction B_{WS}
1	09/20/21	10:26	11:58	13.82	18.63	-	15.77	3.05	-		-
2	09/20/21	12:19	13:47	8.77	20.91	-	15.79	3.04	-		-
3	09/20/21	14:05	15:31	27.15	17.52	-	15.94	2.9	-		-

MONTROSE
AIR QUALITY SERVICES

Method 25A Test Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack
Project Number:	PROJ-01221
Test Date:	September 20, 2021
Operator:	Tom Cassin

Sampling Location			Source 1
Calibration Span			20
Run	Start Time	End Time	Run Average
1	10:26	11:58	0.62
2	12:19	13:47	0.25
3	14:05	15:31	2.12

GE Power **Test 1**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw
9/20/21 10:26 AM	7.98	4.43	18.79	1.24	0.80
9/20/21 10:27 AM	7.61	3.81	19.07	1.28	1.19
9/20/21 10:28 AM	7.53	4.06	18.91	1.17	0.89
9/20/21 10:29 AM	8.20	4.29	18.83	1.28	0.96
9/20/21 10:30 AM	8.22	4.32	18.81	1.31	0.81
9/20/21 10:31 AM	8.05	4.46	18.86	1.32	1.28
9/20/21 10:32 AM	8.05	4.21	18.82	1.28	1.11
9/20/21 10:33 AM	8.19	4.31	18.80	1.29	0.84
9/20/21 10:34 AM	8.19	4.44	18.81	1.30	0.90
9/20/21 10:35 AM	8.29	4.42	18.85	1.32	0.75
9/20/21 10:36 AM	8.22	4.37	18.85	1.30	0.71
9/20/21 10:37 AM	7.99	4.71	18.81	1.30	1.13
9/20/21 10:38 AM	7.80	5.23	18.70	1.28	1.02
9/20/21 10:39 AM	10.71	10.81	17.76	1.46	1.46
9/20/21 10:40 AM	10.93	19.59	17.43	1.97	1.81
9/20/21 10:48 AM	13.88	29.42	16.35	2.69	1.94
9/20/21 10:49 AM	14.38	25.67	16.45	2.71	1.15
9/20/21 10:50 AM	14.97	18.97	16.43	2.69	0.85
9/20/21 10:51 AM	15.85	15.30	16.40	2.71	0.82
9/20/21 10:52 AM	16.40	12.44	16.45	2.72	0.63
9/20/21 10:53 AM	15.77	10.74	16.72	2.69	1.00
9/20/21 10:54 AM	15.47	10.28	16.75	2.57	0.72
9/20/21 10:55 AM	15.71	10.01	16.66	2.58	0.60
9/20/21 10:56 AM	15.52	9.65	16.68	2.57	0.72
9/20/21 10:57 AM	15.98	9.79	16.71	2.59	0.59
9/20/21 10:58 AM	15.71	10.00	16.71	2.59	0.57
9/20/21 10:59 AM	15.73	10.11	16.60	2.57	0.50
9/20/21 11:00 AM	15.46	10.01	16.30	2.61	0.39
9/20/21 11:01 AM	19.44	12.13	15.87	2.91	0.40
9/20/21 11:02 AM	18.79	11.40	15.78	3.06	0.48
9/20/21 11:06 AM	23.48	15.54	14.55	3.76	0.44
9/20/21 11:07 AM	23.39	15.54	14.54	3.77	0.38
9/20/21 11:08 AM	23.50	15.57	14.50	3.79	0.34
9/20/21 11:09 AM	23.75	15.01	14.53	3.79	0.28
9/20/21 11:10 AM	23.61	15.37	14.55	3.79	0.33
9/20/21 11:11 AM	22.93	14.77	14.69	3.71	0.40
9/20/21 11:12 AM	22.23	17.49	14.65	3.69	0.68
9/20/21 11:13 AM	18.18	22.79	14.92	3.58	0.73
9/20/21 11:14 AM	21.73	20.76	14.50	3.62	0.38
9/20/21 11:15 AM	22.47	17.42	14.48	3.77	0.31
9/20/21 11:16 AM	23.35	15.50	14.30	3.78	0.40
9/20/21 11:17 AM	23.79	15.35	14.29	3.88	0.25

9/20/21 11:18 AM	23.78	15.50	14.32	3.86	0.37
9/20/21 11:19 AM	23.52	15.79	14.36	3.87	0.26
9/20/21 11:20 AM	23.61	15.63	14.37	3.86	0.32
9/20/21 11:25 AM	23.38	17.47	14.51	3.78	0.52
9/20/21 11:26 AM	23.31	17.49	14.50	3.78	0.46
9/20/21 11:27 AM	23.54	17.58	14.53	3.76	0.44
9/20/21 11:28 AM	23.32	17.98	14.48	3.74	0.47
9/20/21 11:29 AM	23.24	18.06	14.52	3.79	0.51
9/20/21 11:30 AM	23.48	17.30	14.41	3.80	0.47
9/20/21 11:31 AM	23.51	16.99	14.41	3.83	0.42
9/20/21 11:32 AM	23.54	17.06	14.43	3.82	0.45
9/20/21 11:33 AM	23.57	16.79	14.41	3.84	0.46
9/20/21 11:34 AM	23.27	17.07	14.42	3.84	0.46
9/20/21 11:35 AM	23.57	16.94	14.39	3.81	0.48
9/20/21 11:36 AM	23.56	16.80	14.42	3.83	0.46
9/20/21 11:37 AM	23.38	16.92	14.41	3.84	0.36
9/20/21 11:38 AM	23.36	16.38	14.43	3.82	0.39
9/20/21 11:44 AM	22.34	17.36	14.72	3.59	0.51
9/20/21 11:45 AM	22.49	17.21	14.67	3.67	0.46
9/20/21 11:46 AM	22.70	17.07	14.63	3.69	0.51
9/20/21 11:47 AM	22.58	17.44	14.66	3.70	0.51
9/20/21 11:48 AM	22.53	17.18	14.72	3.71	0.44
9/20/21 11:49 AM	23.23	15.59	14.65	3.68	0.31
9/20/21 11:50 AM	23.16	15.44	14.65	3.70	0.52
9/20/21 11:51 AM	22.95	15.87	14.69	3.66	0.40
9/20/21 11:52 AM	23.02	14.92	14.69	3.68	0.38
9/20/21 11:53 AM	22.99	15.31	14.65	3.69	0.34
9/20/21 11:54 AM	23.22	15.07	14.64	3.68	0.34
9/20/21 11:55 AM	23.19	15.36	14.64	3.70	0.39
9/20/21 11:56 AM	22.48	15.74	14.71	3.69	0.42
9/20/21 11:57 AM	22.51	15.48	14.71	3.67	0.38
9/20/21 11:58 AM	22.63	15.26	14.74	3.69	0.38
Average	**18.63**	**13.82**	**15.77**	**3.05**	**0.62**

GE Power **Test 2**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw
9/20/21 12:19 PM	22.97	15.58	14.81	3.63	0.33
9/20/21 12:20 PM	24.31	13.16	14.78	3.63	0.23
9/20/21 12:21 PM	24.20	13.61	14.82	3.60	0.17
9/20/21 12:22 PM	24.17	13.10	14.90	3.64	0.33
9/20/21 12:23 PM	23.62	14.71	14.81	3.59	0.29
9/20/21 12:24 PM	23.77	13.93	14.67	3.59	0.20
9/20/21 12:25 PM	24.94	13.16	14.64	3.68	0.14
9/20/21 12:26 PM	25.02	13.19	14.67	3.72	0.15
9/20/21 12:27 PM	24.06	13.27	14.71	3.66	0.12
9/20/21 12:28 PM	25.10	11.85	14.72	3.67	0.14
9/20/21 12:29 PM	24.91	12.59	14.69	3.66	0.17
9/20/21 12:30 PM	25.07	12.21	14.67	3.68	0.17
9/20/21 12:31 PM	25.11	11.82	14.72	3.68	0.08
9/20/21 12:32 PM	26.03	10.11	14.78	3.66	0.11
9/20/21 12:37 PM	26.56	10.92	14.63	3.73	0.16
9/20/21 12:38 PM	26.23	11.19	14.62	3.71	0.11
9/20/21 12:39 PM	26.91	10.85	14.59	3.71	0.10
9/20/21 12:40 PM	26.28	11.24	14.60	3.72	0.07
9/20/21 12:41 PM	26.69	10.87	14.61	3.72	0.14
9/20/21 12:42 PM	27.24	10.51	14.56	3.75	0.09
9/20/21 12:43 PM	26.98	10.73	14.54	3.74	0.12
9/20/21 12:44 PM	26.36	11.48	14.51	3.77	0.08
9/20/21 12:45 PM	25.96	12.50	14.49	3.77	0.07
9/20/21 12:46 PM	26.78	11.45	14.52	3.79	0.09
9/20/21 12:47 PM	26.73	11.56	14.51	3.76	0.21
9/20/21 12:48 PM	26.25	11.55	14.49	3.75	0.19
9/20/21 12:49 PM	26.65	11.28	14.51	3.78	0.13
9/20/21 12:50 PM	26.29	11.51	14.48	3.75	0.06
9/20/21 12:51 PM	26.39	10.46	14.61	3.77	0.03
9/20/21 12:56 PM	26.28	10.80	14.60	3.73	0.07
9/20/21 12:57 PM	26.13	11.21	14.57	3.72	0.07
9/20/21 12:58 PM	26.74	10.83	14.56	3.73	0.04
9/20/21 12:59 PM	25.77	11.83	14.56	3.73	0.08
9/20/21 1:00 PM	25.87	11.13	14.93	3.77	0.14
9/20/21 1:01 PM	24.52	10.10	15.02	3.54	0.05
9/20/21 1:02 PM	25.98	9.79	14.92	3.55	0.12
9/20/21 1:03 PM	24.92	9.44	14.92	3.52	0.16
9/20/21 1:04 PM	25.28	9.35	14.96	3.53	0.06
9/20/21 1:05 PM	25.54	9.36	14.91	3.51	-0.03
9/20/21 1:06 PM	26.12	8.70	14.94	3.52	0.04
9/20/21 1:07 PM	25.23	9.20	14.91	3.53	0.06
9/20/21 1:08 PM	25.96	8.81	14.88	3.51	0.10

9/20/21 1:09 PM	27.38	10.22	14.37	3.62	-0.02
9/20/21 1:14 PM	18.78	6.69	16.31	2.73	0.20
9/20/21 1:15 PM	19.08	6.26	16.26	2.75	0.20
9/20/21 1:16 PM	19.08	6.49	16.26	2.76	0.12
9/20/21 1:17 PM	19.13	6.61	16.36	2.77	0.22
9/20/21 1:18 PM	18.56	6.68	16.41	2.78	0.23
9/20/21 1:19 PM	18.01	6.34	16.60	2.74	0.15
9/20/21 1:20 PM	18.22	6.08	16.56	2.63	0.34
9/20/21 1:21 PM	18.91	5.99	16.67	2.63	0.13
9/20/21 1:22 PM	19.10	5.89	16.63	2.58	0.23
9/20/21 1:23 PM	19.09	5.63	16.17	2.59	0.10
9/20/21 1:24 PM	18.11	6.69	15.62	2.87	0.12
9/20/21 1:25 PM	18.54	6.94	16.76	3.12	0.24
9/20/21 1:26 PM	18.02	5.57	16.86	2.66	0.24
9/20/21 1:27 PM	18.11	5.43	16.83	2.49	0.83
9/20/21 1:28 PM	17.99	6.53	16.26	2.60	0.11
9/20/21 1:33 PM	8.78	2.80	18.81	1.28	0.61
9/20/21 1:34 PM	8.54	3.04	18.79	1.27	0.78
9/20/21 1:35 PM	9.47	2.87	18.80	1.29	0.74
9/20/21 1:36 PM	9.58	2.88	18.77	1.30	0.91
9/20/21 1:37 PM	9.54	3.17	18.67	1.35	0.84
9/20/21 1:38 PM	8.99	3.15	18.67	1.36	0.56
9/20/21 1:39 PM	9.02	3.16	18.65	1.40	1.19
9/20/21 1:40 PM	9.11	3.39	18.62	1.40	0.51
9/20/21 1:41 PM	9.22	3.07	18.38	1.39	0.72
9/20/21 1:42 PM	9.98	3.99	18.16	1.54	0.84
9/20/21 1:43 PM	9.65	3.97	18.16	1.67	0.66
9/20/21 1:44 PM	10.48	4.77	17.37	1.78	0.26
9/20/21 1:45 PM	10.79	4.93	17.37	2.16	0.43
9/20/21 1:46 PM	10.63	5.15	17.43	2.17	0.38
9/20/21 1:47 PM	10.59	5.13	17.40	2.15	0.38
Average	**20.91**	**8.77**	**15.79**	**3.04**	**0.25**

GE Power **Test 3**
Greenleaf1 GT1
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw
9/20/21 2:05 PM	7.91	1.98	19.25	1.05	0.74
9/20/21 2:06 PM	7.58	2.40	18.84	1.03	0.58
9/20/21 2:07 PM	7.34	2.53	18.87	1.22	1.04
9/20/21 2:08 PM	8.40	2.68	18.85	1.23	0.74
9/20/21 2:09 PM	8.31	2.67	18.89	1.23	0.93
9/20/21 2:10 PM	8.44	2.61	18.85	1.23	1.02
9/20/21 2:11 PM	8.65	2.71	18.82	1.28	0.86
9/20/21 2:12 PM	9.62	2.71	18.78	1.29	0.95
9/20/21 2:13 PM	9.55	2.70	18.77	1.29	0.77
9/20/21 2:14 PM	9.93	2.76	18.78	1.31	0.49
9/20/21 2:15 PM	9.88	2.73	18.78	1.31	0.64
9/20/21 2:16 PM	10.06	2.85	18.78	1.31	0.62
9/20/21 2:17 PM	10.12	2.63	18.77	1.31	0.84
9/20/21 2:18 PM	10.18	2.51	18.82	1.29	0.74
9/20/21 2:23 PM	19.92	5.46	16.60	2.60	0.26
9/20/21 2:24 PM	19.96	5.29	16.65	2.60	0.35
9/20/21 2:25 PM	19.51	5.36	16.62	2.59	0.44
9/20/21 2:26 PM	19.66	5.49	16.48	2.59	0.25
9/20/21 2:27 PM	19.72	4.93	16.69	2.59	1.30
9/20/21 2:28 PM	19.14	4.98	16.66	2.55	0.30
9/20/21 2:29 PM	19.82	5.03	16.72	2.53	0.28
9/20/21 2:30 PM	19.61	5.29	16.70	2.54	1.04
9/20/21 2:31 PM	19.53	5.15	16.69	2.53	0.32
9/20/21 2:32 PM	19.75	5.26	16.67	2.54	0.20
9/20/21 2:33 PM	19.65	5.31	16.91	2.56	0.25
9/20/21 2:34 PM	18.09	6.04	16.81	2.44	0.43
9/20/21 2:35 PM	16.89	7.75	16.82	2.46	0.44
9/20/21 2:36 PM	15.92	9.48	16.54	2.44	0.48
9/20/21 2:40 PM	20.73	32.79	14.72	3.51	2.12
9/20/21 2:41 PM	20.61	39.68	14.65	3.60	1.95
9/20/21 2:42 PM	20.05	43.98	14.65	3.62	4.55
9/20/21 2:43 PM	19.64	44.09	14.63	3.61	4.34
9/20/21 2:44 PM	19.66	40.64	14.67	3.59	2.10
9/20/21 2:45 PM	21.07	36.75	14.69	3.60	1.73
9/20/21 2:46 PM	20.57	42.48	15.00	3.59	2.32
9/20/21 2:47 PM	20.06	45.07	14.56	3.50	2.92
9/20/21 2:48 PM	19.82	41.37	14.78	3.60	2.17
9/20/21 2:49 PM	20.41	35.92	14.78	3.53	2.48
9/20/21 2:50 PM	19.84	40.27	14.78	3.53	2.14
9/20/21 2:51 PM	19.72	43.56	14.77	3.57	2.29
9/20/21 2:52 PM	19.70	40.24	15.23	3.54	2.19
9/20/21 2:53 PM	18.80	35.39	14.66	3.32	3.15

