st. johns river POWER PARK

March 14, 2006

Ms. Trina L. Vielhauer, Chief Bureau of Air Regulation
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

Attention: Mr. Mike Halpin, P.E., New Review Section

RE: Northside Generating Station/St. Johns River Power Park (SJRPP)
Title V Permit 0310045-014-AC; PSD-FL-10

Dear Mr. Halpin:

SJRPP has evaluated the suggestions in the Department's letter dated October 20, 2005 related to the annual emissions of carbon monoxide reported for Units 1 and 2. Specifically, SJRPP evaluated the Department suggestions stated below:

" You are encouraged to use due diligence in ensuring that:

1. Historical emissions are accurate, and that submittals to this Department are appropriately reflective of actual operation and conditions, and
2. Emissions which increase or decrease as a result of the authorization within DEP File No. 0310045-014-AC are accounted for."

As summarized in our letter of September 29, 2005, the annual CO emissions submitted are part of the application and included in the Department's authorization were from the annual operating reports (AORs). The historical CO emission rates reported in the AOR were developed using AP-42 emission factors. The use of these factors was an artifact of the AOR preparation and not representative of the historical stack test data. Stack tests data were performed using EPA Method 10 during the 5-years from 1997 through 2001 to fulfill the Department's requirement that CO emissions did not result in a significant net increase as a result of co-firing up to 20 percent petroleum coke by weight with coal. While the average CO emissions during this 5-year period was 0.123 lb/MMBtu, it was quite variable between years and units suggesting that even individual stack tests may not be appropriate to determine accurate historical emissions.

In addition, the Department's recent adoption of Rule 62-210.370 Emissions Computation and Reporting, clearly outlines the preferred approach for determining the most accurate computation of annual emissions through a hierarchy of technical methods. In summary, the preferred hierarchy in Rule 62-210.370 is:

- continuous emission monitoring systems (CEMS) including continuous parameter monitoring systems (CPMS) and predictive emissions monitoring systems (PEMS),
- mass-balance, and
- emission factors.

SJRPP Units 1 and 2 have been equipped with CEMS for SO_2 and NO_x since these units began operation. The SO_2 and NO_x monitors (as well as diluent monitoring) have been used for compliance purposes. In the mid-1990's, CO monitors were added for operational purposes and not required for compliance or any other applicable requirement. The CO monitoring data is obtained in the same way the SO_2 and NO_x data and electronically stored. Relatively accuracy tests audits (RATA) were performed 2001, 2003, and 2004. With the exception of the 2003 RATA for Unit 1, all RATA passed the requirements. Since CO CEMs were not included in any applicable requirement for Units 1 and 2 these RATA reports were not previously submitted to the Department. In light of the Department's letter of October 20, 2005 and the promulgation of Rule 62-210.370 F.A.C., the use of the existing continuous CO monitors for reporting historical emissions would be the most appropriate method. However, to make sure these monitors were still fully functional and appropriate for this purpose, SJRPP scheduled and conducted a RATA of the CO monitors in November 2005. The results of the RATA determined that the CO monitors passed the criteria. The RATA test report is attached. Therefore, SJRPP proposes to use the CO CEMS for obtaining and reporting historical CO emissions.

Table CO-CEMS presents data for 2000 through 2004 obtained from the CO CEMS. Recognizing that the information in the AORs did not represent the most accurate method for calculating historical CO emissions, revisions to the AORS will be submitted for CO for the years 2000 through 2004 with the 2005 AOR due March 1, 2006. The AOR for 2005 and future years will use the CO CEMS and the RATA reports will be submitted to the compliance authority on the same schedule as that for the SO_2 and NO_x CEMS.

Based on the updated information on CO emissions, SJRPP requests that the table contained in the Technical Evaluation and Preliminary Determination be revised as indicated below:

Pollutant	**2001 Actual Emissions (TPY)**	**2002 Actual Emissions (TPY)**	**2001–2002 Average (TPY)**	**PSD Significant Emission Rates (TPY)**	**Maximum average Emission Rate without a PSD review (TPY)**
NO_X	26379.1	26738.5	26558.8	40	26598.7
CO	**14,463.5**	**12,891.6**	**13,677.5**	100	**13,776.5**
VOC	118.873	118.179	118.53	40	158.5
SO_2	22535.41	20902.199	21718.8	40	21758.7
SAM	1311.0	1322.9	1316.9	7	1323.8
PM	317.258	326.2401	321.75	25	346.7
PM_{10}	72.964	75.596	74.28	15	89.2
Pb	1.21	0.81	1.01	0.6	1.59

Note: Years 2001 and 2002 were proposed by the applicant as a "representative" period for comparison to future emissions.

No changes are required in the permit conditions issued by the Department. The requested change would only affect the basis for comparing future actual emissions of CO with the historical emissions for 2001-2002. The SJRPP appreciates the Department's consideration in this matter. Please call Mr. Jay Worley at (904) 665-8729 or our environmental consultant Mr. Ken Kosky, P.E. (352) 336-5600) if there are any questions.

Sincerely,

Paul M. Smith

Paul M. Smith
Alternate Responsible Official
Plant Manager
St. Johns River Power Park

Enclosures

cc: Hamilton Oven, P.E., Siting Coordination Office
Jay Worley, SJRPP
Ken Kosky, Golder & Associates

Table CO-CEMS. Historical CO Emissons Using Continous Emissions Monitors

Year	Unit	Heat Input (MMBtu)	CO CEMs (lb/MMBtu)	CEMs Total Tons Per Unit	CEMs Total Tons Per Plant
2000	1	49,485,420	0.327	8,090.9	
	2	45,454,152	0.330	7,499.9	15,590.8
2001	1	47,963,552	0.239	5,731.6	
	2	48,645,432	0.359	8,731.9	14,463.5
2002	1	50,932,641	0.262	6,672.2	
	2	44,905,573	0.277	6,219.4	12,891.6
2003	1	44,949,751	0.251	5,641.2	
	2	48,171,325	0.261	6,286.4	11,927.6
2004	1	50,640,690	0.188	4,760.2	
	2	38,718,787	0.256	4,956.0	9,716.2
	2001 and 2002 used as baseline emissions				13,677.5

COASTAL AIR CONSULTING INC.

1531 Wyngate Drive DeLand, FL 32724
Phone (386) 943 9241 / Cell (386) 451-0169 / Fax (386) 943 9212

COMPLETE EMISSIONS TESTING SERVICES • PERMITTING ASSISTANCE • CEMS CERTIFICATION • AMBIENT AIR MONITORING

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Emissions Test Report

No. 130-023

ST. JOHNS RIVER POWER PARK

Units 1 & 2

CARBON MONOXIDE RELATIVE ACCURACY TEST AUDIT REPORT

Prepared for:

St. Johns River Power Park
11201 New Berlin Road
Jacksonville, FL 32226

Prepared by:

Coastal Air Consulting, Inc.
1531 Wyngate Dr.
DeLand, FL 32724
(386) 943-9241

December 17, 2005

STATEMENT OF VALIDITY

All testing activities and results represented herein were conducted and obtained in accordance with the approved EPA methods listed in 40 CFR Part 60. The contents have been reviewed and verified to be true and correct.

