



May 21, 2012

Mr. Sherrill Culliver
Florida Department of Environmental Protection
South District
2295 Victoria Avenue
Suite 364
Fort Myers, FL 33901

Re: Avon Park Compliance Evaluation
ORIS 624
Units P3 and P4

Dear Mr. Culliver

I have enclosed a copy of the Compliance Evaluation for Progress Energy, Florida's Avon Park Units referenced above. The visible emissions (VE) evaluations were conducted on May 18, 2012.

The units were found to be in compliance.

Please contact Thomas Stark at (727) 820-5593 if you have any questions.

I hereby certify that, based on the information and belief formed after reasonable inquiry, the statements and information in the attached documents are true, accurate and complete.

Sincerely,

A handwritten signature in black ink that reads "Martin J. Drango". The signature is fluid and cursive, with a large, stylized initial "M".

Martin J. Drango
Plant Manager
Combustion Turbines-Central

Enclosure

Visible Emissions Test Report

Completed for:

***Progress Energy Florida, Inc.
Avon Park Power Plant***

***Gas Turbine Peaking Units
1 & 2 (EU -003 & -004)***

Test Report Number: 20-5174-0102-001

Tests Completed: May 18, 2012



Air Emissions Compliance Test Report

**Progress Energy Florida, Inc.
Avon Park Power Plant
Gas Turbine Peaking Units 1 and 2
(EU -003 & -004)
Avon Park, Florida**

C.E.M. Solutions Project No. 5174

Testing Completed: May 18, 2012

C.E.M. Solutions, Inc. Report Number: 20-5174-0102-001

C.E.M. Solutions, Inc.
1183 E. Overdrive Circle
Hernando, Florida 34442
Phone: 352-489-4337

Statement of Validity

I hereby certify the information and data provided in this emissions test report for tests performed at the Progress Energy Florida, Inc. Avon Park Power Plant, on the Gas Turbine Peaking Units (EU -003 and -004), conducted on May 18, 2012 are complete and accurate to the best of my knowledge.

A handwritten signature in black ink, appearing to read "Joe Conti", is written over a horizontal line.

Joe Conti
Quality Assurance Manager,
C.E.M. Solutions, Inc.

Project Background

Name of Source Owner: Progress Energy Florida, Inc.

Address of Owner: 299 First Avenue North
St. Petersburg, Florida 33701

Source Identification: Facility ID: 0550003
Emission Units: Unit 1 (EU-003) and Unit 2 (EU-004)

Location of Source: Oldsmar, Florida

Type of Operation: SIC Code: 4911

Tests Performed: Method 9 – Determination of Visible Emission
ASTM D-240 – Fuel Analysis (by others)
ASTM D-1552 – Sulfur in Petroleum Products (by others)

Test Supervisor: Josh Cooper

Date(s) Tests Conducted: May 18, 2012: V.E. on Unit 1 and Unit 2

Site Test Coordinator: Tom Stark

State Regulatory Observers: No Observer Present

Table of Contents

1.0	Introduction	1
2.0	Facility Description	2
2.1	Process Equipment	2
2.2	Regulatory Requirements	2
3.0	Test Program/Operating Conditions	3
4.0	Test Methods	4
4.1	Determination of Opacity	4
5.0	Test Results	5
5.1	Unit 1 (EU-003).....	5
5.2	Unit 2 (EU-004).....	5

List of Tables

Table 1:	Summary of Results.....	1
Table 2:	Summary of Emissions Limits	2

Appendices

- Appendix A: Plant Operating Data
- Appendix B: Method 9 Support Data

1.0 Introduction

Progress Energy Florida, Inc. (PEF) retained C.E.M. Solutions, Inc. to perform source emissions testing on the Gas Turbine Peaking Units (EU -003 and -004) located at its Avon Park Power Plant in Avon Park, Florida.

The test program was conducted in order to evaluate the compliance status of the Gas Turbine Peaking Units exhaust, while firing No.2 distillate fuel oil, in respect to Title V air operating permit number 0550003-005-AV. The test program and results are presented and discussed in this report.

Tom Stark of the Progress Energy Florida, Inc. Environmental Services Section coordinated plant operations throughout the test program. All testing was conducted in accordance with test methods promulgated by the USEPA.