9/20/21 2:58 PM	20.37	47.11	14.65	3.62	4.06
9/20/21 2:59 PM	19.62	43.38	14.65	3.61	4.01
9/20/21 3:00 PM	20.86	45.48	14.63	3.62	3.96
9/20/21 3:01 PM	20.21	42.95	14.64	3.61	3.82
9/20/21 3:02 PM	20.31	45.67	14.63	3.60	4.14
9/20/21 3:03 PM	19.26	44.59	14.60	3.61	4.20
9/20/21 3:04 PM	20.54	42.32	14.58	3.64	4.11
9/20/21 3:05 PM	19.68	43.85	14.59	3.63	3.37
9/20/21 3:06 PM	20.23	39.64	14.58	3.60	2.13
9/20/21 3:07 PM	20.95	44.50	14.52	3.64	3.43
9/20/21 3:08 PM	20.32	46.32	14.53	3.69	2.67
9/20/21 3:09 PM	20.29	46.05	14.55	3.66	2.90
9/20/21 3:10 PM	21.00	44.08	14.56	3.66	2.64
9/20/21 3:11 PM	20.16	46.42	14.61	3.65	2.68
9/20/21 3:18 PM	19.46	46.56	14.92	3.47	3.18
9/20/21 3:19 PM	19.50	44.15	14.89	3.45	4.63
9/20/21 3:20 PM	18.41	43.68	14.90	3.50	3.75
9/20/21 3:21 PM	18.99	45.50	14.70	3.53	4.12
9/20/21 3:22 PM	19.05	44.95	14.69	3.56	3.37
9/20/21 3:23 PM	19.42	42.60	14.68	3.56	4.07
9/20/21 3:24 PM	19.00	44.32	14.72	3.56	4.14
9/20/21 3:25 PM	19.18	42.76	14.71	3.55	4.06
9/20/21 3:26 PM	19.28	41.48	14.71	3.57	3.08
9/20/21 3:27 PM	19.79	44.88	14.77	3.55	3.05
9/20/21 3:28 PM	19.65	38.33	14.89	3.52	2.10
9/20/21 3:29 PM	19.10	40.57	14.87	3.44	2.62
9/20/21 3:30 PM	19.22	38.09	14.90	3.46	2.33
9/20/21 3:31 PM	19.03	40.63	14.90	3.45	1.99
Average	**17.52**	**27.15**	**15.94**	**2.90**	**2.12**

MONTROSE
AIR QUALITY SERVICES

Instrumental Reference Method Uncorrected Measurements and Calibration Results

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 2
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	9/21/2021
Operator:	Tom Cassin

F Factor Information

F_c	
F_d	8621.5

Test Run Average Analyzer Responses and Support Data

Run Number	Test Date	Start Minute	End Minute	CO (ppm)	NO_x (ppm)	SO_2 (ppm)	O_2 (% vol)	CO_2 (% vol)	Volumetric Flowrate DSCFM		Moisture Fraction B_{WS}
1	09/21/21	8:19	9:39	10.97	19.19	-	15.63	3.12	-		-
2	09/21/21	9:55	11:15	12.54	17.78	-	15.74	3.04	-		-
3	09/21/21	11:33	12:56	9.91	18.66	-	15.98	2.87	-		-

MONTROSE
AIR QUALITY SERVICES

Method 25A Test Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack GT2
Project Number:	PROJ-011221
Test Date:	9/21/2021
Operator:	Tom Cassin

Sampling Location			Source 1
Calibration Span			20
Run	Start Time	End Time	Run Average
1	8:19	9:39	0.97
2	9:55	11:15	0.72
3	11:33	12:56	0.51

GE Power **Test 1**
Greenleaf1 GT2
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw
9/21/21 8:19 AM	24.02	11.36	14.86	3.62	1.39
9/21/21 8:20 AM	24.11	11.60	14.84	3.60	1.41
9/21/21 8:21 AM	24.25	11.95	14.86	3.58	1.43
9/21/21 8:22 AM	24.43	13.19	14.69	3.60	1.21
9/21/21 8:23 AM	24.83	11.72	14.69	3.67	1.08
9/21/21 8:24 AM	24.93	11.38	14.64	3.69	0.96
9/21/21 8:25 AM	24.99	11.73	14.65	3.70	0.86
9/21/21 8:26 AM	25.01	11.06	14.65	3.71	0.83
9/21/21 8:27 AM	24.91	11.14	14.67	3.72	0.98
9/21/21 8:28 AM	25.00	11.85	14.63	3.72	1.17
9/21/21 8:29 AM	24.97	11.70	14.71	3.69	1.00
9/21/21 8:30 AM	25.28	11.99	14.48	3.70	1.29
9/21/21 8:31 AM	25.27	11.69	14.53	3.75	0.85
9/21/21 8:32 AM	25.15	10.89	14.49	3.77	0.69
9/21/21 8:33 AM	24.97	10.42	14.27	3.71	0.65
9/21/21 8:36 AM	22.75	19.55	14.40	3.80	0.84
9/21/21 8:37 AM	22.07	22.18	14.41	3.77	1.07
9/21/21 8:38 AM	21.60	23.63	14.43	3.78	1.23
9/21/21 8:39 AM	21.44	25.40	14.42	3.74	1.03
9/21/21 8:40 AM	21.71	25.17	14.38	3.78	1.14
9/21/21 8:41 AM	22.09	23.78	14.37	3.79	1.03
9/21/21 8:42 AM	22.63	19.71	14.39	3.78	0.76
9/21/21 8:43 AM	23.25	16.34	14.40	3.77	0.67
9/21/21 8:44 AM	23.28	16.21	14.39	3.81	0.79
9/21/21 8:45 AM	23.30	16.41	14.40	3.80	0.74
9/21/21 8:46 AM	23.49	15.99	14.30	3.82	0.60
9/21/21 8:47 AM	23.70	15.51	14.31	3.89	0.58
9/21/21 8:48 AM	23.83	14.20	14.32	3.85	0.30
9/21/21 8:49 AM	24.21	13.21	14.31	3.84	0.39
9/21/21 8:50 AM	23.85	12.64	14.33	3.85	0.43
9/21/21 8:53 AM	23.58	10.41	14.46	3.79	0.02
9/21/21 8:54 AM	23.63	10.58	14.46	3.80	0.11
9/21/21 8:55 AM	23.48	10.69	14.46	3.80	0.13
9/21/21 8:56 AM	23.51	10.68	14.45	3.79	0.17
9/21/21 8:57 AM	23.50	10.51	14.41	3.77	0.01
9/21/21 8:58 AM	23.69	10.60	14.40	3.82	0.11
9/21/21 8:59 AM	23.46	11.21	14.43	3.85	-0.05
9/21/21 9:00 AM	22.82	11.16	14.51	3.82	0.07
9/21/21 9:01 AM	22.79	11.08	14.54	3.78	0.07
9/21/21 9:02 AM	22.96	10.80	14.53	3.75	-0.03
9/21/21 9:03 AM	22.80	11.27	14.53	3.75	0.25
9/21/21 9:04 AM	23.17	11.56	14.23	3.75	0.00

9/21/21 9:05 AM	23.80	11.92	14.23	3.90	-0.03
9/21/21 9:06 AM	23.84	11.50	14.21	3.91	0.01
9/21/21 9:07 AM	23.59	12.18	14.28	3.91	0.04
9/21/21 9:10 AM	12.20	5.73	17.53	2.44	0.46
9/21/21 9:11 AM	12.10	5.32	17.61	2.10	0.24
9/21/21 9:12 AM	12.29	5.59	17.59	2.05	3.38
9/21/21 9:13 AM	12.05	5.61	17.57	2.08	0.75
9/21/21 9:14 AM	11.97	5.58	17.62	2.05	0.34
9/21/21 9:15 AM	12.05	5.41	17.61	2.05	0.23
9/21/21 9:16 AM	16.49	8.37	16.29	2.35	0.13
9/21/21 9:17 AM	16.56	8.81	16.30	2.81	0.14
9/21/21 9:18 AM	15.82	7.86	16.44	2.77	0.16
9/21/21 9:19 AM	16.19	7.76	16.33	2.80	0.08
9/21/21 9:20 AM	15.94	8.80	16.09	2.76	0.17
9/21/21 9:21 AM	17.06	9.50	16.01	2.92	0.18
9/21/21 9:22 AM	17.05	9.57	16.00	2.96	0.08
9/21/21 9:23 AM	17.16	8.76	16.03	2.96	0.18
9/21/21 9:24 AM	14.17	7.54	17.35	2.91	0.39
9/21/21 9:26 AM	6.55	3.16	19.19	1.14	1.51
9/21/21 9:27 AM	6.67	3.17	19.18	1.08	6.03
9/21/21 9:28 AM	6.51	3.42	19.19	1.09	4.80
9/21/21 9:29 AM	6.58	3.35	19.21	1.08	2.73
9/21/21 9:30 AM	6.58	3.47	17.75	1.09	2.25
9/21/21 9:31 AM	11.88	7.09	17.58	1.86	1.53
9/21/21 9:32 AM	9.15	4.84	18.50	1.92	3.59
9/21/21 9:33 AM	8.40	4.82	18.52	1.49	7.10
9/21/21 9:34 AM	10.33	7.23	17.32	1.59	0.68
9/21/21 9:35 AM	12.27	7.36	17.34	2.20	0.98
9/21/21 9:36 AM	12.41	8.83	17.22	2.22	1.12
9/21/21 9:37 AM	12.42	8.52	17.23	2.25	1.33
9/21/21 9:38 AM	12.89	8.37	17.23	2.28	2.18
9/21/21 9:39 AM	12.41	7.85	17.24	2.27	0.73
Average	**19.19**	**10.97**	**15.63**	**3.12**	**0.97**

GE Power **Test 2**
Greenleaf1 GT2
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw
9/21/21 9:55 AM	6.67	4.17	19.02	1.20	6.18
9/21/21 9:56 AM	6.62	4.22	19.04	1.17	1.03
9/21/21 9:57 AM	6.69	4.46	19.01	1.20	1.01
9/21/21 9:58 AM	11.07	8.54	17.47	1.58	2.91
9/21/21 9:59 AM	11.05	8.22	17.49	2.09	3.77
9/21/21 10:00 AM	9.36	5.77	18.69	2.00	2.42
9/21/21 10:01 AM	7.61	5.16	18.74	1.42	1.18
9/21/21 10:02 AM	7.54	4.98	18.65	1.37	0.63
9/21/21 10:03 AM	8.82	6.84	17.45	1.41	0.61
9/21/21 10:04 AM	11.46	8.54	17.40	2.08	0.92
9/21/21 10:05 AM	11.67	9.19	17.19	2.17	0.71
9/21/21 10:06 AM	12.47	10.22	16.99	2.28	0.64
9/21/21 10:07 AM	12.61	11.40	17.00	2.39	0.54
9/21/21 10:08 AM	11.97	11.77	15.73	2.39	1.22
9/21/21 10:11 AM	13.77	9.00	16.77	2.49	0.79
9/21/21 10:12 AM	13.87	9.62	16.81	2.52	0.98
9/21/21 10:13 AM	13.64	9.68	16.77	2.52	1.24
9/21/21 10:14 AM	13.68	9.19	16.78	2.49	1.21
9/21/21 10:15 AM	13.85	9.47	16.79	2.50	1.19
9/21/21 10:16 AM	12.93	9.80	17.01	2.47	0.65
9/21/21 10:17 AM	13.06	9.25	17.13	2.38	1.49
9/21/21 10:18 AM	13.22	9.09	16.98	2.32	0.49
9/21/21 10:19 AM	13.22	8.21	17.02	2.41	1.26
9/21/21 10:20 AM	13.81	8.84	16.56	2.39	0.30
9/21/21 10:21 AM	14.57	10.32	16.48	2.62	0.49
9/21/21 10:22 AM	14.68	9.52	16.53	2.66	0.88
9/21/21 10:23 AM	14.69	9.36	16.07	2.64	0.33
9/21/21 10:24 AM	16.88	13.09	15.71	2.90	0.54
9/21/21 10:28 AM	20.91	15.75	14.64	3.69	0.57
9/21/21 10:29 AM	20.80	15.77	14.63	3.67	0.30
9/21/21 10:30 AM	20.75	16.50	14.62	3.70	0.28
9/21/21 10:31 AM	20.68	15.35	14.61	3.71	0.24
9/21/21 10:32 AM	20.57	15.88	14.48	3.69	0.67
9/21/21 10:33 AM	20.98	16.95	14.46	3.77	0.26
9/21/21 10:34 AM	21.13	17.15	14.44	3.79	0.27
9/21/21 10:35 AM	21.27	16.82	14.46	3.74	0.36
9/21/21 10:36 AM	20.92	17.66	14.53	3.75	0.27
9/21/21 10:37 AM	21.20	17.03	14.54	3.72	0.22
9/21/21 10:38 AM	21.06	15.94	14.55	3.73	0.28
9/21/21 10:39 AM	21.13	19.58	14.51	3.69	0.37
9/21/21 10:40 AM	20.85	17.20	14.49	3.75	0.21
9/21/21 10:41 AM	20.17	16.31	14.74	3.71	0.72

9/21/21 10:45 AM	21.66	17.89	14.72	3.67	0.21
9/21/21 10:46 AM	21.69	15.83	14.76	3.62	0.61
9/21/21 10:47 AM	21.39	17.38	14.73	3.65	0.70
9/21/21 10:48 AM	21.61	15.62	14.74	3.63	0.58
9/21/21 10:49 AM	21.45	17.27	14.59	3.62	0.41
9/21/21 10:50 AM	21.40	18.90	14.59	3.69	0.54
9/21/21 10:51 AM	21.26	17.40	14.65	3.69	0.91
9/21/21 10:52 AM	21.31	17.42	14.63	3.67	0.35
9/21/21 10:53 AM	21.34	16.59	14.64	3.67	0.28
9/21/21 10:54 AM	21.52	17.50	14.58	3.68	0.22
9/21/21 10:55 AM	21.78	16.54	14.60	3.69	0.32
9/21/21 10:56 AM	21.44	17.74	14.63	3.71	0.44
9/21/21 10:57 AM	20.47	14.98	14.70	3.66	0.31
9/21/21 10:58 AM	21.84	15.34	14.68	3.59	1.08
9/21/21 11:02 AM	22.31	12.78	15.03	3.46	0.15
9/21/21 11:03 AM	22.42	13.35	15.04	3.47	0.30
9/21/21 11:04 AM	22.51	12.38	15.05	3.46	0.35
9/21/21 11:05 AM	22.66	10.76	15.02	3.42	0.53
9/21/21 11:06 AM	22.32	11.87	14.99	3.45	0.18
9/21/21 11:07 AM	22.58	12.82	14.87	3.52	0.34
9/21/21 11:08 AM	22.83	12.17	14.85	3.55	0.13
9/21/21 11:09 AM	23.09	11.54	14.88	3.57	0.17
9/21/21 11:10 AM	23.31	11.75	14.86	3.55	0.15
9/21/21 11:11 AM	23.20	12.08	14.83	3.55	0.10
9/21/21 11:12 AM	23.17	12.32	14.85	3.55	0.19
9/21/21 11:13 AM	23.33	11.78	14.82	3.59	0.54
9/21/21 11:14 AM	23.61	11.37	15.02	3.55	0.13
9/21/21 11:15 AM	22.89	12.42	15.13	3.45	-0.45
Average	**17.78**	**12.54**	**15.74**	**3.04**	**0.72**

GE Power **Test 3**
Greenleaf1 GT2
Base Load

	NOx ppmvd	CO ppmvd	O2%	CO2%	UHC ppmvw
9/21/21 11:33 AM	22.53	11.66	15.09	3.41	0.33
9/21/21 11:34 AM	22.49	11.79	15.09	3.41	0.25
9/21/21 11:35 AM	22.76	11.36	15.06	3.41	0.24
9/21/21 11:36 AM	22.51	12.87	15.07	3.44	0.40
9/21/21 11:37 AM	22.95	11.93	14.90	3.45	0.27
9/21/21 11:38 AM	23.54	11.55	14.91	3.51	0.31
9/21/21 11:39 AM	23.22	12.13	14.99	3.54	0.46
9/21/21 11:40 AM	23.31	10.85	15.04	3.49	1.40
9/21/21 11:41 AM	23.07	10.22	15.03	3.47	0.15
9/21/21 11:42 AM	23.45	10.39	14.91	3.47	0.23
9/21/21 11:43 AM	23.89	11.09	14.90	3.53	0.37
9/21/21 11:44 AM	23.89	13.45	14.91	3.55	0.46
9/21/21 11:45 AM	23.81	10.26	14.85	3.53	0.25
9/21/21 11:46 AM	24.02	11.22	14.85	3.55	0.36
9/21/21 11:50 AM	25.55	8.24	14.75	3.63	0.24
9/21/21 11:51 AM	25.66	8.38	14.72	3.62	0.09
9/21/21 11:52 AM	25.58	7.67	14.73	3.63	0.00
9/21/21 11:53 AM	25.97	8.14	14.74	3.63	0.12
9/21/21 11:54 AM	26.13	7.78	14.75	3.62	0.10
9/21/21 11:55 AM	26.38	8.53	14.76	3.63	0.27
9/21/21 11:56 AM	26.14	9.18	14.72	3.62	0.05
9/21/21 11:57 AM	26.12	9.71	14.76	3.60	0.29
9/21/21 11:58 AM	26.09	8.24	14.74	3.63	0.76
9/21/21 11:59 AM	25.57	8.34	14.75	3.61	0.56
9/21/21 12:00 PM	25.04	11.18	14.76	3.60	0.12
9/21/21 12:01 PM	24.68	10.44	14.73	3.61	0.04
9/21/21 12:02 PM	24.79	9.91	14.65	3.61	0.29
9/21/21 12:03 PM	24.85	10.00	14.64	3.65	0.21
9/21/21 12:08 PM	22.93	15.04	15.10	3.70	1.38
9/21/21 12:09 PM	21.13	12.72	15.02	3.46	0.69
9/21/21 12:10 PM	21.34	13.77	14.96	3.45	0.70
9/21/21 12:11 PM	22.47	13.38	14.64	3.48	0.05
9/21/21 12:12 PM	22.77	14.12	14.60	3.65	0.10
9/21/21 12:13 PM	22.52	14.62	14.58	3.67	0.22
9/21/21 12:14 PM	22.40	15.56	14.59	3.66	0.24
9/21/21 12:15 PM	22.26	15.69	14.60	3.66	0.54
9/21/21 12:16 PM	22.84	14.45	14.59	3.66	0.05
9/21/21 12:17 PM	22.48	14.07	14.77	3.64	0.17
9/21/21 12:18 PM	21.81	15.16	14.79	3.55	0.26
9/21/21 12:19 PM	21.81	15.27	14.81	3.53	0.56
9/21/21 12:20 PM	22.01	13.71	14.80	3.55	0.20
9/21/21 12:21 PM	22.38	16.75	14.56	3.60	0.24