Stephen C. Webb

Stephen C. Webb
President
Coastal Air Consulting, Inc.
1531 Wyngate Dr.
DeLand, FL 32724
(386) 943-9241

PROJECT STATISTICS

Client:	St. Johns River Power Park
Facility:	SJRPP Units 1 & 2
Location:	11201 New Berlin Road Jacksonville, FL 32226
Type of Process Tested:	Coal Fired Utility Steam Generating Unit
Test Protocols Performed:	Carbon Monoxide-EPA Method 10 Oxygen/Carbon Dioxide-EPA Method 3A
Source Analyzers:	TECO CO – 48C
Testing Firm:	Coastal Air Consulting, Inc. 1531 Wyngate Dr. DeLand, FL 32724
Test Personnel:	Steve Webb — Site Supervisor Bob Righter — Chemist Taylor Smith — Technician
Test Date:	December 9 & 10, 2005
Client Representative:	Bruce Kofler
Observers:	William Coffman — City of Jacksonville

TABLE OF CONTENTS

1.0 Introduction

Coastal Air Consulting, Inc. (Coastal) was contracted by SJRPP to determine the relative accuracy of the Continuous Emissions Monitoring System (CEMS) Carbon Monoxide (CO) at the SJRPP Units 1 & 2 Stack in Jacksonville, Florida.

The sampling program was conducted the week of November 7, 2005. The RATA was performed by Coastal personnel. Mr. Bruce Kofler of SJRPP coordinated plant operations during testing activities.

2.0 Test Program Summary

A summary of test results developed by this source sampling program is presented in Table 1.

TABLE 1
Relative Accuracy Summary
Unit 1

PARAMETERS	LOCATION	RELATIVE ACCURACY	ALLOWABLE
CO (ppm)	Stack	4.936	10%
CO (lb/mmbtu)	Stack	9.595	10%
CO_2 (%)	Stack	4.573	20%

TABLE 1
Relative Accuracy Summary
Unit 2

PARAMETERS	LOCATION	RELATIVE ACCURACY	ALLOWABLE
CO (ppm)	Stack	9.473	10%
CO (lb/mmbtu)	Stack	6.655	10%
CO_2 (%)	Stack	3.048	20%

3.0 Results of Testing

These results indicate that Units 1 & 2 passes the RATA at the time of testing under normal operating conditions. The Individual test run results are tabulated in Appendix 1.

4.0 Description of Source

SJRPP Units 1 & 2 are coal fired utility steam generators. The flue gas is exhausted through the Units 1 & 2 stack. A schematic of the process and stack sampling location is included in Appendix 3 "Figures".

5.0 Sampling Procedures

EPA testing protocols utilized during this test program include the following;

EPA Method 10	Determination of Carbon Monoxide Emissions From Stationary Sources (Instrumental Analyzer Method)
EPA Method 3A	Gas Analysis for CO_2, O_2, Excess Air and Dry Molecular Weight (Instrumental Analyzer Method)
EPA Method 4	Determination of Moisture Content in Stack Gas

6.0 Operating Conditions

SJRPP personnel monitored operating conditions throughout the duration of the sampling program.

7.0 Quality Assurance Procedures

Quality assurance procedures followed during these testing activities were applied consistent with the requirements outlined by the EPA methods referenced in 40 CFR Part 60. Analyzer calibrations, system bias and drift checks were completed before and after each sample run utilizing EPA Protocol 1 calibration gases.

APPENDIX 1
Reference Data

UNIT 1

COASTAL AIR CONSULTING, INC.

CO PPM RELATIVE ACCURACY

CLIENT: St. Johns River Power Park
SITE: SJRPP
UNIT: 1
LOAD: Normal
DATE: 11/10/05

TECO
MODEL # 48

RUN	TIME START	TIME END	REFERENCE METHOD* (PPM)	CEM RESPONSE (PPM)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	10:15	10:36	105.903	101.900	4.003	16.02421694
2	10:47	11:08	111.992	109.300	2.692	7.24471519
3	11:21	11:42	134.257	133.800	0.457	0.20881646
4	11:53	12:14	110.298	106.000	4.298	18.46884756
5	12:24	12:45	116.166	109.400	6.766	45.77783859
6	13:04	13:25	78.220	73.200	5.020	25.20039313
7	13:33	13:54	72.475	71.000	1.475	2.17548120
8	14:03	14:24	86.922	82.900	4.022	16.17693777
9	14:37	14:58	75.918	74.600	1.318	1.73843647
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			99.128	95.789	30.051	133.0156833

**MEAN DIFFERENCE, d (Eq. A-7)	3.339
**STANDARD DEVIATION, Sd (Eq. A-8)	2.02
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	1.554
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	4.936

** 40 CFR 60

COASTAL AIR CONSULTING, INC.

CO LB/MMBTU RELATIVE ACCURACY

CLIENT: St. Johns River Power Park
SITE: SJRPP
UNIT: 1
LOAD: Normal
DATE: 11/10/05

TECO
MODEL # 48

RUN	TIME START	TIME END	REFERENCE METHOD* (LB/mmBtu)	CEM RESPONSE (LB/mmBtu)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	10:15	10:36	0.122	0.112	0.010	0.00010000
2	10:47	11:08	0.128	0.120	0.008	0.00006400
3	11:21	11:42	0.154	0.147	0.007	0.00004900
4	11:53	12:14	0.127	0.116	0.011	0.00012100
5	12:24	12:45	0.134	0.120	0.014	0.00019600
6	13:04	13:25	0.091	0.081	0.010	0.00010000
7	13:33	13:54	0.083	0.079	0.004	0.00001600
8	14:03	14:24	0.100	0.092	0.008	0.00006400
9	14:37	14:58	0.087	0.083	0.004	0.00001600
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			0.114	0.106	0.076	0.0007260

**MEAN DIFFERENCE, d (Eq. A-7)	0.008
**STANDARD DEVIATION, Sd (Eq. A-8)	0.00
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	0.002
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	9.595

** 40 CFR 60

COASTAL AIR CONSULTING, INC.

CO2 % RELATIVE ACCURACY

CLIENT: St. Johns River Power Park
SITE: SJRPP
UNIT: 1
LOAD: Normal
DATE: 11/10/05

TECO
MODEL # 41H
SERIAL # 41H-49357-282

RUN	TIME START	TIME END	REFERENCE METHOD* (% CO2)	CEM RESPONSE (% CO2)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	10:15	10:36	11.40	11.80	-0.399	0.160
2	10:47	11:08	11.48	11.93	-0.454	0.206
3	11:21	11:42	11.40	11.96	-0.561	0.314
4	11:53	12:14	11.39	11.90	-0.506	0.256
5	12:24	12:45	11.36	11.85	-0.487	0.237
6	13:04	13:25	11.24	11.79	-0.551	0.304
7	13:33	13:54	11.46	11.75	-0.288	0.083
8	14:03	14:24	11.35	11.77	-0.422	0.178
9	14:37	14:58	11.36	11.80	-0.437	0.191
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			11.38	11.84	-4.105	1.928

**MEAN DIFFERENCE, d (Eq. A-7)	-0.456
**STANDARD DEVIATION, Sd (Eq. A-8)	0.084
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	0.064
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	4.573

** 40 CFR 60

REFERENCE METHOD VALUES
MOISTURE CORRECTION
SJRPP 1
CO

RUN #	REFERENCE METHOD (ppm/%, dry)	MOISTURE (%)	MOISTURE CORRECTION (1-moisture/100)	REFERENCE METHOD (ppm/%, wet)
CO ppm				
1	122.99	13.89	0.861	105.90
2	129.50	13.52	0.865	111.99
3	156.64	14.29	0.857	134.26
4	128.17	13.94	0.861	110.30
5	135.35	14.17	0.858	116.17
6	91.52	14.53	0.855	78.22
7	83.34	13.04	0.870	72.47
8	101.26	14.16	0.858	86.92
9	87.99	13.72	0.863	75.92
CO2 %				
1	13.24	13.89	0.861	11.40
2	13.27	13.52	0.865	11.48
3	13.30	14.29	0.857	11.40
4	13.24	13.94	0.861	11.39
5	13.24	14.17	0.858	11.36
6	13.15	14.53	0.855	11.24
7	13.18	13.04	0.870	11.46
8	13.22	14.16	0.858	11.35
9	13.17	13.72	0.863	11.36