A summary of the visible emission results are located in Table 1 below.

**Table 1: Summary of Results
Progress Energy Florida, Inc.
Avon Park Power Plant
Gas Turbine Peaking Units 1 & 2**

Unit	Emission Standard/ Permit Limitation	Test Results
Unit 1	Visible Emission no greater than 20% opacity	12.1%*
Unit 2	Visible Emission no greater than 20% opacity	14.8%*

*Six minute block average

2.0 Facility Description

Avon Park Units 1 and 2 are Gas Turbine Peaking Units that fire No. 2 fuel oil. These Units are used as peaking units. Units 1 and 2 have a maximum heat input rate of 562.6 mmbtu/hr and are capable of generating 33.8 MW.

2.1 Process Equipment

Emissions from the Gas Turbine Peaking Units are uncontrolled. Turbine engine exhausts are vented to the atmosphere through a 35 foot stacks.

2.2 Regulatory Requirements

PEF conducted emissions tests for the following pollutants while operating at peak load. Emission testing was conducted to determine the compliance status of the following pollutants:

- Opacity in percent

Table 1 summarizes the applicable emissions limits for the Gas Turbine Peaking Unit.

**Table 2: Summary of Emissions Limits
Progress Energy Florida, Inc.
Avon Park Power Plant
Gas Turbine Peaking Units 1 & 2**

Pollutant	Control Technology	Emission Limit	Permit Condition
Visible Emissions	Good Combustion	20%	A.5

^a While firing new No. 2 Fuel Oil

3.0 Test Program/Operating Conditions

Emissions tests were completed at the Avon Park Power Plant to determine the compliance status of the No. 2 fuel oil fired turbine on May 18, 2012.

Visible emission testing was performed while the units were at base load, firing No. 2 Distillate Fuel Oil.

Turbine operating data was collected and provided by facility personnel during the entire test program. Data provided include, but was not limited to:

- Unit Generation (MW)
- Fuel flow rate
- Heat input (mmbtu/hr)

During the test program, Unit 1 heat input averaged 350.2 mmBtu/hr while operating on 100 percent No. 2 fuel oil, which correlates to 70 percent of the maximum heat input (501.5 mmBtu/hr).

During the test program, Unit 2 heat input averaged 357.2 mmBtu/hr while co-firing natural gas and oil, which correlates to 71 percent of the maximum heat input (501.5 mmBtu/hr).

The heat input plant data for the Avon Park CTs can be viewed in Appendix A.

4.0 Test Methods

All testing was performed in accordance with methods approved by the USEPA and FDEP. The following discusses the methods, as well as quality assurance and sample handling procedures.

4.1 Determination of Visible Emission

USEPA Method 9 was utilized to determine Visible Emissions.

Visible emission observations were performed by a FDEP certified visible emission reader. Readings were taken at 15 second intervals and reduced into six minute averages as required by the applicable EPA standard. One-sixty minute visible emission run was performed while the Unit was operating at maximum capacity.

5.0 Test Results

The test program results are presented below. Summaries of the compliance test results for visible emissions are listed below. Supporting Visible Emission field data reports are presented in Appendix B and C, respectively.

5.1 Unit 1 (EU-003)

The highest six-minute block average visible emission recorded for Unit 1 was 12.1%, passing the 20% permit limitation.

5.2 Unit 2 (EU-004)

The highest six-minute block average visible emission recorded for Unit 2 was 14.8%, passing the 20% permit limitation.

Appendix A: Plant Operating Data



Avon Park - VE Operating Data 2012

Units	Date	Fuel	Calculated Heat		Permitted Heat Input at		Capacity
			Inlet Temp	Input	Inlet Temp	Input	
			<i>deg F</i>	<i>mmBTU/hr</i>	<i>mmBTU/hr</i>	<i>%</i>	
P1	5/18/12	Oil	82.5	350.2	501.5	70%	
P2	5/18/12	Oil	83.1	357.2	501.5	71%	