9/21/21 12:25 PM	11.14	6.10	17.87	1.85	0.44
9/21/21 12:26 PM	11.02	6.10	17.83	1.80	0.39
9/21/21 12:27 PM	10.71	6.69	17.85	1.84	0.75
9/21/21 12:28 PM	10.70	6.67	17.82	1.85	0.33
9/21/21 12:29 PM	10.89	6.57	17.83	1.86	0.31
9/21/21 12:30 PM	13.21	8.63	16.76	1.94	0.49
9/21/21 12:31 PM	14.95	8.98	16.73	2.44	0.28
9/21/21 12:32 PM	15.14	9.05	16.67	2.49	0.19
9/21/21 12:33 PM	15.04	8.81	16.72	2.50	0.32
9/21/21 12:34 PM	13.56	6.71	17.08	2.38	0.23
9/21/21 12:35 PM	14.05	7.69	16.98	2.27	0.21
9/21/21 12:36 PM	14.25	7.67	17.04	2.33	0.27
9/21/21 12:37 PM	14.01	7.79	16.96	2.34	0.13
9/21/21 12:38 PM	15.58	8.69	16.59	2.47	0.11
9/21/21 12:43 PM	6.78	3.22	19.17	1.03	1.01
9/21/21 12:44 PM	6.76	3.20	19.19	1.04	0.51
9/21/21 12:45 PM	6.75	3.35	19.16	1.01	1.44
9/21/21 12:46 PM	6.80	3.17	19.14	1.03	0.69
9/21/21 12:47 PM	6.77	3.20	19.19	1.04	2.40
9/21/21 12:48 PM	8.46	6.06	18.15	1.08	3.54
9/21/21 12:49 PM	10.23	6.77	18.06	1.66	3.76
9/21/21 12:50 PM	10.26	5.97	18.03	1.67	0.46
9/21/21 12:51 PM	10.34	7.26	18.07	1.69	1.26
9/21/21 12:52 PM	10.49	6.77	18.05	1.70	0.57
9/21/21 12:53 PM	10.28	5.80	18.18	1.68	0.44
9/21/21 12:54 PM	10.39	16.93	17.26	1.88	0.54
9/21/21 12:55 PM	10.87	13.53	17.17	2.17	0.36
9/21/21 12:56 PM	11.65	11.79	17.16	2.23	0.39
Average	**18.66**	**9.91**	**15.98**	**2.87**	**0.51**

Appendix B.4
Moisture Data Sheets

MONTROSE AIR QUALITY SERVICES

CYCLONIC FLOW DETERMINATION, VELOCITY, and MOISTURE (40 CFR 60 Methods 2 and 4)

Project No. PROJ-011221	Pitot ID N/A	Date 9/21/21
Client GE	PTCF / Cp N/A	Operator TOM CASSIN
Facility Green Leaf 1	Internal Dimensions (in.)	Measurement Device Sensitivity
Source TM 2500 GT B	Barometric Pressure (in. Hg) 30.01	Thermocouple ID
Sampling Location STACK	Meter Box ID CB-04	Meter Box Y 1.026
Condition BASE LOAD	Meter ID	Meter Box DH@ 1.890

Cyclonic Flow / Velocity Traverse Data

Run No.			
Stack CO_2 (%)	Stack O_2 (%)	P Static (in. H_2O)	
Run Time (24-hr)	Start	Stop	
Traverse Point No.	Yaw Angle include + or - (deg.)	Flue Gas Temp. (°F)	DP (in H_2O)
AVERAGE			

Moisture Sample Data

Run No. 1

Test Time: Clock (24-hr)	Test Time: Elapsed (min)	DGM Reading (ft^3)	DGM Temp. (°F): Inlet	DGM Temp. (°F): Outlet	DH (in. H_2O)	Vacuum (in. Hg)	Imp. Exit Temp. (°F)
8:25	0	704.145	64	63	1.9	3	64
8 30	5	707.91	64	63	1.9	3	64
8 35	10	711.42	65	63	1.9	3	63
8 40	15	715.19	65	64	1.9	3	63
8 45	20	718.75	66	63	1.9	3	62
8 50	25	722.49	64	64	1.9	3	60
8 55	30	726.00	64	65	1.9	3	57
9 00	35	729.74	65	65	1.9	3	57
9 05	40	733.44	66	64	1.9	3	57
9 10	45	737.19	65	65	1.9	3	58
9 15	50	740.79	66	64	1.9	3	60
9 20	55	744.43	66	63	1.9	3	61
9 25	60	748.031	67	65	1.9	3	61
	AVG.						

Moisture Analysis Results

	#1	#2	#3	#4	Silica Gel
Reagent	DI	DI	Empty		
Final Weight (g)	740.1	733.9	621.1		961.7
Initial Weight (g)	648.3	732.1	619.7		851.3
Net Moisture Weight Gain (g)	91.8	1.8	1.4		10.4

Total Moisture (g) 105.4

Leak Check Data

Meterbox	Pre-Test	Post-Test
Vacuum (in Hg)	60s @ 10	60s @ 5
Rate (cfm)	.000	.000
Pitot Tube	Pre-Test	Post-Test
	+	+
	-	-

O_2 / CO_2 Data

	Fyrite	Orsat	CEM
O_2 %			
CO_2 %			

MONTROSE
AIR QUALITY SERVICES

CYCLONIC FLOW DETERMINATION, VELOCITY, and MOISTURE (40 CFR 60 Methods 2 and 4)

Project No. PROJ-01121	Pitot ID N/A	Date 9/21/21
Client GE	PTCF / Cp N/A	Operator Tom CASSIN
Facility Green Heat 1	Internal Dimensions (in.)	Measurement Device Sensitivity
Source TM 2500 GT B	Barometric Pressure (in. Hg) 30.01	Thermocouple ID
Sampling Location STACK	Meter Box ID CB-04	Meter Box Y 1.026
Condition BASE LOAD	Meter ID	Meter Box DH@ 1.890

Cyclonic Flow / Velocity Traverse Data

Run No.			
Stack CO_2 (%)	Stack O_2 (%)	P Static (In. H_2O)	
Run Time (24-hr)	Start	Stop	

Traverse Point No.	Yaw Angle Include + or - (deg.)	Flue Gas Temp. (°F)	DP (in H_2O)
AVERAGE			

Moisture Sample Data

Run No. 2

Test Time: Clock (24-hr)	Elapsed (min)	DGM Reading (ft^3)	DGM Temp. (°F): Inlet	Outlet	DH (in. H_2O)	Vacuum (in. Hg)	Imp. Exit Temp. (°F)
10:00	0	748.223	66	65	1.9	3	67
10 05	5	251.99	67	65	1.9	3	64
10 10	10	255.67	67	65	1.9	3	62
10 15	15	759.42	66	67	1.9	3	62
10 20	20	263.28	68	66	1.9	3	61
10 25	25	766.80	68	67	1.9	3	61
10 30	30	270.78	67	66	1.9	3	61
10 35	35	274.41	69	66	1.9	3	62
10 40	40	278.46	69	67	1.9	3	61
10 45	45	781.93	68	68	1.9	3	63
10 50	50	285.27	67	66	1.9	3	63
10 55	55	288.41	67	66	1.9	3	63
11:00	60	793.269	69	67	1.9	3	63
	AVG.						

Moisture Analysis Results

	#1	#2	#3	#4	Silica Gel
Reagent	DI	DI	Empty		
Final Weight (g)	745.8	695.0	614.9		942.2
Initial Weight (g)	651.2	690.3	613.7		935.6
Net Moisture Weight Gain (g)	94.6	4.7	1.2		11.6
				Total Moisture (g)	112.1

Leak Check Data

Meterbox	Pre-Test	Post-Test
Vacuum (In Hg)	0	5
Rate (cfm)	.000	.000

Pitot Tube	Pre-Test	Post-Test
	+ ____	+ ____
	- ____	- ____

O_2 / CO_2 Data

	Fyrite	Orsat	CEM
O_2 %			
CO_2 %			

MONTROSE
AIR QUALITY SERVICES

CYCLONIC FLOW DETERMINATION, VELOCITY, and MOISTURE (40 CFR 60 Methods 2 and 4)

Project No. PROJ-011221	Pitot ID N/A	Date 9/21/21
Client GE	PTCF / Cp N/A	Operator Tom Cassin
Facility Green Leaf 1	Internal Dimensions (in.)	Measurement Device Sensitivity
Source TM 2500	Barometric Pressure (in. Hg) 30.01	Thermocouple ID
Sampling Location STACK	Meter Box ID CB-04	Meter Box Y 1.026
Condition BASE LOAD	Meter ID	Meter Box DH@ 1.890

Cyclonic Flow / Velocity Traverse Data

Run No.			
Stack CO_2 (%)	Stack O_2 (%)	P Static (in. H_2O)	
Run Time (24-hr)	Start	Stop	
Traverse Point No.	Yaw Angle Include + or - (deg.)	Flue Gas Temp. (°F)	DP (in H_2O)
AVERAGE			

Moisture Sample Data

Run No. 3

Test Time: Clock (24-hr)	Test Time: Elapsed (min)	DGM Reading (ft³)	DGM Temp. (°F): Inlet	DGM Temp. (°F): Outlet	DH (in. H_2O)	Vacuum (in. Hg)	Imp. Exit Temp. (°F)
11:40	0	793.454	68	66	1.9	3	66
11 45	5	797.27	68	66	1.9	3	66
11 50	10	800.91	68	67	1.4	3	65
11 55	15	904.77	69	67	1.9	3	63
12 00	20	808.55	68	66	1.9	3	63
12 05	25	812.36	68	68	1.9	3	63
12 10	30	816.12	70	68	1.9	3	62
12 15	35	819.70	69	67	1.9	3	63
12 20	40	823.59	69	67	1.9	3	62
12 25	45	827.37	68	66	1.9	3	63
12 30	50	831.09	70	68	1.9	3	68
12 35	55	834.92	69	67	1.9	3	64
12 40	60	838.582	70	68	1.9	3	64
	AVG.						

Moisture Analysis Results

	#1	#2	#3	#4	Silica Gel
Reagent	DI	DI	Empty		
Final Weight (g)	702.3	245.6	622.9		875.7
Initial Weight (g)	626.7	233.1	621.3		861.3
Net Moisture Weight Gain (g)	80.6	12.5	1.6		14.4

Total Moisture (g) 109.1

Leak Check Data

Meterbox	Pre-Test	Post-Test
Vacuum (in Hg)	10	6
Rate (cfm)	.000	.000
Pitot Tube	**Pre-Test**	**Post-Test**
	+ ___	+ ___
	- ___	- ___

O_2 / CO_2 Data

	Fyrite	Orsat	CEM
O_2 %			
CO_2 %			

MONTROSE
AIR QUALITY SERVICES

CYCLONIC FLOW DETERMINATION, VELOCITY, and MOISTURE (40 CFR 60 Methods 2 and 4)

Project No. PROJ-011221	Pitot ID N/A	Date 9/20/21
Client GE	PTCF/Co N/A	Operator Tom Cassin
Facility Green Leaf 1	Internal Dimensions (in.)	Measurement Device Sensitivity
Source TM 2500 GT A	Barometric Pressure (in. Hg) 29.87	Thermocouple ID
Sampling Location Stack	Meter Box ID CB-04	Meter Box Y 1.026
Condition Base Load	Meter ID	Meter Box DH@ 1.890

Cyclonic Flow / Velocity Traverse Data

Run No.		
Stack CO_2 (%)	Stack O_2 (%)	P Static (in. H_2O)
Run Time (24-hr)	Start	Stop

Traverse Point No.	Yaw Angle include + or - (deg.)	Flue Gas Temp. (°F)	DP (in H_2O)
AVERAGE			

Moisture Sample Data

Test Time: Clock (24-hr)	Test Time: Elapsed (min)	DGM Reading (ft³)	DGM Temp. (°F): Inlet	DGM Temp. (°F): Outlet	DH (in. H_2O)	Vacuum (in. Hg)	Imp. Exit Temp. (°F)
					Run No. 1		
10:30	0	570.504	65	64	1.8	3	61
10 35	5	574.19	62	62	1.8	3	60
10 40	10	577.85	63	63	1.8	3	60
10 45	15	581.54	65	64	1.8	3	59
10 50	20	585.29	66	65	1.8	3	57
10 55	25	588.92	66	64	1.8	3	57
11 00	30	592.57	66	65	1.8	3	56
11 05	35	596.21	66	65	1.8	3	57
11 10	40	599.87	66	65	1.8	3	57
11 15	45	603.61	67	66	1.8	3	57
11 20	50	607.32	66	66	1.8	3	56
11 25	55	610.98	67	64	1.8	3	56
11 30	60	614.668	66	65	1.8	3	57
	AVG.						

Moisture Analysis Results

	#1	#2	#3	#4	Silica Gel
Reagent	DI	DI	Empty		
Final Weight (g)	732.6	723.5	611.0		964.5
Initial Weight (g)	659.1	715.8	610.3		946.3
Net Moisture Weight Gain (g)	73.5	7.7	.7		18.2
				Total Moisture (g)	100.1

Leak Check Data

Meterbox	Pre-Test	Post-Test
Vacuum (in Hg)	.0027	.0027
Rate (cfm)	.000	.000
Pitot Tube	Pre-Test	Post-Test
	+____	+____
	-____	-____

O_2 / CO_2 Data

	Fyrite	Orsat	CEM
O_2 %			
CO_2 %			

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AIR QUALITY SERVICES

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CYCLONIC FLOW DETERMINATION, VELOCITY, and MOISTURE (40 CFR 60 Methods 2 and 4)

Project No. Proj- 01121	Pitot ID N/A	Date 9/20/21
Client GE	PTCF / Cp N/A	Operator Tom Cassin
Facility Green Leaf 1	Internal Dimensions (in.)	Measurement Device Sensitivity
Source TM 2500 GT A	Barometric Pressure (in. Hg) 29.87	Thermocouple ID
Sampling Location Stack	Meter Box ID CB-04	Meter Box Y 1.026
Condition Base Load	Meter ID	Meter Box DH@ 1.890

Cyclonic Flow / Velocity Traverse Data

Run No.			
Stack CO_2 (%)	Stack O_2 (%)	P Static (in. H_2O)	
Run Time (24-hr)	Start	Stop	
Traverse Point No.	Yaw Angle Include + or - (deg.)	Flue Gas Temp. (°F)	DP (in H_2O)
AVERAGE			

Moisture Sample Data

Run No. 2

Test Time Clock (24-hr)	Test Time Elapsed (min)	DGM Reading (ft³)	DGM Temp. (°F) Inlet	DGM Temp. (°F) Outlet	DH (in. H_2O)	Vacuum (in. Hg)	Imp. Exit Temp. (°F)
12:25	0	616.641	66	65	1.8	3	67
12 30	5	620.22	66	63	1.8	3	64
12 35	10	623.71	67	65	1.8	3	64
12 40	15	627.39	66	64	1.8	3	60
12 45	20	630.99	66	64	1.8	3	60
12 50	25	634.50	65	65	1.8	3	59
12 55	30	638.19	65	65	1.8	3	59
13 00	35	641.71	67	66	1.8	3	61
13 05	40	645.22	67	65	1.8	3	61
13 10	45	648.91	66	68	1.8	3	62
13 15	50	652.47	66	66	1.8	3	63
13 20	55	656.13	65	65	1.8	3	63
13 25	60	659.646	66	64	1.8	3	65
	AVG.						