UNIT 1 CO RATA TEST DATA SHEET

Client: St. Johns River Power Park

Site: SJRPP 1 | Bar. Pressure (in.Hg): 29.70 | Load: Normal

Method: 1 - 2

Run Number: 1-3

Date: 11/10/05 | Operators: RRR/JTS

MOISTURE TEST FIELD DATA SHEET

Meter Box#: CAC 1 | Method: 4 | Run Number: 1

Ini. Leak Rate:0.000 @10" | Impinger Set: D

Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 370.100	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	10:15	10	378.2	1.80	87	87	3.0	54
2		20	385.1	1.80	90	90	3.0	56
3	10:45	30	393.869	1.80	91	91	3.0	54
			23.769	1.800	89.3	89.3		
						89.3		

H20 COLLECTED (g) = 75.4 | VOL WATER COLLECTED (SCF) = 3.56

GAS SAMPLED (DSCF) = 22.034 | MOISTURE IN STACK GAS (% VOL) = 13.89

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 2

Ini. Leak Rate:0.000 @10" | Impinger Set: D

Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 394.000	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	10:47	10	402.3	1.80	92	92	3.0	55
2		20	410.7	1.80	93	93	3.0	56
3	11:17	30	418.596	1.80	94	94	3.0	58
			24.596	1.800	93.0	93.0		
						93.0		

H20 COLLECTED (g) = 75.1 | VOL WATER COLLECTED (SCF) = 3.54

GAS SAMPLED (DSCF) = 22.650 | MOISTURE IN STACK GAS (% VOL) = 13.52

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 3

Ini. Leak Rate:0.000 @10" | Impinger Set: D

Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 420.413	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	11:21	10	428.7	1.80	93	93	3.0	54
2		20	435.6	1.80	95	95	3.0	54
3	11:51	30	444.549	1.80	95	95	3.0	56
			24.136	1.800	94.3	94.3		
						94.3		

H20 COLLECTED (g) = 78.4 | VOL WATER COLLECTED (SCF) = 3.70

GAS SAMPLED (DSCF) = 22.173 | MOISTURE IN STACK GAS (% VOL) = 14.29

UNIT 1 CO RATA TEST DATA SHEET

Client: St. Johns River Power Park
Site: SJRPP 1 | Bar. Pressure (in.Hg): 29.70 | Load: Normal
Method: 1 - 2
Run Number: 4 - 6
Date: 11/10/05 | Operators: RRR/JTS

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 4
Ini. Leak Rate:0.000 @10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 444.604	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	11:53	10	451.5	1.80	94	94	3.0	54
2		20	458.3	1.80	95	95	3.0	55
3	12:05	30	469.340	1.80	96	96	3.0	56
			24.736	1.800	95.0	95.0		
						95.0		

H20 COLLECTED (g) = 78.0 | VOL WATER COLLECTED (SCF) = 3.68
GAS SAMPLED (DSCF) = 22.696 | MOISTURE IN STACK GAS (% VOL) = 13.94

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 5
Ini. Leak Rate:0.000 @8" | Impinger Set: D
Fin. Leak Rate:0.000 @8" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 469.402	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	12:24	10	477.4	1.80	95	95	3.0	54
2		20	485.3	1.80	95	95	3.0	56
3	12:54	30	493.345	1.80	96	96	3.0	58
			23.943	1.800	95.3	95.3		
						95.3		

H20 COLLECTED (g) = 76.9 | VOL WATER COLLECTED (SCF) = 3.63
GAS SAMPLED (DSCF) = 21.956 | MOISTURE IN STACK GAS (% VOL) = 14.17

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 6
Ini. Leak Rate:0.000 @10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 493.401	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	13:04	10	500.1	1.80	95	95	3.0	52
2		20	507.4	1.80	95	95	3.0	54
3	13:34	30	516.595	1.80	96	96	3.0	55
			23.194	1.800	95.3	95.3		
						95.3		

H20 COLLECTED (g) = 76.7 | VOL WATER COLLECTED (SCF) = 3.62
GAS SAMPLED (DSCF) = 21.269 | MOISTURE IN STACK GAS (% VOL) = 14.53

UNIT 1 CO RATA TEST DATA SHEET

Client: St. Johns River Power Park
Site: SJRPP 1 Bar. Pressure (in.Hg): 29.70 Load: Normal
Method: 1 - 2
Run Number: 7 - 9
Date: 11/10/05 Operators: RRR/JTS

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 Method: 4 Run Number: 7
Ini. Leak Rate:0.000 @10" Impinger Set: D
Fin. Leak Rate:0.000 @10" Yi 0.972 Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 516.750	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	13:33	10	523.3	1.80	95	95	3.0	54
2		20	532.4	1.80	95	95	3.0	58
3	14:03	30	540.710	1.80	95	95	3.0	56
			23.960	1.800	95.0	95.0		
						95.0		

H20 COLLECTED (g) = 69.9 VOL WATER COLLECTED (SCF) = 3.30
GAS SAMPLED (DSCF) = 21.984 MOISTURE IN STACK GAS (% VOL) = 13.04

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 Method: 4 Run Number: 8
Ini. Leak Rate:0 000 @10" Impinger Set: D
Fin. Leak Rate:0.000 @10" Yi 0.972 Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 540.300	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	14:03	10	547.9	1.80	95	95	3.0	54
2		20	555.5	1.80	94	94	3.0	54
3	14.33	30	563.526	1.80	95	95	3.0	56
			23.226	1.800	94.7	94.7		
						94.7		

H20 COLLECTED (g) = 74.6 VOL WATER COLLECTED (SCF) = 3.52
GAS SAMPLED (DSCF) = 21.324 MOISTURE IN STACK GAS (% VOL) = 14.16

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 Method: 4 Run Number: 9
Ini. Leak Rate:0.000 10" Impinger Set: D
Fin. Leak Rate:0.000 @10" Yi 0.972 Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 563.601	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	14:37	10	571.2	1.80	94	94	3.0	52
2		20	579 5	1.80	96	96	3.0	54
3	15:07	30	587.383	1.80	97	97	3.0	56
			23 782	1.800	95 7	95 7		
						95.7		

H20 COLLECTED (g) = 73.5 VOL WATER COLLECTED (SCF) = 3.47
GAS SAMPLED (DSCF) = 21.795 MOISTURE IN STACK GAS (% VOL) = 13.72

ST. JOHNS RIVER POWER PARK
UNIT NO. 1 OUTLET STACK (CO)

11/10/05

ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 1 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1083.0	0.4	1084.0	0.4	0.1