Avon Park 5/18/12 9:15 5/18/12 10:15 1m	Progress Energy		P1	
	GGA LIQUID RTD TEMPERATURE	UNIT2 GROSS POWER OUT PE	Fuel Oil Flow	
	APP01_UIFLEX:PIA_LIQ_TMP.MEAS	APP01_GROSS POWER OUT.PE	A + B	
	Deg F	MW	lbs/s	
18-May-12 09:15:00	81.8	24.7	5.0	
18-May-12 09:16:00	81.9	24.7	5.0	
18-May-12 09:17:00	81.9	24.7	5.0	
18-May-12 09:18:00	81.9	24.7	5.0	
18-May-12 09:19:00	81.9	24.7	5.0	
18-May-12 09:20:00	82.0	24.7	5.0	
18-May-12 09:21:00	82.0	24.7	5.0	
18-May-12 09:22:00	82.0	24.7	5.0	
18-May-12 09:23:00	82.0	24.7	5.0	
18-May-12 09:24:00	82.0	24.7	5.0	
18-May-12 09:25:00	82.1	24.7	5.0	
18-May-12 09:26:00	82.1	24.7	5.0	
18-May-12 09:27:00	82.1	24.7	5.0	
18-May-12 09:28:00	82.1	24.7	5.0	
18-May-12 09:29:00	82.2	24.7	5.0	
18-May-12 09:30:00	82.2	24.7	5.0	
18-May-12 09:31:00	82.2	24.7	5.0	
18-May-12 09:32:00	82.2	24.7	5.0	
18-May-12 09:33:00	82.3	24.7	5.0	
18-May-12 09:34:00	82.3	24.7	5.0	
18-May-12 09:35:00	82.3	24.7	5.0	
18-May-12 09:36:00	82.3	24.7	5.0	
18-May-12 09:37:00	82.3	24.7	5.0	
18-May-12 09:38:00	82.4	24.7	5.0	
18-May-12 09:39:00	82.4	24.7	5.0	
18-May-12 09:40:00	82.4	24.7	5.0	
18-May-12 09:41:00	82.4	24.7	5.0	
18-May-12 09:42:00	82.5	24.7	5.0	
18-May-12 09:43:00	82.5	24.7	5.0	
18-May-12 09:44:00	82.5	24.7	5.0	
18-May-12 09:45:00	82.5	24.7	5.0	
18-May-12 09:46:00	82.6	24.7	5.0	
18-May-12 09:47:00	82.6	24.7	5.0	
18-May-12 09:48:00	82.6	24.7	5.0	
18-May-12 09:49:00	82.6	24.7	5.0	
18-May-12 09:50:00	82.7	24.7	5.0	
18-May-12 09:51:00	82.7	24.7	5.0	
18-May-12 09:52:00	82.7	24.7	5.0	
18-May-12 09:53:00	82.7	24.7	5.0	
18-May-12 09:54:00	82.8	24.7	5.0	
18-May-12 09:55:00	82.8	24.7	5.0	
18-May-12 09:56:00	82.8	24.7	5.0	
18-May-12 09:57:00	82.8	24.7	5.0	
18-May-12 09:58:00	82.9	24.7	5.0	
18-May-12 09:59:00	82.9	24.7	5.0	
18-May-12 10:00:00	82.9	24.7	5.0	
18-May-12 10:01:00	82.9	24.7	5.0	
18-May-12 10:02:00	83.0	24.7	5.0	
18-May-12 10:03:00	83.0	24.7	5.0	
18-May-12 10:04:00	83.0	24.7	5.0	
18-May-12 10:05:00	83.0	24.7	5.0	
18-May-12 10:06:00	83.1	24.7	5.0	
18-May-12 10:07:00	83.1	24.7	5.0	
18-May-12 10:08:00	83.1	24.7	5.0	
18-May-12 10:09:00	83.1	24.7	5.0	
18-May-12 10:10:00	83.2	24.7	5.0	
18-May-12 10:11:00	83.2	24.7	5.0	
18-May-12 10:12:00	83.2	24.7	5.0	
18-May-12 10:13:00	83.2	24.7	5.0	
18-May-12 10:14:00	83.3	24.7	5.0	
18-May-12 10:15:00	83.3	24.7	5.0	