Moisture Analysis Results

	#1	#2	#3	#4	Silica Gel
Reagent	DI water	DI	Empty		
Final Weight (g)	719.8	690.5	615.7		932.8
Initial Weight (g)	652.3	684.7	613.5	~~948.2~~	918.2
Net Moisture Weight Gain (g)	67.5	5.8	2.2	TC	19.6
				Total Moisture (g)	95.1

Leak Check Data

Meterbox	Pre-Test	Post-Test
Vacuum (in Hg)	.00 @ 10	.00 @ 5
Rate (cfm)	.000	.002
Pitot Tube	Pre-Test	Post-Test
	+ ____	+ ____
	- ____	- ____

O_2 / CO_2 Data

	Fyrite	Orsat	CEM
O_2 %			
CO_2 %			

MONTROSE
AIR QUALITY SERVICES

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CYCLONIC FLOW DETERMINATION, VELOCITY, and MOISTURE (40 CFR 60 Methods 2 and 4)

Project No. PROJ-01121	Pitot ID N/A	Date 9/20/21
Client GE	PTCF / Cp N/A	Operator Tom Cassin
Facility Green Leaf 1	Internal Dimensions (in.)	Measurement Device Sensitivity
Source TM 2500 GT A	Barometric Pressure (in. Hg) 29.87	Thermocouple ID
Sampling Location Stack	Meter Box ID CB-04	Meter Box Y 1.026
Condition Base Load	Meter ID	Meter Box DH@ 1.890

Cyclonic Flow / Velocity Traverse Data

Run No.		
Stack CO_2 (%)	Stack O_2 (%)	P Static (in. H_2O)
Run Time (24-hr)	Start	Stop

Traverse Point No.	Yaw Angle include + or - (deg.)	Flue Gas Temp. (°F)	DP (in H_2O)
AVERAGE			

Moisture Sample Data

Run No. 3

Clock (24-hr)	Elapsed (min)	DGM Reading (ft³)	DGM Temp. (°F) Inlet	DGM Temp. (°F) Outlet	DH (in. H_2O)	Vacuum (in. Hg)	Imp. Exit Temp. (°F)
14:15	0	659.818	67	65	1.8	2	66
14 20	5	663.46	67	65	1.8	2	64
14 25	10	667.09	68	65	1.8	2	65
14 30	15	670.61	69	64	1.8	2	61
14 35	20	674.33	68	66	1.8	2	60
14 40	25	677.85	68	66	1.8	2	60
14 45	30	681.57	67	65	1.8	2	59
14 50	35	685.19	68	65	1.8	2	58
14 55	40	688.80	68	65	1.8	2	61
15 00	45	692.31	67	66	1.8	2	62
15 05	50	695.93	66	64	1.8	2	62
15 10	55	699.72	67	64	1.8	2	62
15 15	60	703.245	68	65	1.8	2	63
	AVG.						

Moisture Analysis Results

	#1	#2	#3	#4	Silica Gel
Reagent	DI	DI	Empty		
Final Weight (g)	707.7	234.6	618.6		862.9
Initial Weight (g)	650.3	223.0	611.7		840.3
Net Moisture Weight Gain (g)	57.4	11.6	6.9		22.6

Total Moisture (g) 98.5

Leak Check Data

Meterbox	Pre-Test	Post-Test
Vacuum (in Hg)	8 7	.005
Rate (cfm)	.000	.000
Pitot Tube	Pre-Test +____ -____	Post-Test +____ -____

O_2 / CO_2 Data

	Fyrite	Orsat	CEM
O_2 %			
CO_2 %			

APPENDIX C
EMISSIONS CALCULATIONS

Appendix C.1
Gaseous Emission Calculations

MONTROSE AIR QUALITY SERVICES

Example Calculations

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 1
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Monday, September 20, 2021
Operator:	Tom Cassin

Example Calculations Taken From Initial Calibration and Run 1

Analyzer Calibration Error

$$ACE = \frac{C_{Dir} - C_V}{CS} \; x \; 100$$

ACE = Analyzer calibration error, percent of calibration span
C_{Dir} = Measured concentration of a calibration gas (low) when introduced in direct calibration mode, ppmv
C_v = Manufacturer certified concentration of a calibration gas (low), ppmv.
CS = Calibration span, ppmv.

CO	C_{dir}	-0.06	CS	48.64
	C_v	0.00	ACE	-0.12%
NO_x	C_{dir}	-0.10	CS	46.48
	C_v	0.00	ACE	-0.22%
O_2	C_{dir}	-0.01	CS	20.87
	C_v	0.00	ACE	-0.05%
CO_2	C_{dir}	0.03	CS	19.50
	C_v	0.00	ACE	0.15%

System Bias - Non-Dilution Systems

$$SB = \frac{C_S - C_{Dir}}{CS} \; x \; 100$$

SB = System bias, percent of calibration span.
C_S = Measured concentration of a calibration gas (low) when introduced in system calibration mode, ppmv.
C_{Dir} = Measured concentration of a calibration gas (low) when introduced in direct calibration mode, ppmv.
CS = Calibration span, ppmv.

CO	C_S	-0.05	CS	48.64
	C_{dir}	-0.06	SB	0.02%
NO_x	C_S	0.01	CS	46.48
	C_{dir}	-0.10	SB	0.24%
O_2	C_S	-0.01	CS	20.87
	C_{dir}	-0.01	SB	0.00%
CO_2	C_S	0.01	CS	19.50
	C_{dir}	0.03	SB	-0.10%

Drift Assessment - Extractive System

$$D = |SB_{Final} - SB_i|$$

D = Drift assessment, percent of calibration span.
SB_{final} = Post-run system bias, percent of calibration span.
SB_i = Pre-run system bias, percent of calibration span.

CO	SB_{Final}	-0.27	D 0.287829	% Span
	SB_i	0.02		
NO_x	SB_{Final}	0.26	D 0.021515	% Span
	SB_i	0.24		
O_2	SB_{Final}	-0.05	D 0.047916	% Span
	SB_i	0.00		
CO_2	SB_{Final}	-0.15	D 0.051282	% Span
	SB_i	-0.10		

Effluent Gas Concentration

$$C_{Gas} = (C_{Avg} - C_O)\frac{C_{MA}}{C_M - C_O}$$

C_{Gas}= Average effluent gas concentration adjusted for bias, ppmv
C_{Avg} = Average unadjusted gas concentration indicated by data recorder for the test run, ppmv.
C_O = Average of the initial and final system calibration bias check responses from the zero calibration gas, ppmv.
C_{MA} = Actual concentration of the upscale calibration gas, ppmv.
C_M = Average of initial and final system calibration bias check responses for the upscale calibration gas, ppmv.

CO	C_{Gas}	13.76	C_{MA}	23.82
	C_{Avg}	13.82	C_M	24.02
	C_O	-0.12	C_O	-0.12
NO_x	C_{Gas}	18.74	C_{MA}	24.04
	C_{Avg}	18.63	C_M	23.89
	C_O	0.02	C_O	0.02
O_2	C_{Gas}	15.79	C_{MA}	10.32
	C_{Avg}	15.77	C_M	10.31
	C_O	-0.02	C_O	-0.02
CO_2	C_{Gas}	3.07	C_{MA}	10.01
	C_{Avg}	3.05	C_M	9.95
	C_O	0.01	C_O	0.01

Concentration Corrected to a Reference Oxygen Percent

$$\mathbf{C_{GAS}\ at\ Reference\ O_2 = C_{GAS} X \frac{(20.9\% - Ref\ O_2)}{(20.9\% - \%O_2)}}$$

C_{GAS} at Reference O_2 = Corrected effluent gas concentration to reference oxygen percent
C_{Gas}= Average effluent gas concentration adjusted for bias, ppmv
Ref O_2 = Reference percent oxygen for correction
$\%O_2$ = Average effluent oxygen concentration, as measured.

CO	C_{Gas}	13.76		
	Ref O_2	15%	C_{Gas} at Reference O_2	15.87
	$\%O_2$	15.79		
NO_x	C_{Gas}	18.74		
	Ref O_2	15%	C_{Gas} at Reference O_2	21.62
	$\%O_2$	15.79		
SO_2	C_{Gas}	-		
	Ref O_2	-	C_{Gas} at Reference O_2	-
	$\%O_2$	15.79		

Pollutant Emission Rate - Using Oxygen-Based Fuel Factor - lb/MMBtu

$ER = C_{Gas}$ X CFC X Fd X (20.9/(20.9-%O2))

ER_{CO}, ER_{NOx}, ER_{SO2} = Pollutant emission rates for NO_x, CO, and SO_2, respectively. (lb/MMBtu)
C_{Gas}= Average effluent gas concentration adjusted for bias, ppmv
CFC = Conversion Factors for Concentrations from Section 17 - Table 19-1- Method 19 Title 40 Part 60 (Values below)
7.269E-08 = Conversion constant for CO.
1.194E-07 = Conversion constant for NO_x.
1.660E-07 = Conversion constant for SO_2.
F_d = Oxygen Based Fuel Factor (dscf/MMBtu)
$\%O_2$ = Average effluent oxygen concentration, as measured.

Note: C_{Gas} and $\%O_2$ are on matching moisture basis, i.e. wet to wet and dry to dry.

CO	C_{Gas}	13.76		
	F_d	8615.6	ER_{CO}	0.035199
	$\%O_2$	15.79		

NO_x	C_{Gas}	18.74		
	F_d	8615.6	ER_{NOX}	0.078785
	$\%O_2$	15.79		

Pollutant Emission Rate - lb/MMBtu - Based on Volumetric Flow Rate and Heat Input

$$ER = \frac{lb/hr}{MMBtu/hr\ Heat\ Input}$$

ER_{CO}, ER_{NOx}, ER_{SO2} = Pollutant emission rates for NO_x, CO, and SO_2, respectively. (lb/MMBtu)
lb/hr - Calculated emissions rates for NO_x, CO and SO_2

CO	lb/hr	-	
	Heat Input	319.5	
	ER_{CO}	11.24602	lb/hr

NO_x	lb/hr	-	
	Heat Input	319.5	
	ER_{NOX}	25.17187	lb/hr

lb/m	mw	gpm
182	23	27

H20/Fuel Ratio	scfm	lb/m	lb/hr	lb/hr, h20	h20/fuel
	3,837.2	182.00	10920.00	13,932	1.28

	scfm	MMBTU/hr	btu/kwh
Heat Rate	3,837.2	234.83	10,210

Stack Flow	scfm	dscfm
	3,837.2	106,341

Appendix C.2
Gaseous Emission Spreadsheets

MONTROSE AIR QUALITY SERVICES

Reference Method Test Run Data

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 1
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Monday, September 20, 2021
Operator:	Tom Cassin

F Factor Information

F_c	-
F_d	8615.6

Reference Method Measurement Basis:	Dry - Extractive
CEMS Analyzer Measurement Basis:	-

Uncorrected Reference Method Analyzer Results

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/20/21	10:26	11:58	13.82	18.63	-	15.77	3.05
2	09/20/21	12:19	13:47	8.77	20.91	-	15.79	3.04
3	09/20/21	14:05	15:31	27.15	17.52	-	15.94	2.90

Calibration Corrected Reference Method Analyzer Results

Moisture Basis As Measured

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/20/21	10:26	11:58	13.76	18.74	-	15.79	3.07
2	09/20/21	12:19	13:47	8.93	21.03	-	15.84	3.07
3	09/20/21	14:05	15:31	27.12	17.48	-	16.00	2.92

Reference Method Emission Rate Summary - lb/MMBtu

Run Number	Test Date	CO lb/MMBtu	NO_x lb/MMBtu	SO_2 lb/MMBtu	F_c Factor	F_d Factor
1	09/20/21	0.035	0.0788	-	-	8615.6
2	09/20/21	0.023	0.0893	-	-	8615.6
3	09/20/21	0.072	0.077	-	-	8615.6

Reference Method Emission Rate Summary - lb/hr Using Heat Input and lb/MMBtu Emissions Factor

Run Number	Test Date	CO lb/hr	NO_x lb/hr	SO_2 lb/hr	Heat Input MMBtu/hr
1	09/20/21	11.25	25.17	-	319.5
2	09/20/21	7.03	27.20	-	304.56
3	09/20/21	22.75	24.09	-	314.05

Test Run Data Corrected to Reference O_2

		Corrected Data			Data Used for Correction			
Run Number	Test Date	CO ppmvd Corrected to 15% Oxygen	NO_x ppmvd Corrected to 15% Oxygen	SO_2 ppmvd Corrected to NA	CO ppmvd	NO_x ppmvd	SO_2 ppmvd	O_2 (% v/v Dry)
1	09/20/21	15.87	21.62	-	13.76	18.74	-	15.79
2	09/20/21	10.41	24.51	-	8.93	21.03	-	15.84
3	09/20/21	32.66	21.05	-	27.12	17.48	-	16.00

MONTROSE
AIR QUALITY SERVICES

Method 25A - Total Hydrocarbon - THC- Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack
Project Number:	PROJ-01221
Test Date:	Monday, September 20, 2021
Operator:	Tom Cassin

Location	Source 1			
Test Run Number	1	2	3	Average
Condition	Base	Base	Base	
Test Date	9/20/2021	9/20/2021	9/20/2021	
Test Start	10:26	12:19	14:05	
Test End	11:58	13:47	15:31	
Test Duration (Minutes)	1:32	1:28	1:26	1:28:40
THC (ppmvw as Propane)	0.62	0.25	2.12	1.00
Volumetric Flow Rate (scfm)	165304.87	159436.67	169603.32	164782
THC (lb/hr as Propane)	0.70	0.27	2.46	1.15
THC (lb/hr as Carbon)	0.57	0.22	2.01	0.94
Moisture Content (%)	10.59	10.35	10.62	10.52
Oxygen (% Dry)	15.79	15.84	16	15.88
F_d	8616	8616	8616	8616
THC (lb/MMBtu) - F_d Basis	0.003	0.001	0.010	0.005
THC (ppmvw as Propane @ 15% O2)	0.72	0.29	2.55	1.19
THC (ppmvd as Propane @ 15% O2)	0.80	0.33	2.85	1.33

SOURCE TEST DATA SUMMARY

Client				GE Power
Unit / Location				Unit 1
Reference temperature, °F				68
Test number	Grab 1	Grab 1	Grab 1	Average
Date	9-20-21	9-20-21	9-20-21	--
FUEL DATA				
Fuel "F" factor @ 68°F, dscf/MMBtu	8,616	8,616	8,616	8,616
Fuel "F" factor @ T_{ref}, dscf/MMBtu	8,616	8,616	8,616	8,616
Fuel higher heating value (HHV), Btu/scf	1,048	1,048	1,048	1,048
Fuel density, lb/scf	0.0454	0.0454	0.0454	0.0454
Fuel flow, lb/sec	3.79	3.61	3.73	3.71
Fuel flow, scfh	300,529	286,256	295,771	294,185
Fuel Sulfur, ppm weight	1.0	1.0	1.0	1.0
Fuel Sulfur, gr/100 scf	0.0318	0.0318	0.0318	0.0318
ANALYZER DATA				
O_2, % volume dry	15.79	15.84	16.00	15.88
VOLUMETRIC FLOW RATE				
Stack flow rate - based on fuel, dscfm	184,884	177,843	189,755	184,161
EMISSIONS				
SO_2 concentrations, ppm volume dry	0.015	0.015	0.014	0.015
2b SO_2 concentrations, ppm @ 15% O_2 dry	0.017	0.017	0.017	0.017
2e SO_2 mass emissions, lb/hr	0.027	0.026	0.027	0.027
2f SO_2 mass emissions, lb/MMBtu	0.000087	0.000087	0.000087	0.000087

MONTROSE AIR QUALITY SERVICES

Reference Method Test Run Data

Client:	GE Power
Facility:	Green Leaf 1
Source:	TM 2500 GT 2
Test Location:	Stack
Condition/Load:	Base
Project Number:	PROJ-011221

Test Start Date:	Tuesday, September 21, 2021
Operator:	Tom Cassin

F Factor Information

F_c	-
F_d	8621.5

Reference Method Measurement Basis:	Dry - Extractive
CEMS Analyzer Measurement Basis:	-

Uncorrected Reference Method Analyzer Results

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/21/21	8:19	9:39	10.97	19.19	-	15.63	3.12
2	09/21/21	9:55	11:15	12.54	17.78	-	15.74	3.04
3	09/21/21	11:33	12:56	9.91	18.66	-	15.98	2.87

Calibration Corrected Reference Method Analyzer Results

Moisture Basis As Measured

Run Number	Test Date	Start Minute	End Minute	CO (ppmvd)	NO_x (ppmvd)	SO_2 (ppmvd)	O_2 (% v/v Dry)	CO_2 (% v/v Dry)
1	09/21/21	8:19	9:39	10.97	19.21	-	15.59	3.13
2	09/21/21	9:55	11:15	12.68	17.83	-	15.74	3.05
3	09/21/21	11:33	12:56	10.03	18.75	-	16.02	2.88