RUN 1 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 10:15	6.09	13.18	87.00
11/10/2005 10:16	5.98	13.26	150.50
11/10/2005 10:17	5.88	13.35	150.00
11/10/2005 10:18	5.84	13.44	152.00
11/10/2005 10:19	5.89	13.39	153.50
11/10/2005 10:20	5.95	13.35	150.50
11/10/2005 10:21	5.81	13.35	157.50
11/10/2005 10:22	5.99	13.35	151.50
11/10/2005 10:23	5.94	13.32	148.50
11/10/2005 10:24	6.13	13.22	129.50
11/10/2005 10:25	6.21	13.08	103.50
11/10/2005 10:26	6.18	13.09	101.00
11/10/2005 10:27	6.22	13.08	71.00
11/10/2005 10:28	6.23	13.06	58.00
11/10/2005 10:29	6.21	13.06	66.50
11/10/2005 10:30	6.15	13.08	72.50
11/10/2005 10:31	6.07	13.17	88.00
11/10/2005 10:32	6.01	13.25	122.00
11/10/2005 10:33	5.91	13.29	133.50
11/10/2005 10:34	5.86	13.37	155.00
11/10/2005 10:35	5.88	13.39	159.50
11/10/2005 10:36	5.97	13.30	158.50
AVERAGES	6.02	13.24	123.61

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	6.02
CO2 %	13.24
CO PPM	122.99
CO LB/MMBTU	0.122

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 2 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1084.0	0.4	1083.0	0.4	-0.1

RUN 2 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 10:47	6.11	13.20	124.50
11/10/2005 10:48	6.01	13.25	123.50
11/10/2005 10:49	5.81	13.39	125.50
11/10/2005 10:50	5.93	13.37	157.50
11/10/2005 10:51	5.89	13.38	155.50
11/10/2005 10:52	5.93	13.36	155.50
11/10/2005 10:53	5.99	13.32	140.00
11/10/2005 10:54	5.97	13.32	153.00
11/10/2005 10:55	6.05	13.28	165.00
11/10/2005 10:56	6.08	13.23	126.50
11/10/2005 10:57	6.16	13.20	124.00
11/10/2005 10:58	6.18	13.10	87.50
11/10/2005 10:59	6.19	13.10	91.50
11/10/2005 11:00	6.09	13.19	122.00
11/10/2005 11:01	6.17	13.18	109.50
11/10/2005 11:02	6.14	13.14	99.50
11/10/2005 11:03	6.02	13.23	102.00
11/10/2005 11:04	6.08	13.23	112.50
11/10/2005 11:05	5.91	13.31	157.00
11/10/2005 11:06	5.85	13.38	144.50
11/10/2005 11:07	5.88	13.38	148.50
11/10/2005 11:08	5.89	13.37	140.50
AVERAGES	6.02	13.27	130.25

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	6.02
CO2 %	13.27
CO PPM	129.59
CO LB/MMBTU	0.128

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 3 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1083.0	0.4	1082.0	0.3	-0.1

RUN 3 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 11:21	5.82	13.37	159.50
11/10/2005 11:22	5.91	13.36	165.50
11/10/2005 11:23	5.88	13.35	176.50
11/10/2005 11:24	5.92	13.34	159.50
11/10/2005 11:25	5.89	13.37	163.50
11/10/2005 11:26	5.97	13.31	176.00
11/10/2005 11:27	5.91	13.35	172.00
11/10/2005 11:28	5.98	13.31	174.50
11/10/2005 11:29	6.04	13.26	129.00
11/10/2005 11:30	6.13	13.18	123.00
11/10/2005 11:31	6.08	13.22	116.50
11/10/2005 11:32	6.08	13.22	117.50
11/10/2005 11:33	6.16	13.16	117.00
11/10/2005 11:34	6.10	13.16	126.00
11/10/2005 11:35	6.02	13.20	163.00
11/10/2005 11:36	5.98	13.30	165.50
11/10/2005 11:37	5.88	13.34	172.50
11/10/2005 11:38	5.84	13.38	184.50
11/10/2005 11:39	5.86	13.36	182.50
11/10/2005 11:40	5.83	13.40	173.00
11/10/2005 11:41	5.81	13.41	178.00
11/10/2005 11:42	5.96	13.33	165.50
AVERAGES	5.96	13.30	157.30

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.96
CO2 %	13.30
CO PPM	156.64
CO LB/MMBTU	0.154

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 4 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1082.0	0.3	1080.0	0.2	-0.1

RUN 4 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 11:53	5.83	13.38	161.50
11/10/2005 11:54	5.87	13.36	172.00
11/10/2005 11:55	5.88	13.35	172.00
11/10/2005 11:56	5.92	13.33	156.50
11/10/2005 11:57	5.96	13.31	164.00
11/10/2005 11:58	6.02	13.24	145.00
11/10/2005 11:59	6.03	13.24	131.50
11/10/2005 12:00	6.13	13.14	98.50
11/10/2005 12:01	6.14	13.12	92.00
11/10/2005 12:02	6.14	13.10	81.50
11/10/2005 12:03	6.04	13.16	93.00
11/10/2005 12:04	6.06	13.18	98.00
11/10/2005 12:05	6.06	13.19	89.00
11/10/2005 12:06	6.07	13.13	99.00
11/10/2005 12:07	5.97	13.21	124.00
11/10/2005 12:08	5.89	13.32	144.00
11/10/2005 12:09	6.01	13.22	136.50
11/10/2005 12:10	5.87	13.30	136.00
11/10/2005 12:11	5.97	13.29	150.00
11/10/2005 12:12	6.03	13.19	116.00
11/10/2005 12:13	5.91	13.27	132.00
11/10/2005 12:14	5.91	13.32	135.50
AVERAGES	5.99	13.24	128.52

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.99
CO2 %	13.24
CO PPM	128.17
CO LB/MMBTU	0.127

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 5 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1080.0	0.2	1081.0	0.3	0.1

RUN 5 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 12:24	5.91	13.27	140.50
11/10/2005 12:25	5.87	13.33	160.00
11/10/2005 12:26	5.86	13.35	177.50
11/10/2005 12:27	5.84	13.37	178.00
11/10/2005 12:28	5.83	13.39	172.50
11/10/2005 12:29	5.86	13.35	176.00
11/10/2005 12:30	5.91	13.30	176.00
11/10/2005 12:31	5.94	13.29	177.50
11/10/2005 12:32	6.01	13.21	141.50
11/10/2005 12:33	6.13	13.10	104.50
11/10/2005 12:34	6.14	13.10	82.50
11/10/2005 12:35	6.23	13.03	68.50
11/10/2005 12:36	6.21	13.03	62.50
11/10/2005 12:37	6.13	13.08	71.00
11/10/2005 12:38	6.09	13.09	84.50
11/10/2005 12:39	5.99	13.17	125.50
11/10/2005 12:40	5.89	13.23	137.00
11/10/2005 12:41	5.83	13.34	123.00
11/10/2005 12:42	5.80	13.34	156.50
11/10/2005 12:43	5.84	13.35	164.00
11/10/2005 12:44	5.89	13.31	173.00
11/10/2005 12:45	6.02	13.23	132.50
AVERAGES	5.96	13.24	135.66

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.96
CO2 %	13.24
CO PPM	135.35
CO LB/MMBTU	0.134

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 6 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1081.0	0.3	1079.0	0.2	-0.1