AVG Fuel
Avg TEMP
HI

18000.0 lbs/hr
82.5 deg F
350.2 mmbTU/hr

Avon Park 5/18/12 9:15 5/18/12 10:15 lm	 Progress Energy	P2		
	GGA LIQUID RTD TEMPERATURE	UNIT1 GROSS POWER OUT PE	Fuel Oil Flow	
	APP02_U2FLEX:P2B_LIQ_TMP.MEAS	APP02_GROSS POWER OUT.PE	A + B	
	<i>Deg F</i>	<i>MW</i>	<i>lbs/s</i>	
18-May-12 09:15:00	82.8	24.7	5.1	
18-May-12 09:16:00	82.8	24.7	5.1	
18-May-12 09:17:00	82.8	24.7	5.1	
18-May-12 09:18:00	82.9	24.7	5.1	
18-May-12 09:19:00	82.9	24.7	5.1	
18-May-12 09:20:00	82.9	24.7	5.1	
18-May-12 09:21:00	82.9	24.7	5.1	
18-May-12 09:22:00	82.9	24.7	5.1	
18-May-12 09:23:00	82.9	24.7	5.1	
18-May-12 09:24:00	82.9	24.7	5.1	
18-May-12 09:25:00	82.9	24.7	5.1	
18-May-12 09:26:00	82.9	24.7	5.1	
18-May-12 09:27:00	82.9	24.7	5.1	
18-May-12 09:28:00	83.0	24.7	5.1	
18-May-12 09:29:00	83.0	24.7	5.1	
18-May-12 09:30:00	83.0	24.7	5.1	
18-May-12 09:31:00	83.0	24.7	5.1	
18-May-12 09:32:00	83.0	24.7	5.1	
18-May-12 09:33:00	83.0	24.7	5.1	
18-May-12 09:34:00	83.0	24.7	5.1	
18-May-12 09:35:00	83.0	24.7	5.1	
18-May-12 09:36:00	83.0	24.7	5.1	
18-May-12 09:37:00	83.0	24.7	5.1	
18-May-12 09:38:00	83.1	24.7	5.1	
18-May-12 09:39:00	83.1	24.7	5.1	
18-May-12 09:40:00	83.1	24.7	5.1	
18-May-12 09:41:00	83.1	24.7	5.1	
18-May-12 09:42:00	83.1	24.7	5.1	
18-May-12 09:43:00	83.1	24.7	5.1	
18-May-12 09:44:00	83.1	24.7	5.1	
18-May-12 09:45:00	83.1	24.7	5.1	
18-May-12 09:46:00	83.1	24.7	5.1	
18-May-12 09:47:00	83.1	24.7	5.1	
18-May-12 09:48:00	83.2	24.7	5.1	
18-May-12 09:49:00	83.2	24.7	5.1	
18-May-12 09:50:00	83.2	24.7	5.1	
18-May-12 09:51:00	83.2	24.7	5.1	
18-May-12 09:52:00	83.2	24.7	5.1	
18-May-12 09:53:00	83.2	24.7	5.1	
18-May-12 09:54:00	83.2	24.7	5.1	
18-May-12 09:55:00	83.2	24.7	5.1	
18-May-12 09:56:00	83.2	24.7	5.1	
18-May-12 09:57:00	83.2	24.7	5.1	
18-May-12 09:58:00	83.3	24.7	5.1	
18-May-12 09:59:00	83.3	24.7	5.1	
18-May-12 10:00:00	83.3	24.7	5.1	
18-May-12 10:01:00	83.3	24.7	5.1	
18-May-12 10:02:00	83.3	24.7	5.1	
18-May-12 10:03:00	83.3	24.7	5.1	
18-May-12 10:04:00	83.3	24.7	5.1	
18-May-12 10:05:00	83.3	24.7	5.1	
18-May-12 10:06:00	83.4	24.7	5.1	
18-May-12 10:07:00	83.4	24.7	5.1	
18-May-12 10:08:00	83.4	24.7	5.1	
18-May-12 10:09:00	83.4	24.7	5.1	
18-May-12 10:10:00	83.4	24.7	5.1	
18-May-12 10:11:00	83.5	24.7	5.1	
18-May-12 10:12:00	83.5	24.7	5.1	
18-May-12 10:13:00	83.5	24.7	5.1	
18-May-12 10:14:00	83.5	24.7	5.1	
18-May-12 10:15:00	83.5	24.7	5.1	