Reference Method Emission Rate Summary - lb/MMBtu

Run Number	Test Date	CO lb/MMBtu	NO_x lb/MMBtu	SO_2 lb/MMBtu	F_c Factor	F_d Factor
1	09/21/21	0.027	0.0778	-	-	8621.5
2	09/21/21	0.032	0.0743	-	-	8621.5
3	09/21/21	0.027	0.083	-	-	8621.5

Reference Method Emission Rate Summary - lb/hr Using Heat Input and lb/MMBtu Emissions Factor

Run Number	Test Date	CO lb/hr	NO_x lb/hr	SO_2 lb/hr	Heat Input MMBtu/hr
1	09/21/21	8.99	25.87	-	332.5
2	09/21/21	10.29	23.77	-	319.95
3	09/21/21	8.47	26.01	-	314.41

Test Run Data Corrected to Reference O_2

		Corrected Data			Data Used for Correction			
Run Number	Test Date	CO ppmvd Corrected to 15% Oxygen	NO_x ppmvd Corrected to 15% Oxygen	SO_2 ppmvd Corrected to NA	CO ppmvd	NO_x ppmvd	SO_2 ppmvd	O_2 (% v/v Dry)
1	09/21/21	12.18	21.34	-	10.97	19.21	-	15.59
2	09/21/21	14.49	20.38	-	12.68	17.83	-	15.74
3	09/21/21	12.14	22.69	-	10.03	18.75	-	16.02

MONTROSE
AIR QUALITY SERVICES

Method 25A - Total Hydrocarbon - THC- Data

Client:	GE
Facility:	Greenleaf 1
Test Location:	Stack GT2
Project Number:	PROJ-011221
Test Date:	Tuesday, September 21, 2021
Operator:	Tom Cassin

Location	Source 1			
Test Run Number	1	2	3	Average
Condition	Base	Base	Base	
Test Date	9/21/2021	9/21/2021	9/21/2021	
Test Start	8:19	9:55	11:33	
Test End	9:39	11:15	12:56	
Test Duration (Minutes)	1:20	1:20	1:23	1:21:00
THC (ppmvw as Propane)	0.97	0.72	0.51	0.73
Volumetric Flow Rate (scfm)	164846.23	162136.92	169282.9	165422
THC (lb/hr as Propane)	1.10	0.80	0.59	0.83
THC (lb/hr as Carbon)	0.90	0.65	0.48	0.68
Moisture Content (%)	11.09	11.49	11.22	11.27
Oxygen (% Dry)	15.59	15.74	16.02	15.78
F_d	8622	8622	8622	8622
THC (lb/MMBtu) - F_d Basis	0.004	0.003	0.002	0.003
THC (ppmvw as Propane @ 15% O2)	1.08	0.82	0.62	0.84
THC (ppmvd as Propane @ 15% O2)	1.21	0.92	0.69	0.94
THC (ppmvd as Propane)	1.09	0.81	0.57	0.83

SOURCE TEST DATA SUMMARY

Client				GE Power
Unit / Location				Unit 2
Reference temperature, °F				68
Test number	Grab 1	Grab 1	Grab 1	Average
Date	9-21-21	9-21-21	9-21-21	--
FUEL DATA				
Fuel "F" factor @ 68°F, dscf/MMBtu	8,622	8,622	8,622	8,622
Fuel "F" factor @ T_{ref}, dscf/MMBtu	8,622	8,622	8,622	8,622
Fuel higher heating value (HHV), Btu/scf	1,008	1,008	1,008	1,008
Fuel density, lb/scf	0.0444	0.0444	0.0444	0.0444
Fuel flow, lb/sec	4.01	3.85	3.79	3.88
Fuel flow, scfh	325,135	312,162	307,297	314,865
Fuel Sulfur, ppm weight	2.3	2.3	2.3	2.3
Fuel Sulfur, gr/100 scf	0.0715	0.0715	0.0715	0.0715
ANALYZER DATA				
O_2, % volume dry	15.59	15.74	16.02	15.78
VOLUMETRIC FLOW RATE				
Stack flow rate - based on fuel, dscfm	185,408	183,185	190,677	186,423
EMISSIONS				
SO_2 concentrations, ppm volume dry	0.036	0.035	0.033	0.035
2b SO_2 concentrations, ppm @ 15% O_2 dry	0.040	0.040	0.040	0.040
2e SO_2 mass emissions, lb/hr	0.066	0.064	0.063	0.064
2f SO_2 mass emissions, lb/MMBtu	0.000202	0.000202	0.000202	0.000202

Appendix C.3
Moisture Emission Spreadsheets

Company:	GE Greenleaf 1
Unit:	GT 1
Location:	Stack
Date:	9/20/21

Run	One (1)		Two (2)		Three (3)	
	Meter Temperatures in Degrees F					
	65	64	66	65	67	65
	62	62	66	63	67	65
	63	63	67	65	68	65
	65	64	66	64	69	64
	66	65	66	64	68	66
	66	64	65	65	68	66
	66	65	65	65	67	65
	66	65	67	66	68	65
	66	65	67	65	68	65
	67	66	66	65	67	66
	66	66	66	66	66	64
	67	64	65	65	67	64
	66	65	66	64	68	65
Average Meter Temps.:		65.0		65.4		66.3
		(A)		(A)		(A)

INPUT DATA			
Meter Volume. (cubic feet):	44.162	43.051	43.427
Water Caught (grams):	100.1	95.1	98.5
Measured Barometric Pressure ("Hg):	29.9	29.9	29.9
Sample Location Elevation (feet):	25.0	25.0	25.0
Corrected Barometric Pressure ("Hg) [Pb]:	29.85	29.85	29.85
Meter Correction Factor:	1.026	1.026	1.026
Average Delta H ("H2O):	1.8	1.8	1.8
Correction Temperature:	0	0	0

OUTPUT DATA			
Metered Volume (Std.cu.ft.):	39.779	38.747	39.020
Moisture Volume (cubic feet):	4.71	4.48	4.64
Percent Moisture:	**10.59**	**10.35**	**10.62**

Standard Conditions are (T) degrees F and 29.92" Hg

Run	One (1)		Two (2)		Three (3)	
	Meter Temperatures in Degrees F					
	64	63	66	65	68	66
	64	63	67	65	68	66
	65	63	67	65	69	67
	65	64	66	67	69	67
	66	63	68	66	68	66
Company: GE Grrenleaf 1	64	64	68	67	68	68
Unit: GT 2	64	65	67	66	70	68
Location: Stack	65	65	69	66	69	67
Date: 9/21/21	66	64	69	67	69	67
	65	65	68	68	68	66
	66	64	67	66	70	68
	66	63	67	66	69	67
	67	65	69	67	70	68
Average Meter Temps.:		64.5		66.9		67.9
		(A)		(A)		(A)

INPUT DATA			
Meter Volume. (cubic feet):	43.886	45.046	45.138
Water Caught (grams):	105.4	112.1	109.1
Measured Barometric Pressure ("Hg):	30.0	30.0	30.0
Sample Location Elevation (feet):	25.0	25.0	25.0
Corrected Barometric Pressure ("Hg) [Pb]:	29.99	29.99	29.99
Meter Correction Factor:	1.026	1.026	1.026
Average Delta H ("H2O):	1.9	1.9	1.9
Correction Temperature:	0	0	0

OUTPUT DATA			
Metered Volume (Std.cu.ft.):	39.756	40.625	40.628
Moisture Volume (cubic feet):	4.96	5.28	5.13
Percent Moisture:	**11.09**	**11.49**	**11.22**

Standard Conditions are (T) degrees F and 29.92" Hg

APPENDIX D
LABORATORY REPORTS

Appendix D.1
Method 18 Report

Atmospheric Analysis & Consulting, Inc.

CLIENT	:	Montrose Air Quality Services
PROJECT NAME	:	GE
PROJECT NUMBER	:	PROJ-011221
AAC PROJECT NO.	:	211691
REPORT DATE	:	10/08/2021

On September 24, 2021, Atmospheric Analysis & Consulting, Inc. received twelve (12) Tedlar Bags for Methane and Ethane analysis by EPA 18 Modified. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.	Client ID	Lab No.
GT 1-M18-R1	211691-23665	Unit 1-M18-R1	211691-23671
GT 1-M18-R2	211691-23666	Unit 1-M18-R2	211691-23672
GT 1-M18-R3	211691-23667	Unit 1-M18-R3	211691-23673
GT 2-M18-R1	211691-23668	Unit 2-M18-R1	211691-23674
GT 2-M18-R2	211691-23669	Unit 2-M18-R2	211691-23675
GT 2-M18-R3	211691-23670	Unit 2-M18-R3	211691-23676

This analysis is performed in accordance with AAC's Quality Manual. Test results apply to the sample(s) as received. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. No problems were encountered during receiving, preparation, and/or analysis of these samples. The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha Parmar, Ph.D.
Technical Director

This report consists of 6 pages.

2225 Sperry Ave., Ventura, CA 93003 www.aaclab.com • (805) 650-1642

LABORATORY ANALYSIS REPORT

CLIENT	: Montrose Air Quality Services	SAMPLING DATE	: 09/20-21/2021
PROJECT NO.	: 211691	RECEIVING DATE	: 09/24/2021
MATRIX	: Air	ANALYSIS DATE	: 09/24/2021
UNITS	: ppmV	REPORT DATE	: 10/08/2021

Methane and Ethane Analysis by EPA 18 Modified

Client ID	GT 1-M18-R1		SRL	GT 1-M18-R2		SRL	GT 1-M18-R3		SRL	Reporting Limit (RL)
AAC ID	211691-23665		(RL x DF's)	211691-23666		(RL x DF's)	211691-23667		(RL x DF's)	
Analyte	Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		
C_1 (as Methane)	1.91	1	0.5	1.41	1	0.5	8.07	1	0.5	0.5
C_2 (as Ethane)	<SRL	1	0.5	<SRL	1	0.5	<SRL	1	0.5	0.5

Client ID	GT 2-M18-R1		SRL	GT 2-M18-R2		SRL	GT 2-M18-R3		SRL	Reporting Limit (RL)
AAC ID	211691-23668		(RL x DF's)	211691-23669		(RL x DF's)	211691-23670		(RL x DF's)	
Analyte	Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		
C_1 (as Methane)	3.98	1	0.5	2.06	1	0.5	2.36	1	0.5	0.5
C_2 (as Ethane)	<SRL	1	0.5	<SRL	1	0.5	<SRL	1	0.5	0.5

Sample Reporting Limit (SRL) is equal to Reporting Limit (RL) x Canister Dilution Factor x Analysis Dilution Factor (if applicable)

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LABORATORY ANALYSIS REPORT

CLIENT	**: Montrose Air Quality Services**	**SAMPLING DATE**	**: 09/21-22/2021**
PROJECT NO.	**: 211691**	**RECEIVING DATE**	**: 09/24/2021**
MATRIX	**: Air**	**ANALYSIS DATE**	**: 09/24/2021**
UNITS	**: ppmV**	**REPORT DATE**	**: 10/08/2021**

Methane and Ethane Analysis by EPA 18 Modified

Client ID	Unit 1-M18-R1		SRL	Unit 1-M18-R2		SRL	Unit 1-M18-R3		SRL	Reporting Limit (RL)
AAC ID	211691-23671		(RL x DF's)	211691-23672		(RL x DF's)	211691-23673		(RL x DF's)	
Analyte	Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		
C_1 (as Methane)	9.59	1	0.5	9.39	1	0.5	1.77	1	0.5	0.5
C_2 (as Ethane)	0.715	1	0.5	0.683	1	0.5	<SRL	1	0.5	0.5

Client ID	Unit 2-M18-R1		SRL	Unit 2-M18-R2		SRL	Unit 2-M18-R3		SRL	Reporting Limit (RL)
AAC ID	211691-23674		(RL x DF's)	211691-23675		(RL x DF's)	211691-23676		(RL x DF's)	
Analyte	Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		Result	Analysis Dil. Fac.		
C_1 (as Methane)	1.32	1	0.5	1.17	1	0.5	1.24	1	0.5	0.5
C_2 (as Ethane)	<SRL	1	0.5	<SRL	1	0.5	<SRL	1	0.5	0.5

Sample Reporting Limit (SRL) is equal to Reporting Limit (RL) x Canister Dilution Factor x Analysis Dilution Factor (if applicable)

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed : 09/24/2021
Analyst : DL/DB
Units : ppmv

Instrument ID : FID #3
Calb Date : 03/31/21
Reporting Limit : 0.5 ppmv

I - Opening Continuing Calibration Verification - EPA 18 Mod

AAC ID	Analyte	Methane	Ethane	Propane	Butane	Pentane	Hexane
CCV	Spike Conc	98.9	99.1	98.7	98.1	98.1	99.7
	Result	90.7	92.0	91.0	91.4	91.3	92.0
	% Rec *	91.7	92.8	92.1	93.2	93.0	92.2

II - Method Blank - EPA 18 Mod

AAC ID	Analyte	Methane	Ethane	Propane	Butane	Pentane	Hexane
MB	Concentration	ND	ND	ND	ND	ND	ND

III - Laboratory Control Spike & Duplicate - EPA 18 Mod

AAC ID	Analyte	Methane	Ethane	Propane	Butane	Pentane	Hexane
Lab Control Standards	Sample Conc	0.0	0.0	0.0	0.0	0.0	0.0
	Spike Conc	98.9	99.1	98.7	98.1	98.1	99.7
	LCS Result	89.5	91.7	90.1	90.6	92.2	91.2
	LCSD Result	92.3	93.8	92.2	92.9	93.8	93.4
	LCS % Rec **	90.6	92.5	91.2	92.3	94.0	91.5
	LCSD % Rec **	93.4	94.6	93.4	94.7	95.5	93.6
	% RPD ***	3.0	2.3	2.3	2.5	1.7	2.3

IV -Sample & Sample Duplicate - EPA 18 Mod

AAC ID	Analyte	Methane	Ethane	Propane	Butane	Pentane	Hexane
212443-22500	Sample	0.0	0.0	0.0	0.0	0.0	0.0
	Sample Dup	0.0	0.0	0.0	0.0	0.0	0.0
	Mean	0.0	0.0	0.0	0.0	0.0	0.0
	% RPD ***	0.0	0.0	0.0	0.0	0.0	0.0

V - Matrix Spike & Duplicate- EPA 18 Mod

AAC ID	Analyte	Methane	Ethane	Propane	Butane	Pentane	Hexane
212443-22500	Sample Conc	0.0	0.0	0.0	0.0	0.0	0.0
	Spike Conc	49.4	49.6	49.4	49.0	49.1	49.9
	MS Result	48.3	48.6	48.0	48.4	49.6	52.2
	MSD Result	50.8	51.7	51.3	52.0	54.0	58.0
	MS % Rec **	97.6	98.2	97.2	98.7	101.0	104.6
	MSD % Rec **	102.7	104.3	103.9	106.0	110.0	116.4
	% RPD ***	5.1	6.0	6.7	7.1	8.5	10.6

VI - Closing Continuing Calibration Verification - EPA 18 Mod

AAC ID	Analyte	Methane	Ethane	Propane	Butane	Pentane	Hexane
CCV	Spike Conc	98.9	99.1	98.7	98.1	98.1	99.7
	Result	97.1	99.3	97.6	97.9	97.7	98.2
	% Rec *	98.3	100.2	98.9	99.8	99.6	98.4

** Must be 85-115%*

*** Must be 75-125%*

**** Must be < 25%*

ND = Not Detected

<RL = less than Reporting Limit

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21169

MONTROSE AIR QUALITY SERVICES

Chain of Custody

Contact Information

Montrose Contact Information	
Project Manager:	John Hamner
Contact Email:	jhamner@montrose-env.com
Contact Phone:	630-715-3259
Montrose Office:	630-715-3259

Project Information	
Client:	GE
Facility/Plant:	Greenleaf 1
Collection/Test Source:	GT-Stack
Project Number:	PROJ-011221

Sample Information

Sample System Prepared By:	Tom Cassin
Sample Recovery Performed By:	Tom Cassin

Sample ID Number	Sample Collection Date	Description of Sample	Number of Containers	Run Time/Sample Collection Time	Requsted Analysis: Method 18					Comments
1	09/20/21	23665 GT 1-M18-R1	1	10:26-11:58	X					Bag
2	09/20/21	23666 GT 1-M18-R2	1	12:19-13:47	X					Bag
3	09/20/21	23667 GT 1-M18-R3	1	14:05-15:32	X					Bag
4	09/21/21	23668 GT 2-M18-R1	1	8:19-9:40	X					Bag
5	09/21/21	23669 GT 2-M18-R2	1	9:55-11:15	X					Bag
6	09/21/21	23670 GT 2-M18-R3	1	11:33-12:56	X					Bag