RUN 6 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 13:04	6.11	13.17	72.50
11/10/2005 13:05	6.13	13.10	74.50
11/10/2005 13:06	6.11	13.11	72.00
11/10/2005 13:07	6.21	13.09	84.00
11/10/2005 13:08	6.11	13.10	72.00
11/10/2005 13:09	6.18	13.09	73.50
11/10/2005 13:10	6.09	13.14	94.50
11/10/2005 13:11	6.04	13.16	94.00
11/10/2005 13:12	5.97	13.25	119.50
11/10/2005 13:13	6.05	13.19	113.50
11/10/2005 13:14	6.01	13.21	117.00
11/10/2005 13:15	6.00	13.21	127.00
11/10/2005 13:16	6.02	13.23	131.00
11/10/2005 13:17	6.08	13.16	92.00
11/10/2005 13:18	6.04	13.15	88.00
11/10/2005 13:19	6.13	13.13	83.50
11/10/2005 13:20	6.03	13.14	88.00
11/10/2005 13:21	6.04	13.15	85.50
11/10/2005 13:22	6.09	13.16	84.50
11/10/2005 13:23	6.09	13.17	83.00
11/10/2005 13:24	6.08	13.15	83.50
11/10/2005 13:25	6.14	13.14	84.25
AVERAGES	6.08	13.15	91.69

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	6.08
CO2 %	13.15
CO PPM	91.52
CO LB/MMBTU	0.091

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 7 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.0	0.0	0.0
CO ppm	1076.00	1079.0	0.2	1080.0	0.2	0.1

RUN 7 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 13:33	6.14	13.18	86.00
11/10/2005 13:34	6.11	13.20	93.00
11/10/2005 13:35	6.16	13.16	88.50
11/10/2005 13:36	6.09	13.20	94.50
11/10/2005 13:37	6.16	13.17	82.50
11/10/2005 13:38	6.15	13.16	71.50
11/10/2005 13:39	6.16	13.15	71.50
11/10/2005 13:40	6.09	13.20	86.50
11/10/2005 13:41	6.15	13.20	80.00
11/10/2005 13:42	6.35	13.04	53.00
11/10/2005 13:43	6.35	13.01	41.00
11/10/2005 13:44	6.33	13.02	56.00
11/10/2005 13:45	6.29	13.05	65.00
11/10/2005 13:46	6.14	13.13	84.50
11/10/2005 13:47	6.15	13.16	95.00
11/10/2005 13:48	6.13	13.20	90.00
11/10/2005 13:49	6.04	13.21	87.00
11/10/2005 13:50	6.03	13.28	91.50
11/10/2005 13:51	5.94	13.35	107.50
11/10/2005 13:52	6.03	13.29	107.00
11/10/2005 13:53	5.98	13.34	101.00
11/10/2005 13:54	6.04	13.26	103.50
AVERAGES	6.14	13.18	83.45

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	6.14
CO2 %	13.18
CO PPM	83.34
CO LB/MMBTU	0.083

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 8 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.0	0.0	0.2	0.0	0.0
CO ppm	1076.00	1080.0	0.2	1082.0	0.3	0.1

RUN 8 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 14:03	6.11	13.19	92.50
11/10/2005 14:04	6.08	13.19	88.50
11/10/2005 14:05	5.96	13.22	102.00
11/10/2005 14:06	5.93	13.36	104.50
11/10/2005 14:07	6.01	13.30	117.00
11/10/2005 14:08	6.01	13.29	103.50
11/10/2005 14:09	6.05	13.25	115.50
11/10/2005 14:10	6.16	13.17	88.50
11/10/2005 14:11	6.09	13.20	99.00
11/10/2005 14:12	6.12	13.18	115.00
11/10/2005 14:13	6.23	13.12	92.00
11/10/2005 14:14	6.14	13.10	80.50
11/10/2005 14:15	6.24	13.11	87.00
11/10/2005 14:16	6.19	13.11	71.00
11/10/2005 14:17	6.12	13.16	84.50
11/10/2005 14:18	6.10	13.20	110.00
11/10/2005 14:19	6.06	13.22	115.50
11/10/2005 14:20	6.04	13.26	113.50
11/10/2005 14:21	5.99	13.25	110.50
11/10/2005 14:22	5.96	13.32	113.50
11/10/2005 14:23	5.97	13.35	119.50
11/10/2005 14:24	6.08	13.23	112.50
AVERAGES	6.07	13.22	101.64

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	6.07
CO2 %	13.22
CO PPM	101.26
CO LB/MMBTU	0.100

ST. JOHNS RIVER POWER PARK
UNIT NO. 1 OUTLET STACK (CO)

11/10/05

ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.3	0.0	0.0	
	CO ppm	0.00	0.0	0.0	0.0	
2000	CO ppm	1078.00	1076.0	-2.0	-0.1	48C-71754-369
	CO ppm	1685.00	1680.0	-5.0	-0.3	

RUN 9 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.00	0.2	0.0	0.3	0.0	0.0
CO ppm	1076.00	1082.0	0.3	1083.0	0.4	0.1

RUN 9 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/10/2005 14:37	6.13	13.16	95.00
11/10/2005 14:38	6.09	13.19	100.00
11/10/2005 14:39	6.05	13.23	102.00
11/10/2005 14:40	6.09	13.22	104.00
11/10/2005 14:41	6.09	13.20	95.00
11/10/2005 14:42	6.11	13.20	95.00
11/10/2005 14:43	6.15	13.18	83.50
11/10/2005 14:44	6.24	13.10	70.00
11/10/2005 14:45	6.24	13.08	67.50
11/10/2005 14:46	6.24	13.07	64.00
11/10/2005 14:47	6.24	13.08	69.00
11/10/2005 14:48	6.18	13.09	69.50
11/10/2005 14:49	6.24	13.11	70.00
11/10/2005 14:50	6.21	13.09	56.50
11/10/2005 14:51	6.14	13.14	82.50
11/10/2005 14:52	6.12	13.17	78.50
11/10/2005 14:53	6.08	13.19	96.00
11/10/2005 14:54	6.09	13.21	98.00
11/10/2005 14:55	6.03	13.25	107.00
11/10/2005 14:56	6.01	13.27	116.00
11/10/2005 14:57	6.01	13.26	117.50
11/10/2005 14:58	6.04	13.26	112.50
AVERAGES	6.13	13.17	88.59

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	6.13
CO2 %	13.17
CO PPM	87.99
CO LB/MMBTU	0.087

UNIT 2

COASTAL AIR CONSULTING, INC.

CO PPM RELATIVE ACCURACY

CLIENT:	St. Johns River Power Park		TECO
SITE:	SJRPP		MODEL # 48
UNIT:	2		
LOAD:	Normal		
DATE:	11/09/05		

RUN	TIME START	TIME END	REFERENCE METHOD* (PPM)	CEM RESPONSE (PPM)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	08:55	09:16	419.922	463.600	-43.678	1907.75037868
2	09:28	09:49	438.719	465.800	-27.081	733.36130149
3	10:00	10:21	426.282	464.000	-37.718	1422.63816675
4	10:41	11:02	417.734	447.200	-29.466	868.27337622
5	11:13	11:34	363.890	396.800	-32.910	1083.03741729
6	11:45	12:06	406.132	433.600	-27.468	754.50585435
7	12:19	12:40	378.332	399.900	-21.568	465.18698124
8	12:51	13:12	318.864	352.700	-33.836	1144.84887910
9	13:25	13:46	272.129	297.600	-25.471	648.74944988
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			382.445	413.467	-279.195	9028.3518050

**MEAN DIFFERENCE, d (Eq. A-7)	-31.022
**STANDARD DEVIATION, Sd (Eq. A-8)	6.78
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	5.208
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	9.473

** 40 CFR 60

COASTAL AIR CONSULTING, INC.