AVG Fuel
Avg TEMP
HI

18360.0 lbs/hr
83.1 deg F
357.2 mmbTU/hr

Appendix B: Method 9 Support Data

VE Field Documentation
VE Observers Certificate

RECORD OF VISUAL DETERMINATION OF OPACITY

SOURCE/PROCESS INFORMATION **OBSERVATION RECORD**

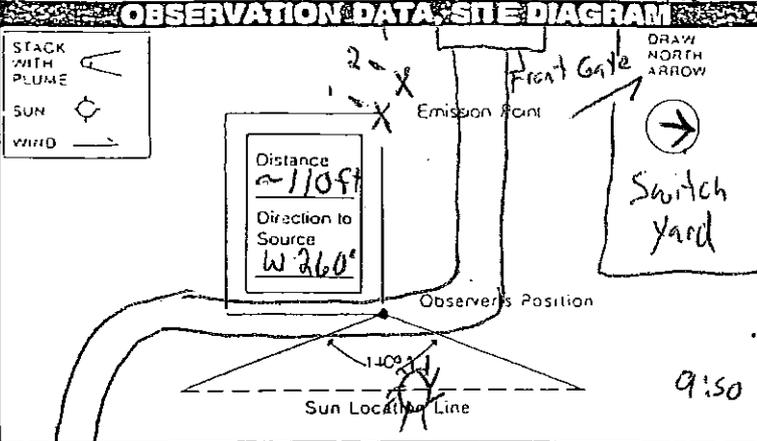
FACILITY NAME: **AJLC PEF Aven park**
 SOURCE NAME: **Units 1 + 2 (eq 003/004) 055003 006-AV.**
 LOCATION ADDRESS: **1112 Memorial Dr**
 CITY: **Aven park** STATE: **FL** ZIP: **33825**
 UNIT LOAD: **Base** HEAT UNIT: **TBD**
 CONTROL EQUIPMENT: **N/A** OPERATING MODE: **Normal**
 FUEL TYPE: **Oil** PERMITTED RATE: **56206 mmbtu/hr**
 DESCRIBE EMISSION POINT: **two rectangular tan stacks on site**
 HEIGHT ABOVE GROUND LEVEL: **6 ft** HEIGHT OF OBSERVATION POINT: **~35 ft**

DATE: **5-18-12** **003** STACK A **1** **004** STACK B **2**

DATE	HOUR	MINUTE	0	15	30	45	0	15	30	45
9:15		0	5	15	5	10	16	15	16	15
		1	16	10	10	10	15	10	15	15
		2	5	5	5	10	15	15	15	15
		3	10	10	10	10	15	10	10	10
		4	10	10	10	10	10	10	10	15
9:20		5	10	10	10	15	15	10	15	15
		6	10	10	10	15	15	10	20	15
		7	10	10	10	10	10	10	15	15
		8	10	10	10	10	15	15	15	10
		9	10	10	10	10	10	15	15	15
9:25		10	10	10	10	10	15	15	10	15
		11	10	15	10	10	15	15	10	10
		12	10	10	10	10	15	15	10	15
		13	10	5	10	10	10	10	10	15
		14	10	15	15	10	15	15	15	15
9:30		15	10	15	10	10	15	15	15	15
		16	10	10	10	10	15	15	15	15
		17	10	10	10	10	15	10	15	15
		18	10	10	10	10	15	15	15	15
		19	10	10	10	10	10	15	15	15
9:35		20	10	16	10	15	10	15	15	15
		21	10	15	10	15	10	15	15	10
		22	10	10	10	10	10	15	15	10
		23	10	10	10	10	15	10	10	15
		24	10	10	10	10	15	15	10	10
9:40		25	15	10	15	15	15	10	15	15
		26	10	10	15	10	15	10	15	15
		27	10	10	10	10	15	15	10	15
		28	10	10	15	10	10	15	15	15
		29	10	10	10	10	15	15	10	15
9:45		30	10	10	15	15	10	10	15	15
		31	10	15	15	10	10	10	15	15
		32	10	10	10	10	10	10	15	10
		33	10	10	10	10	16	15	10	10
JLC		34	15	15	10	15	15	15	15	15
10:00		35	10	15	15	15	15	15	15	15
		36	10	10	10	10	15	15	15	15
		37	10	10	10	10	15	15	10	15
		38	10	10	10	10	15	10	10	20
JLC		39	10	10	10	10	10	10	15	15
10:05		40	10	10	10	10	15	15	15	15
		41	10	10	10	10	15	10	15	15
		42	10	10	10	10	15	15	15	15
		43	10	10	10	10	15	10	15	15
		44	10	10	10	10	15	15	15	15
10:00		45	10	10	10	10	15	10	15	15
		46	10	10	10	10	15	10	15	15
		47	10	10	10	10	10	10	10	10
		48	15	15	10	10	15	15	15	10
		49	10	15	10	10	10	15	15	15
10:05		50	10	10	10	10	10	10	15	10
		51	10	10	10	10	10	15	15	10
		52	10	10	10	10	15	15	15	15
		53	10	10	10	10	15	15	15	15
		54	10	10	10	10	15	15	10	15
10:10		55	10	10	10	10	15	15	15	15
		56	10	10	10	10	15	15	15	15
		57	10	10	10	10	15	15	15	15
		58	10	10	10	10	15	15	15	15
		59	10	10	10	10	15	10	10	10