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Custody Record

Relinquished By		Date	Time
Print	Tom Cassin	#####	
Sign			
Print	R. Schell	9/23/21	
Sign			1600
Print	Victor Garcia	9/23/21	
Sign			1600
Print			
Sign			
Print		9/24/21	
Sign			0945

Lab Information

Lab:	AA&C
Attn:	John Yokoyamo
Phone:	805-650-1642
Lab Address	
Street 1	1534 Easstman Ave. Suite A
Street 2	
City, State Zip Code	Ventura, CA 93003
TAT:	10 Day
Results Requested By Date:	

Shipping Information

Shipped By:	
Shipped On Date:	
Shipping Method:	
Shipping Remarks or Special Handling Instructions:	

Notes

Special Instructions for Lab:

Project Remarks:

211691

MONTROSE AIR QUALITY SERVICES

Chain of Custody

Contact Information

Montrose Contact Information	
Project Manager:	John Hamner
Contact Email:	jhamner@montrose-env.com
Contact Phone:	630-715-3259
Montrose Office:	630-715-3259

Project Information	
Client:	GE
Facility/Plant:	Roseville
Collection/Test Source:	Unit 1 &2
Project Number:	PROJ-011221

Sample Information

Sample System Prepared By:	Finnegan Schall
Sample Recovery Performed By:	Finnegan Schall

Sample ID Number	Sample Collection Date	Description of Sample	Number of Containers	Run Time/Sample Collection Time	Requsted Analysis: Method 18					Comments
1-1	09/21/21	23671 Unit 1-M18-R1	1	830-1045	X					Bag
1-2	09/21/21	23672 Unit 1-M18-R2	1	1051-1228	X					Bag
1-3	09/21/21	23673 Unit 1-M18-R3	1	1235-1459	X					Bag
2-1	09/22/21	23674 Unit 2-M18-R1	1	930-1043	X					Bag
2-2	09/22/21	23675 Unit 2-M18-R2	1	1051-1206	X					Bag
2-3	09/22/21	23676 Unt 2-M18-R3	1	1215-1326	X					Bag

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Custody Record

Relinquished By		Date	Time
Print	~~Tom Cassin~~	~~######~~	
Sign			
Print	F Schall	9/23/21	
Sign			1640
Print	Victor Garcia	9/23/21	
Sign			1600
Print			
Sign			
Print		9/24/21	
Sign			0945

Lab Information

Lab:	**AA&C**
Attn:	John Yokoyamo
Phone:	805-650-1642
Lab Address	
Street 1	**1534 Easstman Ave. Suite A**
Street 2	
City, State Zip Code	**Ventura, CA 93003**
TAT:	10 Day
Results Requested By Date:	

Shipping Information

Shipped By:	
Shipped On Date:	
Shipping Method:	
Shipping Remarks or Special Handling Instructions:	

Notes

Special Instructions for Lab:

Project Remarks:

Appendix D.2
Fuel Gas Analysis

Certificate of Analysis

SINCE 1985

Quality Controlled Through Analysis

10630 FALLSTONE RD. HOUSTON, TEXAS 77099
P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Montrose Air Quality Services	**REQUESTED BY:**	Mr. John Hamner
CLIENT PROJECT:	Yuba City, CA Proj-PROJ-011221	**PURCHASE ORDER NO:**	PO-016934
LABORATORY NO:	95642-001	**REPORT DATE:**	October 14, 2021
SAMPLE:	7 Fuel Sample-1 (6022) 2021-09-20		

Composition of Natural Gas by Gas Chromatography, ASTM D 1945.a

	Results, Mol %
Hydrogen	0.003
Oxygen	0.007
Nitrogen	0.480
Carbon Dioxide	0.759
Methane	92.920
Ethane	5.220
Propane	0.478
iso-Butane	0.047
n-Butane	0.059
iso-Pentane	0.011
n-Pentane	0.008
Hexane Plus	0.008
TOTAL	**100.000**

Calorific Value and Specific Gravity, Calculated at 14.696 psia and 60°F, ASTM D 3588.e

	Results
Specific Gravity at 60ºF (air=1)	0.5952
NET (Dry basis), BTU/scf	944.8
Gross (Dry basis), BTU/scf	1,048
NET (Dry basis), BTU/lb	20,800
Gross (Dry basis), BTU/lb	23,058

Parameter	***Results***
Total Sulfur in Petroleum Gas by Microcoulometry, ASTM D 3246, ppm	<1.0

Respectfully submitted
For Texas OilTech Laboratories, L.P.

Mr. Ikenna “Ike” Ezeji
Laboratory Director

Certificate of Analysis

SINCE 1985

Quality Controlled Through Analysis

10630 FALLSTONE RD. HOUSTON, TEXAS 77099
P.O. BOX 741905, HOUSTON, TEXAS 77274

TEL: (281) 495-2400
FAX: (281) 495-2410

CLIENT:	Montrose Air Quality Services	**REQUESTED BY:**	Mr. John Hamner
CLIENT PROJECT:	Yuba City, CA Proj-PROJ-011221	**PURCHASE ORDER NO:**	PO-016934
LABORATORY NO:	95642-003	**REPORT DATE:**	October 14, 2021
SAMPLE:	9 Fuel Sample-3 (6457) 2021-09-21		

Composition of Natural Gas by Gas Chromatography, ASTM D 1945.a

	Results, Mol %
Hydrogen	0.002
Oxygen	0.006
Nitrogen	2.076
Carbon Dioxide	0.433
Methane	94.749
Ethane	2.435
Propane	0.230
iso-Butane	0.023
n-Butane	0.029
iso-Pentane	0.006
n-Pentane	0.004
Hexane Plus	0.007
TOTAL	**100.000**

Calorific Value and Specific Gravity, Calculated at 14.696 psia and 60°F, ASTM D 3588.e

	Results
Specific Gravity at 60ºF (air=1)	0.5818
NET (Dry basis), BTU/scf	908.6
Gross (Dry basis), BTU/scf	1,008
NET (Dry basis), BTU/lb	20,464
Gross (Dry basis), BTU/lb	22,707

Parameter	***Results***
Total Sulfur in Petroleum Gas by Microcoulometry, ASTM D 3246, ppm	2.3

Respectfully submitted
For Texas OilTech Laboratories, L.P.

Mr. Ikenna “Ike” Ezeji
Laboratory Director

FUEL F-FACTOR CALCULATIONS

GE GreenLeaf1 GT1

9/20/2021

SPECIES	MW	MOLE %	MOLE % (normalized)	MW*%	HHV	BTU/SCF	LHV	BTU/SCF	ATOMS / MOLE C	H	O	N
H_2 (Hydrogen)	2.02	0.003	0.003	0.01	324.20	0.01	273.93	0.01	0.00	2.00	0.00	0.00
O_2 (Oxygen)	32.00	0.007	0.007	0.22	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
N_2 (Nitrogen)	28.01	0.480	0.480	13.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
CO_2 (Carbon Dioxide)	44.01	0.759	0.759	33.40	0.00	0.00	0.00	0.00	1.00	0.00	2.00	0.00
C_1 (Methane)	16.04	92.920	92.920	1490.7	1010.00	938.49	909.40	845.01	1.00	4.00	0.00	0.00
C_2 (Ethane)	30.07	5.220	5.220	156.96	1769.70	92.38	1618.70	84.50	2.00	6.00	0.00	0.00
C_3 (Propane)	44.10	0.478	0.478	21.08	2516.10	12.03	2314.90	11.07	3.00	8.00	0.00	0.00
ISO C_4 (Isobutane / Methylpropane)	58.12	0.047	0.047	2.73	3251.90	1.53	3000.40	1.41	4.00	10.00	0.00	0.00
C_4 / N-C_4 (Butane / n-Butane)	58.12	0.059	0.059	3.43	3262.30	1.92	3010.80	1.78	4.00	10.00	0.00	0.00
ISO C_5 (Isopentane)	72.15	0.011	0.011	0.79	4000.90	0.44	3699.00	0.41	5.00	12.00	0.00	0.00
C_5 / N-C_5 (Pentane / n-Pentane)	72.15	0.008	0.008	0.58	4008.90	0.32	3703.90	0.30	5.00	12.00	0.00	0.00
C_{6+} (Hexane+)	86.00	0.008	0.008	0.69	4755.90	0.38	4403.90	0.35	6.00	14.00	0.00	0.00
Ave. / Total	100.00	100.00	1724.04		1047.50		944.83		12.73	4.08	0.25	0.13
Weight, %		99.74		=					73.86	23.68	1.42	0.78

Gas MW	17.24	
HHV Btu/scf=	1047.50	@ 60 F
LHV Btu/scf=	944.83	@ 60 F
Btu/lb.=	23,058	
lb./scf=	0.0454	
Fd"(60)=	8,485.0	(O_2 Based)
Fd"(68)=	8,615.6	
Fc"(60)=	1,012.7	(CO_2 Based)
Fc"(68)=	1,028.3	

Calculations:

Fd"(68) = 10^6 * [3.64 * (H%) + 1.53 * (C%) + 0.14 * (N%) - 0.46 * (O%)] / HHV, Btu/lb
Fd"(60) = Fd"(68) * 520 R / 528 R
Fc"(68) = 10^6 * [0.321 * (C%)] / HHV, Btu/lb
Fc"(60) = Fc"(68) * 520 R / 528 R

FUEL F-FACTOR CALCULATIONS

GE GreenLeaf1 GT2

9/21/2021

SPECIES	MW	MOLE %	MOLE % (normalized)	MW*%	HHV	BTU/SCF	LHV	BTU/SCF	ATOMS / MOLE C	H	O	N
H_2 (Hydrogen)	2.02	0.002	0.002	0.00	324.20	0.01	273.93	0.01	0.00	2.00	0.00	0.00
O_2 (Oxygen)	32.00	0.006	0.006	0.19	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
N_2 (Nitrogen)	28.01	2.076	2.076	58.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
CO_2 (Carbon Dioxide)	44.01	0.433	0.433	19.06	0.00	0.00	0.00	0.00	1.00	0.00	2.00	0.00
C_1 (Methane)	16.04	94.749	94.749	1520.0	1010.00	956.96	909.40	861.65	1.00	4.00	0.00	0.00
C_2 (Ethane)	30.07	2.435	2.435	73.22	1769.70	43.09	1618.70	39.42	2.00	6.00	0.00	0.00
C_3 (Propane)	44.10	0.230	0.230	10.14	2516.10	5.79	2314.90	5.32	3.00	8.00	0.00	0.00
ISO C_4 (Isobutane / Methylpropane)	58.12	0.023	0.023	1.34	3251.90	0.75	3000.40	0.69	4.00	10.00	0.00	0.00
C_4 / N-C_4 (Butane / n-Butane)	58.12	0.029	0.029	1.69	3262.30	0.95	3010.80	0.87	4.00	10.00	0.00	0.00
ISO C_5 (Isopentane)	72.15	0.006	0.006	0.43	4000.90	0.24	3699.00	0.22	5.00	12.00	0.00	0.00
C_5 / N-C_5 (Pentane / n-Pentane)	72.15	0.004	0.004	0.29	4008.90	0.16	3703.90	0.15	5.00	12.00	0.00	0.00
C_{6+} (Hexane+)	86.00	0.007	0.007	0.60	4755.90	0.33	4403.90	0.31	6.00	14.00	0.00	0.00
Ave. / Total	100.00		100.00	1685.15		1008.28		908.63	12.13	3.96	0.14	0.58
Weight, %			99.75		=				71.95	23.51	0.83	3.45

Gas MW	16.85	
HHV Btu/scf=	1008.28	@ 60 F
LHV Btu/scf=	908.63	@ 60 F
Btu/lb.=	22,707	
lb./scf=	0.0444	
Fd"(60)=	8,490.8	(O_2 Based)
Fd"(68)=	8,621.5	
Fc"(60)=	1,001.8	(CO_2 Based)
Fc"(68)=	1,017.2	

Calculations:

Fd"(68) = 10^6 * [3.64 * (H%) + 1.53 * (C%) + 0.14 * (N%) - 0.46 * (O%)] / HHV, Btu/lb
Fd"(60) = Fd"(68) * 520 R / 528 R
Fc"(68) = 10^6 * [0.321 * (C%)] / HHV, Btu/lb
Fc"(60) = Fc"(68) * 520 R / 528 R

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If you have any questions, please contact one of the following individuals by email or phone.

Name: Justin Merryman
Title: Vice President – Technical
Email: jmerryman@montrose-env.com
Phone: (830) 387-1424

Name: Mr. John Hamner
Title: Account Manager
Email: jhamner@montrose-env.com
Phone: (630) 715-3259

CALPINE GREEENLEAF 1

Yuba City, California

Unit A- Monthly Emissions & Operations Report

October - 2021

Day	Gas Flow kscf	Heat Input mmBtu	Megawatt Hours	Water Injection gal	Water Injection On-Time	NOx lbs	SO2 lbs	CO lbs	PM lbs	VOC lbs	Unit On-Time
01	126	128	11	16	0.6	10.5	0.0	5.5	1.4	0.6	0.7
02	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
03	183	187	15	19	0.7	15.3	0.0	8.0	2.0	0.9	0.8
04	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
05	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
06	47	48	4	15	0.5	3.9	0.0	2.1	0.5	0.2	0.7
07	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
08	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
09	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
10	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
11	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
12	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
13	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
14	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
15	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
16	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
17	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
18	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
19	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
20	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
21	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
22	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
23	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
24	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
25	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
26	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
27	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
28	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
29	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
30	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
31	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
Day	Gas Flow kscf	Heat Input mmBtu	Megawatt Hours	Water Injection gal	Water Injection On-Time	NOx lbs	SO2 lbs	CO lbs	PM lbs	VOC lbs	Unit On-Time
Average	119	121	10	17		9.9	0.0	5.2	1.3	0.6	
Total	356	363	30	50	2	29.7	0.0	15.6	3.9	1.7	2
12-Mo Roll	356	363				0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	2
Year Total	356	363				0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	2

CALPINE GREEENLEAF 1

Yuba City, California

Unit B- Monthly Emissions & Operations Report

October - 2021

Day	Gas Flow kscf	Heat Input mmBtu	Megawatt Hours	Water Injection gal	Water Injection On-Time	NOx lbs	SO2 lbs	CO lbs	PM lbs	VOC lbs	Unit On-Time
01	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
02	24	25	2	6	0.2	1.9	0.0	0.7	0.3	0.1	0.4
03	96	98	8	14	0.5	7.6	0.0	2.8	1.1	0.3	0.6
04	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
05	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
06	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
07	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
08	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
09	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
10	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
11	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
12	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
13	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
14	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
15	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
16	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
17	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
18	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
19	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
20	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
21	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
22	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
23	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
24	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
25	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
26	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
27	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
28	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
29	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
30	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
31	**Down**	**Down**	**Down**	**Down**	0.0	**Down**	**Down**	**Down**	**Down**	**Down**	0.0
Day	Gas Flow kscf	Heat Input mmBtu	Megawatt Hours	Water Injection gal	Water Injection On-Time	NOx lbs	SO2 lbs	CO lbs	PM lbs	VOC lbs	Unit On-Time
Average	60	62	5	10		4.8	0.0	1.8	0.7	0.2	
Total	120	123	10	20	1	9.5	0.0	3.5	1.4	0.4	1
12-Mo Roll	120	123				0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	1
Year Total	120	123				0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	0.0 Tons	1

Unit A- Monthly Emissions & Operations Report

21-Sep

Day	Gas Flow k	Heat Input	Megawatt	Water Inje	Water Inje	NOx lbs	SO2 lbs	CO lbs	PM lbs	VOC lbs	Unit On-Time
1	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
2	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
3	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
4	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
5	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
6	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
7	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
8	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
9	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
10	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
11	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
12	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
13	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
14	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
15	12	12	0	0	0.3	1	0	0.5	0.1	0.1	0.3
16	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
17	356	358	18	6989	4.2	29.4	0	15.4	3.9	1.8	4.2
18	617	620	52	4727	3.1	50.9	0	26.7	6.7	3.1	3.1
19	1518	1525	153	8729	5.4	125.1	0	65.6	16.7	7.6	5.4
20	1972	1981	196	11455	6.9	162.6	0	85.1	21.5	9.8	6.9
21	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
22	342	344	33	2784	1.7	28.2	0	14.8	3.7	1.7	1.7
23	148	149	11	1160	0.8	12.2	0	6.4	1.6	0.7	0.8
24	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
25	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
26	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
27	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
28	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
29	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
30	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
Average	709	713	66	5121		58.5	0	30.6	7.7	3.5	
Total	4965	4989	463	35844	22	409.4	0	214.5	54.2	24.8	22
12-Mo Rol	4965	4989				0.2 Tons	0.0 Tons	0.1 Tons	0.0 Tons	0.0 Tons	22
Year Total	4965	4989				0.2 Tons	0.0 Tons	0.1 Tons	0.0 Tons	0.0 Tons	22