CO LB/MMBTU RELATIVE ACCURACY

CLIENT:	St. Johns River Power Park		TECO
SITE:	SJRPP		MODEL # 48
UNIT:	2		
LOAD:	Normal		
DATE:	11/09/05		

RUN	TIME START	TIME END	REFERENCE METHOD* (LB/mmBtu)	CEM RESPONSE (LB/mmBtu)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	08:55	09:16	0.470	0.505	-0.035	0.00122500
2	09:28	09:49	0.486	0.508	-0.022	0.00048400
3	10:00	10:21	0.479	0.508	-0.029	0.00084100
4	10:41	11:02	0.467	0.487	-0.020	0.00040000
5	11:13	11:34	0.408	0.432	-0.024	0.00057600
6	11:45	12:06	0.454	0.473	-0.019	0.00036100
7	12:19	12:40	0.427	0.436	-0.009	0.00008100
8	12:51	13:12	0.360	0.385	-0.025	0.00062500
9	13:25	13:46	0.302	0.326	-0.024	0.00057600
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			0.428	0.451	-0.207	0.0051690

**MEAN DIFFERENCE, d (Eq. A-7)	-0.023
**STANDARD DEVIATION, Sd (Eq. A-8)	0.01
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	0.005
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	6.655

** 40 CFR 60

COASTAL AIR CONSULTING, INC.

CO2 % RELATIVE ACCURACY

CLIENT: St. Johns River Power Park
SITE: SJRPP
UNIT: 2
LOAD: Normal
DATE: 11/09/05

TECO
MODEL # 41H
SERIAL # 41H-49357-282

RUN	TIME START	TIME END	REFERENCE METHOD* (% CO2)	CEM RESPONSE (% CO2)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	08:55	09:16	11.70	12.01	-0.307	0.094
2	09:28	09:49	11.81	12.00	-0.187	0.035
3	10:00	10:21	11.66	11.95	-0.295	0.087
4	10:41	11:02	11.71	12.01	-0.301	0.090
5	11:13	11:34	11.69	12.03	-0.342	0.117
6	11:45	12:06	11.71	12.00	-0.290	0.084
7	12:19	12:40	11.61	12.00	-0.392	0.154
8	12:51	13:12	11.60	11.98	-0.384	0.147
9	13:25	13:46	11.80	11.95	-0.146	0.021
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			11.70	11.99	-2.644	0.830

**MEAN DIFFERENCE, d (Eq. A-7)	-0.294
**STANDARD DEVIATION, Sd (Eq. A-8)	0.082
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	0.063
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	3.048

** 40 CFR 60

REFERENCE METHOD VALUES
MOISTURE CORRECTION
SJRPP 2
CO

RUN #	REFERENCE METHOD (ppm/%, dry)	MOISTURE (%)	MOISTURE CORRECTION (1-moisture/100)	REFERENCE METHOD (ppm/%, wet)
CO ppm				
1	485.13	13.44	0.866	419.92
2	503.25	12.82	0.872	438.72
3	495.21	13.92	0.861	426.28
4	483.75	13.65	0.864	417.73
5	422.49	13.87	0.861	363.89
6	470.29	13.64	0.864	406.13
7	440.66	14.14	0.859	378.33
8	369.56	13.72	0.863	318.86
9	309.62	12.11	0.879	272.13
CO2 %				
1	13.52	13.44	0.866	11.70
2	13.55	12.82	0.872	11.81
3	13.54	13.92	0.861	11.66
4	13.56	13.65	0.864	11.71
5	13.57	13.87	0.861	11.69
6	13.56	13.64	0.864	11.71
7	13.52	14.14	0.859	11.61
8	13.44	13.72	0.863	11.60
9	13.43	12.11	0.879	11.80

UNIT 1 CO RATA TEST DATA SHEET

Client: St. Johns River Power Park

Site: SJRPP 2 | Bar. Pressure (in.Hg): 29.81 | Load: Normal

Method: 1 - 2

Run Number: 1-3

Date: 11/09/05 | Operators: RRR/JTS

MOISTURE TEST FIELD DATA SHEET

Meter Box#: CAC 1 | Method: 4 | Run Number: 1

Ini. Leak Rate:0.000 @10" | Impinger Set: D

Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 84.288	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	08:55	10	92.5	1.80	96	96	3.0	56
2		20	100.5	1.80	98	98	3.0	44
3	09:25	30	108.306	1.80	99	99	3.0	46
			24.018	1.800	97.7	97.7		
						97.7		

H20 COLLECTED (g) = 72.5 | VOL WATER COLLECTED (SCF) = 3.42

GAS SAMPLED (DSCF) = 22.013 | MOISTURE IN STACK GAS (% VOL) = 13.44

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 2

Ini. Leak Rate:0.000 @10" | Impinger Set: D

Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 108.414	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	09:28	10	115.5	1.80	100	100	3.0	55
2		20	123.9	1.80	101	101	3.0	55
3	09:58	30	131.811	1.80	102	102	3.0	56
			23.397	1.800	101.0	101.0		
						101.0		

H20 COLLECTED (g) = 66.5 | VOL WATER COLLECTED (SCF) = 3.14

GAS SAMPLED (DSCF) = 21.317 | MOISTURE IN STACK GAS (% VOL) = 12.82

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 3

Ini. Leak Rate:0.000 @10" | Impinger Set: D

Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 132.140	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	10:00	10	140.1	1.80	103	103	3.0	58
2		20	148.3	1.80	105	105	3.0	59
3	10:30	30	155.910	1.80	108	108	3.0	60
			23.770	1.800	105.3	105.3		
						105.3		

H20 COLLECTED (g) = 73.7 | VOL WATER COLLECTED (SCF) = 3.47

GAS SAMPLED (DSCF) = 21.491 | MOISTURE IN STACK GAS (% VOL) = 13.92

UNIT 1 CO RATA TEST DATA SHEET

Client: St. Johns River Power Park
Site: SJRPP 2 | Bar. Pressure (in.Hg): 29.81 | Load: Normal
Method: 1 - 2
Run Number: 4 - 6
Date: 11/09/05 | Operators: RRR/JTS

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 4
Ini. Leak Rate:0.000 @10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 155.909	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	10:41	10	163.9	1.80	109	109	3.0	55
2		20	171.6	1.80	110	110	3.0	58
3	10:53	30	179.532	1.80	111	111	3.0	60
			23.623	1.800	110.0	110.0		
						110.0		

H20 COLLECTED (g) = 71.0 | VOL WATER COLLECTED (SCF) = 3.35
GAS SAMPLED (DSCF) = 21.183 | MOISTURE IN STACK GAS (% VOL) = 13.65

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 5
Ini. Leak Rate:0.000 @8" | Impinger Set: D
Fin. Leak Rate:0.000 @8" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 179.610	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	11:13	10	187.3	1.80	111	111	3.0	54
2		20	194.5	1.80	111	111	3.0	58
3	11:43	30	203.057	1.80	113	113	3.0	60
			23.447	1.800	111.7	111.7		
						111.7		

H20 COLLECTED (g) = 71.6 | VOL WATER COLLECTED (SCF) = 3.38
GAS SAMPLED (DSCF) = 20.964 | MOISTURE IN STACK GAS (% VOL) = 13.87

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 6
Ini. Leak Rate:0.000 @10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 203.152	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	11:45	10	211.3	1.80	110	110	3.0	56
2		20	219.1	1.80	113	113	3.0	58
3	12:15	30	226.814	1.80	114	114	3.0	59
			23.662	1.800	112.3	112.3		
						112.3		

H20 COLLECTED (g) = 70.8 | VOL WATER COLLECTED (SCF) = 3.34
GAS SAMPLED (DSCF) = 21.131 | MOISTURE IN STACK GAS (% VOL) = 13.64