EMISSIONS DESCRIPTION
 DESCRIBE EMISSIONS: **Heat trace/smoke** END: **Same**
 PLUME COLOR: **Clear/Grey** PLUME TYPE: **Coneing**
 WATER DROPLETS PRESENT: Yes No Attached Detached

METEOROLOGICAL INFORMATION
 BACKGROUND: **Sky** END: **Same** BACKGROUND COLOR: **Blue** END: **Same**
 SKY CONDITIONS - CLOUD COVER: **Clear** END: **Same** AMBIENT TEMPERATURE: **76** END: **80 (SLC)**
 WIND SPEED: **Direction** END: **Same** WIND DIRECTION: **NNW** END: **Same**
 WIND SPEED: **4 mph** END: **Same**



SUMMARY OF AVERAGE OPACITY

SET NUMBER	TIME		OPACITY	
	START	END	SUM	AVERAGE
				9:55

COMPLIANCE INFORMATION
 RANGE OF OPACITY READINGS
 MAXIMUM: **1=15 2=15 20** MINIMUM: **1=5 2=5**
 HIGHEST 8 MINUTE AVERAGE: **1=12.1, 2=14.8**

COMMENTS: **Angle 8°**

OBSERVER: **Jash Cooper** DATE: **5-18-12**
 SIGNATURE: *Jash Cooper*
 ID NUMBER: **105822** EXPIRATION: **8-9-12**

CEM Solutions, Inc.
Method 9: Determination of the Opacity of Emissions from Stationary Sources
6-Minute Data Reduction

Company: PEF
 Facility: Avon Park
 Unit No.: 1
 Sample Location: Stack

Date: 5/18/2012
 Project #: 5174
 Operator: Josh Cooper

Time	minutes	Readings			
		0	15	30	45
9:15	0	5	15	5	10
9:16	1	10	10	10	10
9:17	2	5	5	5	10
9:18	3	10	10	10	10
9:19	4	10	10	10	10
9:20	5	10	10	10	15
9:21	6	10	10	10	15
9:22	7	10	10	10	10
9:23	8	10	10	10	10
9:24	9	10	10	10	10
9:25	10	10	10	10	10
9:26	11	10	15	10	10
9:27	12	10	10	10	10
9:28	13	10	5	10	10
9:29	14	10	15	15	10
9:30	15	10	15	10	10
9:31	16	10	10	10	10
9:32	17	10	10	10	10
9:33	18	10	10	10	10
9:34	19	10	10	10	10
9:35	20	10	10	10	15
9:36	21	10	15	10	15
9:37	22	10	10	10	10
9:38	23	10	10	10	10
9:39	24	10	10	10	10
9:40	25	15	10	15	15
9:41	26	10	10	15	10
9:42	27	10	10	10	10
9:43	28	10	10	15	10
9:44	29	10	10	10	10
9:45	30	10	10	15	15