Unit B- Monthly Emissions & Operations Report

21-Sep

Day	Gas Flow k	Heat Input	Megawatt	Water Inje	Water Inje	NOx lbs	SO2 lbs	CO lbs	PM lbs	VOC lbs	Unit On-Time
1	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
2	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
3	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
4	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
5	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
6	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
7	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
8	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
9	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
10	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
11	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
12	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
13	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
14	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
15	13	13	0	0	0.1	1	0	0.4	0.1	0	0.1
16	7	7	0	0	0.3	0.5	0	0.2	0.1	0	0.3
17	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
18	667	670	49	4292	2.6	52.3	0.2	19.4	7.3	0.8	2.6
19	1119	1124	111	6525	3.9	87.6	0.3	32.8	12.3	1.4	3.9
20	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
21	2591	2603	259	14529	8.5	203.2	0.7	75.6	28.5	3.2	8.5
22	342	344	33	2784	1.7	26.8	0	10	3.7	1	1.7
23	87	87	11	580	0.5	6.8	0	2.5	1	0.3	0.5
24	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
25	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
26	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
27	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
28	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
29	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
30	Down	Down	Down	Down	0	Down	Down	Down	Down	Down	0
Average	689	693	66	4101		54	0.2	20.1	7.6	1	
Total	4826	4848	463	28710	18	378.2	1.2	140.9	53	6.7	18
12-Mo Rol	4826	4848				0.2 Tons	0.0 Tons	0.1 Tons	0.0 Tons	0.0 Tons	18
Year Total	4826	4848				0.2 Tons	0.0 Tons	0.1 Tons	0.0 Tons	0.0 Tons	18

541 Washington Avenue
Yuba City, CA 95991
(530) 634-7659
FAX (530) 634-7660
www.fraqmd.org

Christopher D. Brown, AICP
Air Pollution Control Officer

Serving Sutter and Yuba Counties

Authority to Construct

ISSUED TO:
Calpine Greenleaf Holdings, Inc.
Greenleaf 1 Project
5087 South Township Road
Yuba City, CA 95993

PERMIT NUMBER: 13005L

PROJECT LOCATION:
Greenleaf 1 Project
5087 South Township Road
Yuba City, CA 95993

VALID FROM:
09/10/2021 - 9/30/2022

_____

09/13/2021

Christopher D. Brown, AICP
Air Pollution Control Officer

Issue Date

PROCESS DESCRIPTION: COMBUSTION TURBINE GENERATORS #3 AND #4

EQUIPMENT

No.	Equipment	Rating
1	Combustion Turbine Generator (CTG) #3, Manufacturer: General Electric, Model: TM2500-G4; Serial # [TBD], Natural Gas Fired, Simple Cycle with Single Annular Combustors with Water Injection, Heat Input Rating (HHV) 366.1 MMBtu/hr; Nominal MW Rating: 33.6 MW	366.1 MMBtu/hr
2	Combustion Turbine Generator (CTG) #4, Manufacturer: General Electric, Model: TM2500-G4; Serial # [TBD], Natural Gas Fired, Simple Cycle with Single Annular Combustors with Water Injection, Heat Input Rating (HHV) 366.1 MMBtu/hr; Nominal MW Rating: 33.6 MW	366.1 MMBtu/hr
3	Selective Catalytic Reduction (SCR) with Integrated Ammonia Injection System, Manufacturer: [TBD], Serial Number: [TBD]	--
4	Carbon Monoxide (CO) Oxidation Catalyst, Manufacturer: [TBD], Serial Number: [TBD]	--
5	Continuous Emissions Monitoring System (CEMS) [TBD]	--

TOTAL RATINGS – MMBtu/hr- 732.2.

CONDITIONS FOR COMMISSIONING

1. The commissioning period commences when all mechanical and electrical systems are installed and individual startup has been completed, or when a gas turbine is first fired, whichever comes first. The period ends when the plant has completed performance testing and is available for commercial operation.

2. Greenleaf 1 Project shall minimize emissions of the CTGs of carbon monoxide (CO) and nitrogen oxides (NOx) to the maximum extent possible during the commissioning periods.

3. The CTGs exhaust stack shall be designed and constructed such that it includes permanent provisions, consistent with the United States Environmental Protection Agency's (U.S. EPA) Method 1 design requirements, to allow the adequate collection of stack gas samples. Access ladders and/or stairs and platforms shall allow easy access to the sampling locations.

4. At the earliest feasible time, in accordance with the recommendations of the equipment manufacturer and construction contractor, the selective catalytic reduction (SCR) and carbon monoxide catalyst air pollution control equipment shall be installed, adjusted, and operated to minimize emissions of NOx, CO, and volatile organic compounds (VOCs) from each combustion turbine.

5. Greenleaf 1 Project shall submit a plan to the District prior to first firing the CTGs describing the procedures to be followed during the commissioning of the gas turbines. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the initial tuning of the combustors, the installation and operation of the required emission control systems, the installation, calibration, and testing of the CO and NOx continuous emission monitors, and any activities requiring the firing of the CTGs without abatement by their respective oxidation catalysts and/or SCR Systems.

6. During the commissioning period and after installation of the SCR and oxidation catalyst, Greenleaf 1 Project shall demonstrate compliance with Conditions 8, 9, and 10, through the use of properly operated and maintained continuous emission monitors and plant data monitoring recorders for the following parameters and emission concentrations:

    a. firing hours
    b. fuel flow rates
    c. turbine water injection rates
    d. stack gas nitrogen oxide emission concentrations
    e. stack gas carbon monoxide emission concentrations
    f. stack gas oxygen concentrations.

The monitored parameters shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation) for the CTGs. Greenleaf 1 Project shall use approved methods to calculate heat input rates, nitrogen dioxide mass emission rates, carbon monoxide mass emission rates, and NOx and CO emission concentrations, summarized for each clock hour and each calendar day. Greenleaf 1 Project shall retain records on site for at least 5 years from the date of entry and make such records available to District personnel upon request.

7. Greenleaf 1 Project shall install, calibrate, and operate the District-approved continuous monitors specified in Condition 6 prior to first firing of the CTGs. After first firing of the turbines, Sutter Energy Center shall adjust the detection range of these continuous emission monitors as necessary to accurately measure the resulting range of CO and NOx emission concentrations. The instruments shall operate at all times of operation of the CTGs including start-up, shutdown, upset, and malfunction, except as allowed by District Rule 10.3 Upset Conditions, Breakdown or Scheduled Maintenance. If necessary to comply with this requirement, Greenleaf 1 Project shall install dual-span monitors. The type, specifications, and location of these monitors shall be subject to District review and approval.

8. The total number of firing hours of each gas turbine without abatement of NOx emissions by the SCR system and/or abatement of the CO emissions by the oxidation catalyst system shall not exceed 160 hours during the commissioning period. Such operation shall only be limited to such discrete commissioning activities that can only be properly executed without the air pollution control equipment. Upon completion of these activities, Greenleaf 1 Project shall provide written notice to the District and the unused balance of the 160 firing hours without abatement shall expire. The total operating days during commissioning shall not exceed 21 calendar days.

9. The total mass emissions of each regulated pollutant that are emitted by the CTGs during the commissioning period shall accrue towards the quarterly emission limits.

10. Within 60 days after start-up of each turbine, Greenleaf 1 Project shall conduct District approved source tests on the CTGs to determine compliance with the emission limitations.. The source tests shall determine NOx, CO, and VOC emissions during peak load firing conditions (100% load plus or minus 25%). The source test shall include a minimum of three compliance runs, with a minimum run time of 30 minutes. Before the execution of the source tests, Greenleaf 1 Project shall submit to the District a detailed source test plan designed to satisfy the requirements of this Part. The District will notify Greenleaf 1 Project of any necessary modifications to the plan; otherwise, the plan shall be deemed approved. Greenleaf 1 Project shall incorporate the District comments into the test plan. Greenleaf 1 Project shall notify the District prior to the planned source testing date. Greenleaf 1 Project shall submit the source test results for the CTGs to the District within 60 days of the source testing date.

OPERATING CONDITIONS

11. Greenleaf 1 Project shall fire the CTGs exclusively on CPUC-quality natural gas with a maximum sulfur content of 0.5 grains per 100 standard cubic feet. To demonstrate compliance with this limit, the operator of the CTGs shall possess a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying the total sulfur content. PG&E monthly sulfur data may be used provided that such data can be demonstrated to be representative of the gas delivered to Greenleaf 1 Project. Alternatively, the operator may choose to sample and analyze the gas from each supply source at least monthly to determine the sulfur content of the gas.

12. Greenleaf 1 Project shall not operate the units such that the heat input rate to each CTG exceeds 366.1 MMbtu (HHV) per hour.

13. Greenleaf 1 Project shall not operate the units such that the heat input rate to each CTG exceeds 73,220 MMbtu (HHV) per calendar quarter.

14. Greenleaf 1 Project shall not operate the units such that the heat input rate to each CTG exceeds 73,220 MMbtu (HHV) per calendar year

15. The owner operator shall not operate the CTGs such that the hours of operation exceed 200 hours per calendar quarter, per turbine.

16. The owner operator shall not operate the CTG such that the hours of operation exceed 200 hours per year, per turbine.

17. Greenleaf 1 Project shall ensure that each CTG is abated by the properly operated and properly maintained SCR system and oxidation catalyst system whenever fuel is combusted at the source and that the corresponding SCR catalyst bed has reached its minimum operating temperature.

18. Greenleaf 1 Project shall install, maintain, and operate continuous plant monitors and a continuous emissions monitoring system (CEMS) during all hours of operation, including gas turbine startup and shutdown periods. The following parameters shall be monitored under this section:

    a. Firing hours, turbine water injection rates, and fuel flow rates for the CTGs
    b. Oxygen concentration, nitrogen oxides concentration, and carbon monoxide concentration at the exhaust point of the CTGs
    c. Ammonia (NH_3) injection rate at the SCR system

    Greenleaf 1 Project shall record the above parameters at least every 15 minutes (excluding normal calibration periods) and shall summarize all of the above parameters for each clock hour. Greenleaf 1 Project shall use the parameters measured above and District approved calculation methods to calculate the following CTG parameters

    d. Heat input rate

e. The concentration of NOx and CO, corrected to 15% O_2 (corrected), and the mass emission rates of NOx and CO for the CTG

19. Greenleaf 1 Project shall submit design details for the SCR system, oxidation catalyst system, and continuous emissions monitoring system to the District at least 30 days prior to commencement of construction of these components.

20. Startup is defined as the period beginning with turbine light-off (firing) until the CTGs meets the concentration and mass emission limits in Condition 45. Shutdown is defined as the period beginning with initiation of the CTGs shutdown sequence and ending with cessation of fuel flow. Startup and shutdown durations shall not exceed 30 minutes. and 15 minutes, respectively, per occurrence.

21. Greenleaf 1 Project shall limit the total CTG startup events for each CTG to no more than 4 startups per day, 40 startups per calendar quarter, and 40 startups per calendar year.

22. Greenleaf 1 Project shall limit the total CTG shutdown events for each CTG to no more than 4 startups per day, 40 startups per calendar quarter, and 40 startups per calendar year.

23. Greenleaf 1 Project shall ensure that it complies with the requirements to hold SO_2 allowances in 40 CFR 72.9(c)(1).

REPORTING AND RECORDKEEPING

24. Greenleaf 1 Project shall notify the District by the close of the next business day of operating the CTGs for any reason, including, but not limited to: commissioning activities, maintenance and testing/tuning activities, emissions testing activities, operation of the turbine for the production of electrical power, etc.

25. Greenleaf 1 Project shall submit a CEMS QA/QC plan to the District for approval within 60 days of installation. Approval should also be required for any future changes to the plan.

26. Greenleaf 1 Project shall submit to the District information correlating the control system operating parameters to the associated NOx, CO, PM_{10}, VOC and SOx emissions. This information may be used by the Air Pollution Control Officer to determine compliance where there is no continuous emission monitoring system available or when the continuous emission monitoring system is not operating properly.

27. For each calendar day, Greenleaf 1 Project shall calculate and record the total firing hours, the average hourly fuel flow rates, turbine water injection rates, CTGs power production rates, and regulated pollutant concentration and emission rates. The data should be recorded as specified below:

a. Heat input rate for every clock hour and the average hourly heat input rate for every rolling 3-hour period

b. The average NOx mass emission rate (as NO_2), CO mass emission rate, and corrected NOx and CO emission concentrations, for every clock hour.

c. On an hourly basis, the cumulative total NOx mass emissions (as NO_2) and the cumulative total CO mass emissions, for each calendar day for all CTGs .

d. For each calendar day, the average hourly heat input rates, corrected NOx and CO emission concentrations, and NOx and CO mass emission rates of the CTGs.

e. For each calendar month, the cumulative total NOx mass emissions and cumulative total CO mass emissions, for each calendar quarter and the previous consecutive twelve-month period for all CTGs.

28. Greenleaf 1 Project shall calculate and record on a daily basis, the volatile organic compound (VOC) mass emissions, fine particulate matter (PM_{10}) mass emissions (including condensable particulate matter), and sulfur oxides (SOx) mass emissions (as SO_2) from the CTGs... Greenleaf 1 Project shall use the actual heat input rates, actual gas turbine start-up times, actual gas turbine shutdown times, and District-approved emission factors developed pursuant to source testing to calculate these emissions. Greenleaf 1 Project shall present the calculated emissions in the following format:

    a. For each calendar day, VOC, PM_{10}, and SOx emissions, summarized for each CTG.

    b. On a monthly basis, the cumulative total VOC, PM_{10}, and SOx mass emissions, for each calendar quarter and calendar year for all CTGs operated at Greenleaf 1 Project.

29. Greenleaf 1 Project shall comply with the continuous emission monitoring requirements of 40 CFR Part 60 and 40 CFR Part 75.

30. Greenleaf 1 Project shall submit all reports to the District as required by District Rules and Regulations.

31. All records which are required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P. paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the U.S. EPA.

32. Greenleaf 1 Project shall notify the District of any violations of these permit conditions. Notification shall be submitted in a timely manner, in accordance with all applicable District Rules and Regulations. Notwithstanding the notification and reporting requirements given in any District Rule or Regulation Greenleaf 1 Project shall submit written notification (email or facsimile is acceptable) to the District within 96 hours of the violation of any permit condition.

33. The following records shall be kept: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any continuous emission monitor emission measurements, total daily and rolling twelve month average hours of operation, hourly quantity of fuel used, and gross three hour average operating load.

34. Greenleaf 1 Project shall notify the District of any breakdown condition as soon as reasonably possible, but no later than 48 hours after its detection.

35. The District shall be notified in writing within 15 calendar days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations.

36. Calibration Gas Audits (CGAs) of the continuous emissions monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with U.S. EPA guidelines. Audit reports shall be submitted along with quarterly compliance reports to the District.

37. Greenleaf 1 Project shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emissions monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F.

38. Greenleaf 1 Project shall submit a written report to the District for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred.

39. Sutter Energy Center shall provide the District with a written emission statement showing actual emissions of VOCs and NOx. Pursuant to District Rule 4.8, Sutter Energy Center shall submit this emission statement on a form or in a format specified by the District. The statement shall contain the following information:

    a. Actual emissions of VOCs and NOx, in tons per year, for the calendar year prior to the preparation of the emission statement; and

    b. Information regarding seasonal or diurnal peaks in the emission of affected pollutants; and

c. Certification by a responsible official of Sutter Energy Center that the information contained in the emission statement is accurate to the best knowledge of the individual certifying the emission statement.

40. Greenleaf 1 Project shall maintain an Operating Compliance Plan for the new CTGs which will assure that the air pollution control equipment will be properly maintained and that necessary operational procedures are in place to continuously achieve compliance with this permit. The Operating Compliance Plan shall include a description of the process monitoring program and devices to be used.

    a. The plan shall specify the frequency of surveillance checks that will be made of process monitoring devices and indicators to determine continued operation within permit limits. A record or log of individual surveillance checks shall be kept to document performance of the surveillance.

    b. The plan shall include the frequency and methods of calibrating the process monitoring devices.

    c. The plan shall specify for each emission control device:

        i. Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission producing operations; and

        ii. Records that must be kept to document the performance of required periodic maintenance procedures.

    d. The plan shall identify what records will be kept to comply with air pollution control requirements and regulations and the specific format of the records. These records shall include at least the Recordkeeping information required by this permit. The information must include emission monitoring evaluations, calibration checks and adjustments, and maintenance performed on such monitoring systems.

    e. The plan shall be submitted to the District no later than 30 days after startup of the CTGs. The plan must be implemented upon approval by the District Air Pollution Control Officer.

    f. The plan shall be resubmitted to the District for approval upon any changes to compliance procedures described in the plan, or upon the request of the District.