UNIT 1 CO RATA TEST DATA SHEET

Client: St. Johns River Power Park
Site: SJRPP 2 | Bar. Pressure (in.Hg): 29.81 | Load: Normal
Method: 1 - 2
Run Number: 7 - 9
Date: 11/09/05 | Operators: RRR/JTS

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 7
Ini. Leak Rate:0.000 @10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 226.978	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	12:19	10	234.7	1.80	112	112	3.0	56
2		20	245.3	1.80	114	114	3.0	58
3	12:49	30	249.964	1.80	114	114	3.0	60
			22.986	1.800	113.3	113.3		
						113.3		

H20 COLLECTED (g) = 71.6 | VOL WATER COLLECTED (SCF) = 3.38
GAS SAMPLED (DSCF) = 20.492 | MOISTURE IN STACK GAS (% VOL) = 14.14

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 8
Ini. Leak Rate:0.000 @10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 250.024	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	12:51	10	258.2	1.80	112	112	3.0	54
2		20	265.5	1.80	114	114	3.0	55
3	13:21	30	273.956	1.80	115	115	3.0	58
			23.932	1.800	113.7	113.7		
						113.7		

H20 COLLECTED (g) = 71.9 | VOL WATER COLLECTED (SCF) = 3.39
GAS SAMPLED (DSCF) = 21.323 | MOISTURE IN STACK GAS (% VOL) = 13.72

MOISTURE TEST FIELD DATA SHEET

Meter Box #: CAC 1 | Method: 4 | Run Number: 9
Ini. Leak Rate:0.000 10" | Impinger Set: D
Fin. Leak Rate:0.000 @10" | Yi 0.972 | Sample Head: B

POINT	CLOCK TIME	SAMPLE TIME	VOLUME 274.800	ORIFICE ^H	METER TEMP (F)		VAC. (IN.HG)	IMPINGER TEMP
1	13:25	10	281.6	1.80	114	114	3.0	58
2		20	290.4	1.80	115	115	3.0	60
3	13:55	30	297.772	1.80	115	115	3.0	62
			22.972	1.800	114.7	114.7		
						114.7		

H20 COLLECTED (g) = 59.7 | VOL WATER COLLECTED (SCF) = 2.81
GAS SAMPLED (DSCF) = 20.432 | MOISTURE IN STACK GAS (% VOL) = 12.11

ST. JOHNS RIVER POWER PARK
UNIT NO. 2 OUTLET STACK (CO)

11/09/05

ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 1 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	0.8	0.0	1.0	0.0	0.0
CO ppm	1085.00	1080.0	-0.3	1090.0	0.3	0.5

RUN 1 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 8:55	5.84	13.40	420.50
11/9/2005 8:56	5.76	13.46	501.00
11/9/2005 8:57	5.68	13.55	554.00
11/9/2005 8:58	5.68	13.58	529.50
11/9/2005 8:59	5.73	13.56	485.50
11/9/2005 9:00	5.72	13.54	462.00
11/9/2005 9:01	5.75	13.52	470.00
11/9/2005 9:02	5.76	13.49	541.50
11/9/2005 9:03	5.69	13.54	583.00
11/9/2005 9:04	5.78	13.51	606.50
11/9/2005 9:05	5.76	13.49	483.50
11/9/2005 9:06	5.73	13.53	406.50
11/9/2005 9:07	5.69	13.52	498.00
11/9/2005 9:08	5.63	13.61	560.50
11/9/2005 9:09	5.69	13.58	513.50
11/9/2005 9:10	5.75	13.49	459.50
11/9/2005 9:11	5.69	13.55	384.00
11/9/2005 9:12	5.65	13.58	544.50
11/9/2005 9:13	5.74	13.54	455.00
11/9/2005 9:14	5.76	13.46	464.50
11/9/2005 9:15	5.76	13.46	423.00
11/9/2005 9:16	5.79	13.46	407.00
AVERAGES	5.73	13.52	488.77

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.73
CO2 %	13.52
CO PPM	485.13
CO LB/MMBTU	0.470

ST. JOHNS RIVER POWER PARK
UNIT NO. 2 OUTLET STACK (CO)

11/09/05

ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 2 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	1.0	0.0	1.0	0.0	0.0
CO ppm	1085.00	1090.0	0.3	1090.0	0.3	0.0

RUN 2 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 9:28	5.69	13.52	538.50
11/9/2005 9:29	5.73	13.49	495.00
11/9/2005 9:30	5.66	13.57	513.00
11/9/2005 9:31	5.73	13.51	524.00
11/9/2005 9:32	5.58	13.62	564.50
11/9/2005 9:33	5.61	13.63	492.00
11/9/2005 9:34	5.74	13.52	395.50
11/9/2005 9:35	5.72	13.51	451.50
11/9/2005 9:36	5.70	13.53	537.00
11/9/2005 9:37	5.74	13.52	482.00
11/9/2005 9:38	5.66	13.56	404.50
11/9/2005 9:39	5.70	13.56	523.00
11/9/2005 9:40	5.71	13.53	492.00
11/9/2005 9:41	5.73	13.54	562.00
11/9/2005 9:42	5.71	13.54	452.00
11/9/2005 9:43	5.60	13.64	571.00
11/9/2005 9:44	5.73	13.54	596.00
11/9/2005 9:45	5.73	13.54	565.50
11/9/2005 9:46	5.75	13.53	538.00
11/9/2005 9:47	5.69	13.56	468.50
11/9/2005 9:48	5.65	13.61	540.00
11/9/2005 9:49	5.74	13.55	501.00
AVERAGES	5.69	13.55	509.39

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.69
CO2 %	13.55
CO PPM	503.25
CO LB/MMBTU	0.486

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 3 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	1.0	0.0	1.1	0.0	0.0
CO ppm	1085.00	1090.0	0.3	1092.0	0.4	0.1

RUN 3 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 10:00	5.69	13.56	482.50
11/9/2005 10:01	5.70	13.56	474.00
11/9/2005 10:02	5.65	13.59	508.00
11/9/2005 10:03	5.73	13.56	454.00
11/9/2005 10:04	5.74	13.52	446.00
11/9/2005 10:05	5.73	13.53	475.50
11/9/2005 10:06	5.77	13.51	420.00
11/9/2005 10:07	5.69	13.56	510.50
11/9/2005 10:08	5.71	13.54	525.50
11/9/2005 10:09	5.74	13.51	485.50
11/9/2005 10:10	5.71	13.56	537.00
11/9/2005 10:11	5.74	13.53	510.00
11/9/2005 10:12	5.68	13.55	505.50
11/9/2005 10:13	5.66	13.59	552.50
11/9/2005 10:14	5.78	13.48	484.50
11/9/2005 10:15	5.71	13.51	494.00
11/9/2005 10:16	5.63	13.59	532.50
11/9/2005 10:17	5.63	13.61	608.00
11/9/2005 10:18	5.65	13.58	605.50
11/9/2005 10:19	5.74	13.53	555.00
11/9/2005 10:20	5.74	13.46	449.00
11/9/2005 10:21	5.78	13.46	423.50
AVERAGES	5.71	13.54	501.75

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.71
CO2 %	13.54
CO PPM	495.21
CO LB/MMBTU	0.479

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 4 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.1	0.4	0.4
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	1.1	0.0	1.0	0.0	0.0
CO ppm	1085.00	1092.0	0.4	1106.0	1.1	0.7