Time	minutes	Readings			
		0	15	30	45
9:46	31	10	15	15	10
9:47	32	10	10	10	10
9:48	33	10	10	10	10
9:49	34	15	15	10	15
9:50	35	10	15	15	15
9:51	36	10	10	10	10
9:52	37	10	10	10	10
9:53	38	10	10	10	10
9:54	39	10	10	10	10
9:55	40	10	10	10	10
9:56	41	10	10	10	10
9:57	42	10	10	10	10
9:58	43	10	10	10	10
9:59	44	10	10	10	10
10:00	45	10	10	10	10
10:01	46	10	10	10	10
10:02	47	10	10	10	10
10:03	48	15	15	10	10
10:04	49	10	15	10	10
10:05	50	10	10	10	10
10:06	51	10	10	10	10
10:07	52	10	10	10	10
10:08	53	10	10	10	10
10:09	54	10	10	10	10
10:10	55	10	10	10	10
10:11	56	10	10	10	10
10:12	57	10	10	10	
10:13	58	10	10	10	10
10:14	59	10	10	10	

Highest 6-minute average: 12.1

Highest 6-Min Average Start Time: 9:45:00
 Highest 6-Min Average End Time: 9:51:00

CEM Solutions, Inc.
Method 9: Determination of the Opacity of Emissions from Stationary Sources
6-Minute Data Reduction

Company: PEF
 Facility: Avon Park
 Unit No.: 2
 Sample Location: Stack

Date: 5/18/2012
 Project #: 5174
 Operator: Josh Cooper

Time	minutes	Readings			
		0	15	30	45
9:15	0	10	15	10	15
9:16	1	15	10	15	15
9:17	2	15	15	15	15
9:18	3	15	10	10	10
9:19	4	10	10	10	15
9:20	5	15	10	15	15
9:21	6	15	10	20	15
9:22	7	10	10	15	15
9:23	8	15	15	15	10
9:24	9	10	15	15	15
9:25	10	15	15	10	15
9:26	11	15	15	10	10
9:27	12	15	15	10	15
9:28	13	10	10	10	15
9:29	14	15	15	15	15
9:30	15	15	15	15	15
9:31	16	15	15	15	15
9:32	17	15	10	15	15
9:33	18	15	15	15	15
9:34	19	10	15	15	15
9:35	20	10	15	15	15
9:36	21	10	15	15	10
9:37	22	10	15	15	10
9:38	23	15	10	10	15
9:39	24	15	15	10	10
9:40	25	15	10	15	15
9:41	26	15	10	15	15
9:42	27	15	15	10	15
9:43	28	10	15	15	15
9:44	29	15	15	10	15
9:45	30	10	10	15	15

Time	minutes	Readings			
		0	15	30	45
9:46	31	10	10	15	15
9:47	32	10	10	15	10
9:48	33	10	15	10	10
9:49	34	15	15	15	15
9:50	35	15	15	15	15
9:51	36	15	15	15	15
9:52	37	15	15	10	15
9:53	38	15	10	10	20
9:54	39	10	10	15	15
9:55	40	15	15	15	15
9:56	41	15	10	15	15
9:57	42	15	15	15	15
9:58	43	15	10	15	15
9:59	44	15	15	15	15
10:00	45	15	10	15	15
10:01	46	15	10	15	15
10:02	47	10	10	10	10
10:03	48	15	15	15	10
10:04	49	10	15	15	15
10:05	50	10	10	15	10
10:06	51	10	15	15	10
10:07	52	15	15	15	15
10:08	53	15	15	15	15
10:09	54	15	15	10	15
10:10	55	15	15	15	15
10:11	56	15	15	15	15
10:12	57	15	15	15	15
10:13	58	15	15	15	15
10:14	59	15	10	10	10

Highest 6-minute average: 14.8

Highest 6-Min Average Start Time: 10:07:00
 Highest 6-Min Average End Time: 10:13:00



VISIBLE EMISSIONS EVALUATOR

Joshua Cooper

This is to certify that the above named observer has met the specifications of Federal Reference Method 9 and is qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates, Inc. of Raleigh, N.C.

This certificate is valid for six months from date of issue.

400822

Certificate Number

COO752114

Student ID Number

2/8/2012

Date of Certification

Orlando, FL

Location

8/9/2012

Certification Expiration Date

TMPF09

Last Lecture

Marty Hughes
Director of Training