PERFORMANCE TESTING

41. On an annual basis, and within twelve (12) months of the previous source test, Greenleaf 1 Project shall conduct District approved source testing on the CTG to determine compliance with the emission limitations specified in Conditions 46. The source tests shall determine concentrations and mass emissions of NOx, CO, VOC, and NH_3. Fuel-based emission factors (lbs/MMbtu) for VOCs, SOx (as SO_2) and PM_{10} shall be established using the annual source test data. The source tests shall be performed while the CTG is operating at peak load firing

conditions (100% load plus or minus 25%). The source tests shall include a minimum of three compliance runs, with a minimum run time of 30 minutes each.

42. Greenleaf 1 Project shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, NOx concentration and mass emissions (as NO_2), CO concentration and mass emissions, VOC concentration and mass emissions, fuel sulfur content and from it SOx mass emissions (as SO_2), and total fine particulate matter emissions (PM_{10}), including condensable particulate matter All testing shall be performed using U.S. EPA approved test methods. Alternative test methods can be used with explicit approval of the District. Greenleaf 1 Project shall submit the source test results to the District within 60 days of conducting the tests.

43. Before the execution of the source tests, Greenleaf 1 Project shall submit to the District a source test protocol detailing the proposed scope and source test methods. The protocol shall be submitted to the District no later than thirty (30) days prior to the scheduled test date. The District will notify Greenleaf 1 Project of any necessary modifications to the plan; otherwise, the plan shall be deemed approved. Sutter Energy Center shall incorporate the District comments into the test plan.

44. On an annual basis, Greenleaf 1 Project shall verify the accuracy of the CEMS by conducting a relative accuracy test audit (RATA). The RATA shall satisfy the applicable performance specification requirements in Appendix B of 40 CFR Part 60 as well as the quality assurance and quality control procedures of 40 CFR Part 75. Greenleaf 1 Project shall submit the RATA results to the District within 60 days of conducting the tests.

EMISSION LIMITATIONS

45. Greenleaf 1 Project shall ensure that the CTGs complies with emission limits established in (a) through (g) below. The limits in (a) through (e) do not apply during a gas turbine startup or shutdown, as defined in Condition 20.

    a. NOx mass emissions (calculated as NO_2) at the exhaust of the CTGs shall not exceed 2.71 pounds per hour. (Basis: BACT for NOx)

    b. The NOx emission concentration at the exhaust of the CTGs shall not exceed 2.5 ppmv, on a dry basis, corrected to 15% O2, averaged over any 1-hour period. (Basis: BACT for NOx)

    c. CO mass emissions at the exhaust of the CTG shall not exceed 2.64 pounds per hour. (Basis: BACT for CO)

    d. The CO emission concentration at the exhaust of the CTG shall not exceed 4.0 ppmv, on a dry basis, corrected to 15% O2 averaged over any rolling 3-hour period. (Basis: BACT for CO)

e. VOC mass emissions (calculated as CH_4) at the exhaust of the CTG shall not exceed 2.3 pounds per hour. (Basis: BACT for VOC)

f. PM_{10} mass emissions at the exhaust of the CTG shall not exceed 4.0 pounds per hour.

g. SOx mass emissions (calculated as SO_2) at the exhaust of the CTG shall not exceed 0.20 pounds per hour.

46. Greenleaf 1 Project shall ensure that the mass emissions at the exhaust of the CTG during startup and shutdown do not exceed the limits established below.

a. NOx (calculated as NO_2)

i. 3.10 pounds per startup.

ii. 3.40 pounds per shutdown.

b. CO

i. 19.40 pounds per startup.

ii. 21.60 pounds per shutdown.

c. VOC (calculated as CH_4)

i. 0.80 pounds of VOC per startup.

ii. 0.90 pounds of VOC per shutdown.

47. Greenleaf 1 Project shall ensure that the quarterly emissions from the CTGs, including emissions generated during gas turbine startups, shutdowns, and malfunctions, do not exceed the limits established in (a) through (e) below. Compliance with mass emissions of VOCs, PM_{10}, and SOx shall be demonstrated by using the heat input-based emission factors established in Condition 41 multiplied by the CTG's quarterly fuel consumption or heat input.

a. NOx mass emissions (calculated as NO_2) at the exhaust of the CTGs shall not exceed 1,344 pounds per quarter.

b. CO mass emissions at the exhaust of the CTGs shall not exceed 2,696 pounds per quarter.

c. VOC mass emissions (calculated as CH_4) at the exhaust of the CTGs shall not exceed 988 pounds per quarter.

d. PM_{10} mass emissions at the exhaust of the CTGs shall not exceed 2,120 pounds per quarter.

e. SOx mass emissions (calculated as SO_2) at the exhaust of the CTG shall not exceed 96 pounds per quarter.

48. Greenleaf 1 Project shall ensure that the annual emissions from the CTGs, including emissions generated during gas turbine startups, shutdowns, and malfunctions, do not exceed the limits established in (a) through (e) below. Compliance with mass emissions of VOCs, PM_{10}, and SOx shall be demonstrated by using the heat input-based emission factors established in Condition 41 multiplied by the CTG's annual fuel consumption or heat input.

a. NOx mass emissions (calculated as NO_2) at the exhaust of the CTGs shall not exceed 0.67 tons per year.
b. CO mass emissions at the exhaust of the CTGs shall not exceed 1.34 tons per year.
c. VOC mass emissions (calculated as CH_4) at the exhaust of the CTGs shall not exceed 0.5 tons per year.
d. PM_{10} mass emissions at the exhaust of the CTGs shall not exceed 0.82 tons per year.
e. SOx mass emissions (calculated as SO_2) at the exhaust of the CTGs shall not exceed 0.05 tons per year.

49. No emissions are permitted, from any source, which are a nuisance per HSC 41700 Public Nuisance.

50. Unless otherwise specified by this permit, the permittee shall not discharge into the atmosphere from any source whatsoever any contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one hour that is:

    a. As dark or darker in shade as that designated as No. 2 (or 40% opacity) on the Ringelmann Chart, as published by the United States Bureau of Mines as determined by U. S. EPA Method 9; or
    b. Of such opacity as to obscure an observer's view to a degree to or greater than does smoke described in subsection (a).

51. The Greenleaf 1 Project shall not emit into the atmosphere, from any source particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions. When the source involves a combustion process the permittee must calculate the concentration to 12 percent carbon dioxide (CO2). [District Rule 3.2.}

52. The Greenleaf 1 Project shall not emit into the atmosphere from any single source emissions whatsoever any sulfur oxides in excess of 0.2 percent by volume (2,000 ppm) collectively calculated as sulfur dioxide (SO2). [District Rule 3.10.}

53. Ammonia emission concentrations at the exhaust of the CTGs shall not exceed 10 ppmv, on a dry basis, corrected to 15% O2. This ammonia emission concentration shall be verified by the continuous recording of the ammonia injection rate to the SCR system. The correlation between the gas turbine heat input rates, the turbine water injection rates, the SCR system ammonia injection rates, and corresponding ammonia emission concentration at the CTGs exhaust shall be determined during the performance testing. This correlation shall be used to determine ongoing compliance with the ammonia slip limit.

TITLE V CONDITION

54. Greenleaf 1 Project shall file a complete application for a Significant Modification to the existing Sutter Energy Center Title V permit pursuant to 10.3, Federal Operating Permit Program, by no later than 12 months after commencing operation of the CTG.

GENERAL CONDITIONS

55. Acceptance of Conditions

The FRAQMD deems acceptance of this Permit to Operate as acceptance of all conditions as specified. Failure to comply with any condition of this permit or the FRAQMD Rules and Regulations shall be grounds for revocation of this permit. [FRAQMD Rule 4.5]

56. Right to Amend Permit

The FRAQMD reserves the right to amend this permit, if the need arises, in order to ensure the compliance of this facility, and/or to abate any public nuisance. [FRAQMD Rule 4.5]

57. Permit Not Transferrable

This permit is not transferable from either one location to another, from one piece of equipment to another or from one person to another without prior FRAQMD approval. In the event a new owner assumes the control of this facility, the permittee and new owner shall notify the FRAQMD in writing within ten (10) days of the change of ownership. [FRAQMD Rule 4.15]

58. Operation in Accordance with Permit Submittal

The permittee shall operate the equipment in compliance with all data and specifications submitted with the application under which this permit was issued. If any provision of this permit is found to be invalid, such finding shall not affect the remaining provisions of this permit. [FRAQMD Rule 4.5]

59. Payment of Fees

The permittee shall be responsible for the payment of annual fees. In the event of facility closure or change in ownership or responsibility, the new owner shall be responsible for any outstanding and/or current fees. [FRAQMD Rule 7.6]

60. Right of Entry

The "Right of Entry", as delineated by the California Health and Safety Code Section 41510 of Division 26, shall apply at all times. The permittee shall allow

FRAQMD staff access to the plant site and pertinent records at all reasonable times for the purposes of inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission records, training, and otherwise conducting all necessary functions related to this permit. [CA Health and Safety Code Section 41510]

61. Permit Condition Familiarity

The operating staff of this facility shall be advised of and be familiar with all the conditions contained in this permit. [FRAQMD Rule 4.5]

62. Maintain Equipment

The permittee shall maintain the physical integrity of all processes and air pollution control equipment at regular intervals to insure minimal discharge of emissions. The permittee shall not operate the basic equipment without the control equipment attached and operating as designed. The permittee shall follow the equipment manufacturers' recommendations diligently. [FRAQMD Rule 4.5]

63. Emission Source Tests

The FRAQMD may conduct or require emission source tests on any source at the discretion of the FRAQMD. The permittee shall conduct all tests and calculate all results in accordance with test procedures approved by the FRAQMD. [FRAQMD Rule 9.3]

64. Permit Required for Additions and Alterations

The permittee shall report any additions, deletions, or alterations of the subject equipment, including a change in the method of operation or a change in the location, to the FRAQMD. Such alterations may require a new Authority to Construct permit. [FRAQMD Rule 4.1]

65. Copy of Permit Maintained at Facility

The permittee shall maintain this permit or a legible copy at the site. The permit shall be made available on demand to any authorized person. [FRAQMD Rule 4.14]

66. Fugitive Dust

The permittee shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

a. The use, where possible, of water or chemicals for controlling dust during the demolition of existing buildings or structures, construction operations, construction of roadways, or the clearing of land;
b. The application of asphalt, California approved oils and emulsion substances, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts; or
c. Any other means submitted in writing and approved by the FRAQMD.
[FRAQMD Rule 3.16]

67. Surface Preparation and Clean-up
a. This facility is subject to all applicable requirements under District Rule 3.14 – Surface Preparation and Clean-up.
b. Net surface preparation and clean-up solvent usage at this facility shall not exceed 20 gallons per calendar year.
c. The permittee shall keep current Safety Data Sheets for all VOC-containing materials (solvents, coatings, inks, resins) used at this facility and make them available to District personnel upon request.
d. The permittee shall store all VOC-containing materials, whether in their form for intended use or as a waste or used product, including items such as cloth or paper laden with VOC-containing materials, in non-absorbent, non-leaking containers which shall be kept closed at all times, except when in-use, and disposed of in a manner to prevent the evaporation of VOCs into the atmosphere.
[FRAQMD Rule 3.14]

68. Natural Gas-Fired Water Heaters, Small Boilers, and Process Heaters
The permittee shall not install at this facility any natural gas-fired boiler, steam generator, process heater, or water heater with a rated heat input capacity of greater than or equal to 75,000 British Thermal Units per hour (Btu/hr) and less than 1 million Btu/hr unless the unit is certified to meet the emissions requirements established in FRAQMD Rule 3.23.
[FRAQMD Rule 3.23

69. Air Toxic Hot Spots
a. This facility is subject to Division 26, Part 6, Chapter 1 Section 44300 et. seq. of the California Health and Safety Code (Air Toxics “Hot Spots” Information and Assessment Act of 1987). The owner or operator is responsible for complying with all requirements and deadlines set forth in the regulation.
b. The FRAQMD reserves the right to require the facility to evaluate the health risk, in accordance with the AB2588 Air Toxics “Hot Spots” Emission Inventory Criteria and Guidelines Regulation, if there is a significant change in population, emissions, or emission unit(s) site location, or if new health data becomes available.
[CA Health and Safety Code Section 44300 et. seq.]

70. Portable Engines and Portable Equipment Units
a. The operation of portable engines and portable equipment units at the facility shall not require modification of this permit provided the permittee

verify that each source is registered with the California Air Resources Board or permitted by the FRAQMD.

i. This provision shall not apply if the engine or equipment unit is operated in such a way that it supplements the stationary source operation.
ii. For the purpose of this permit, "Equipment Unit" means equipment that emits PM10 over and above that emitted from an associated engine.

b. Portable engines and portable equipment units registered by the California Air Resources Board shall operate pursuant to the conditions of the registration. This permit does not allow operation of the source, such that the operation invalidates the registration.
c. Portable engines and portable equipment units permitted by the FRAQMD shall operate pursuant to the conditions of the permit.
d. If a portable equipment unit will be at the facility for more than five days, the permittee shall notify the district in writing within two working days of commencing operations. The notification shall include:
   i. The registration number of the equipment unit;
   ii. The name and phone number of the responsible official; and
   iii. The estimated time that the equipment unit will be located at the facility.
e. If the permittee utilizes a portable equipment unit, the permittee shall comply with the following recordkeeping and reporting provisions within 30 days after the end of each calendar quarter:
   i. The dates in which the equipment unit was operated at the facility;
   ii. The type and quantity of materials processed by the equipment unit; and
   iii. The emissions for the project, calculated in accordance with the equipment unit's registration.

[Basis: FRAQMD Rule 4.5]

71. Performance Test Requirements: If the District finds that additional performance tests are required to determine compliance with District Rules and Regulations and/or conditions of this Authority to Construct, reasonable written notice shall be provided to Greenleaf 1 Project. The performance tests shall be subject to the following:

a. At least thirty (30) days prior to the actual testing, a written test plan shall be submitted to the District detailing the sampling methods, analytical methods or detection principles to be used. The prior written approval of the District is required for the use of alternate test methods.

b. The District may require, upon reasonable written notice, the conduct by Greenleaf 1 Project of such emissions testing or analysis as may be deemed necessary by the District to demonstrate compliance with District Rules and/or state or federal regulations and the limiting conditions of this permit.

c. Testing shall be conducted in accordance with 40 CFR 60, Appendix A, Methods, or equivalent methods approved by the State of California Air Resources Board (CARB) by reference in Title 17 of the California Administrative Code, or other methods specified by Greenleaf 1 Project

and approved in writing by the District. Independent testing contractors and analytical laboratories shall be CARB certified for the test or analysis conducted. Particulate matter testing, if requested, shall include both filterable and condensed particulate matter (e.g. Method 5 modified to include impinger catch).

d. A report of the testing shall be submitted to the District no later than sixty (60) days after the source test is performed.

72. The applicant/permittee has an obligation to defend and indemnify the District against third party challenges.

Greenleaf One

Yuba City. CA

Facility- Monthly On-Time Report

September - 2021

Day	Unit A On-Time	Unit B On-Time
01	0.0	0.0
02	0.0	0.0
03	0.0	0.0
04	0.0	0.0
05	0.0	0.0
06	0.0	0.0
07	0.0	0.0
08	0.0	0.0
09	0.0	0.0
10	0.0	0.0
11	0.0	0.0
12	0.0	0.0
13	0.0	0.0
14	0.0	0.0
15	0.3	0.1
16	0.0	0.3
17	4.2	0.0
18	3.1	2.6
19	5.4	3.9
20	6.9	0.0
21	0.0	8.5
22	1.7	1.7
23	0.8	0.5
24	0.0	0.0
25	0.0	0.0
26	0.0	0.0
27	0.0	0.0
28	0.0	0.0
29	0.0	0.0
30	0.0	0.0
Total	22	18
12-Mo Roll	22	18
Year Total	22	18

Greenleaf One

Yuba City. CA

Facility- Monthly On-Time Report

October - 2021

Day	Unit A On-Time	Unit B On-Time
01	0.0	0.0
02	0.0	0.0
03	0.0	0.0
04	0.0	0.0
05	0.0	0.0
06	0.0	0.0
07	0.0	0.0
08	0.0	0.0
09	0.0	0.0
10	0.0	0.0
11	0.0	0.0
12	0.0	0.0
13	0.0	0.0
14	0.0	0.0
15	0.0	0.0
16	0.0	0.0
17	0.0	0.0
18	0.0	0.0
19	0.0	0.0
20	0.0	0.0
21	0.0	0.0
22	0.0	0.0
23	0.0	0.0
24	0.0	0.0
25	0.0	0.0
26	0.0	0.0
27	0.0	0.0
28	0.0	0.0
29	0.0	0.0
30	0.0	0.0
31	0.0	0.0
Total	0	0
12-Mo Roll	22	18
Year Total	22	18