RUN 4 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 10:41	5.63	13.59	502.00
11/9/2005 10:42	5.74	13.53	489.50
11/9/2005 10:43	5.69	13.54	443.00
11/9/2005 10:44	5.70	13.58	526.00
11/9/2005 10:45	5.68	13.56	475.00
11/9/2005 10:46	5.73	13.53	576.00
11/9/2005 10:47	5.74	13.52	494.00
11/9/2005 10:48	5.66	13.59	527.50
11/9/2005 10:49	5.66	13.60	578.00
11/9/2005 10:50	5.74	13.52	445.00
11/9/2005 10:51	5.65	13.59	454.50
11/9/2005 10:52	5.64	13.61	450.50
11/9/2005 10:53	5.61	13.64	572.50
11/9/2005 10:54	5.65	13.59	549.50
11/9/2005 10:55	5.71	13.59	483.00
11/9/2005 10:56	5.69	13.55	483.00
11/9/2005 10:57	5.71	13.55	443.00
11/9/2005 10:58	5.71	13.53	456.50
11/9/2005 10:59	5.76	13.50	541.50
11/9/2005 11:00	5.71	13.54	412.00
11/9/2005 11:01	5.68	13.54	489.50
11/9/2005 11:02	5.60	13.61	471.00
AVERAGES	5.69	13.56	493.75

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.66
CO2 %	13.56
CO PPM	483.75
CO LB/MMBTU	0.467

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 5 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.1	0.4	0.1	0.4	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	1.0	0.0	0.5	0.0	0.0
CO ppm	1085.00	1106.0	1.1	1081.0	-0.2	-1.3

RUN 5 — UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 11:13	5.69	13.52	385.50
11/9/2005 11:14	5.63	13.57	465.50
11/9/2005 11:15	5.68	13.55	421.50
11/9/2005 11:16	5.68	13.57	388.50
11/9/2005 11:17	5.67	13.57	398.50
11/9/2005 11:18	5.59	13.65	455.00
11/9/2005 11:19	5.55	13.68	430.00
11/9/2005 11:20	5.68	13.61	451.50
11/9/2005 11:21	5.68	13.58	478.00
11/9/2005 11:22	5.67	13.61	400.50
11/9/2005 11:23	5.71	13.55	415.50
11/9/2005 11:24	5.69	13.56	421.00
11/9/2005 11:25	5.61	13.64	322.00
11/9/2005 11:26	5.66	13.58	379.00
11/9/2005 11:27	5.70	13.56	447.00
11/9/2005 11:28	5.65	13.57	462.00
11/9/2005 11:29	5.67	13.56	497.50
11/9/2005 11:30	5.70	13.53	508.00
11/9/2005 11:31	5.70	13.52	413.00
11/9/2005 11:32	5.66	13.57	525.00
11/9/2005 11:33	5.69	13.55	453.50
11/9/2005 11:34	5.73	13.52	320.50
AVERAGES	5.67	13.57	429.02

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.61
CO2 %	13.57
CO PPM	422.49
CO LB/MMBTU	0.408

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 6 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.1	0.4	0.0	0.0	-0.4
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	0.5	0.0	0.4	0.0	0.0
CO ppm	1085.00	1081.0	-0.2	1080.0	-0.3	-0.1

RUN 6 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 11:45	5.68	13.42	440.00
11/9/2005 11:46	5.77	13.48	462.50
11/9/2005 11:47	5.72	13.51	381.50
11/9/2005 11:48	5.66	13.56	411.00
11/9/2005 11:49	5.51	13.67	618.50
11/9/2005 11:50	5.58	13.65	539.50
11/9/2005 11:51	5.63	13.63	525.50
11/9/2005 11:52	5.70	13.58	496.50
11/9/2005 11:53	5.74	13.54	442.00
11/9/2005 11:54	5.61	13.58	441.50
11/9/2005 11:55	5.58	13.65	477.50
11/9/2005 11:56	5.65	13.61	435.00
11/9/2005 11:57	5.64	13.58	490.00
11/9/2005 11:58	5.69	13.56	515.00
11/9/2005 11:59	5.62	13.60	475.50
11/9/2005 12:00	5.64	13.59	517.50
11/9/2005 12:01	5.67	13.55	498.50
11/9/2005 12:02	5.68	13.54	432.00
11/9/2005 12:03	5.67	13.56	411.00
11/9/2005 12:04	5.71	13.50	430.00
11/9/2005 12:05	5.64	13.54	479.00
11/9/2005 12:06	5.73	13.50	456.50
AVERAGES	5.66	13.56	471.64

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.63
CO2 %	13.56
CO PPM	470.29
CO LB/MMBTU	0.454

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 7 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	0.4	0.0	0.3	0.0	0.0
CO ppm	1085.00	1080.0	-0.3	1078.0	-0.4	-0.1

RUN 7 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 12:19	5.69	13.49	440.00
11/9/2005 12:20	5.54	13.60	464.50
11/9/2005 12:21	5.55	13.60	623.00
11/9/2005 12:22	5.65	13.55	523.00
11/9/2005 12:23	5.78	13.45	393.00
11/9/2005 12:24	5.73	13.47	357.50
11/9/2005 12:25	5.70	13.48	450.50
11/9/2005 12:26	5.72	13.47	355.00
11/9/2005 12:27	5.61	13.55	440.50
11/9/2005 12:28	5.66	13.51	506.00
11/9/2005 12:29	5.70	13.49	407.00
11/9/2005 12:30	5.73	13.46	419.50
11/9/2005 12:31	5.59	13.52	423.50
11/9/2005 12:32	5.63	13.58	507.00
11/9/2005 12:33	5.60	13.55	461.00
11/9/2005 12:34	5.73	13.47	441.50
11/9/2005 12:35	5.69	13.48	315.00
11/9/2005 12:36	5.66	13.50	442.00
11/9/2005 12:37	5.68	13.47	354.50
11/9/2005 12:38	5.59	13.56	417.50
11/9/2005 12:39	5.56	13.58	495.00
11/9/2005 12:40	5.59	13.59	471.50
AVERAGES	5.65	13.52	441.27

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.65
CO2 %	13.52
CO PPM	440.66
CO LB/MMBTU	0.427

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 8 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	11.0	0.0	0.0
CO ppm	0.50	0.3	0.0	0.3	0.0	0.0
CO ppm	1085.00	1078.0	-0.4	1079.0	-0.3	0.1

RUN 8 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 12:51	5.74	13.43	516.50
11/9/2005 12:52	5.74	13.37	360.00
11/9/2005 12:53	5.68	13.45	398.50
11/9/2005 12:54	5.62	13.47	336.00
11/9/2005 12:55	5.77	13.45	350.00
11/9/2005 12:56	5.76	13.37	295.50
11/9/2005 12:57	5.68	13.45	342.50
11/9/2005 12:58	5.67	13.48	362.00
11/9/2005 12:59	5.75	13.40	371.00
11/9/2005 13:00	5.64	13.46	395.00
11/9/2005 13:01	5.63	13.51	390.00
11/9/2005 13:02	5.74	13.43	357.50
11/9/2005 13:03	5.73	13.39	314.00
11/9/2005 13:04	5.71	13.44	298.00
11/9/2005 13:05	5.68	13.42	359.00
11/9/2005 13:06	5.71	13.44	473.00
11/9/2005 13:07	5.68	13.46	389.00
11/9/2005 13:08	5.68	13.46	390.00
11/9/2005 13:09	5.69	13.48	375.50
11/9/2005 13:10	5.78	13.39	295.00
11/9/2005 13:11	5.68	13.45	336.00
11/9/2005 13:12	5.63	13.52	434.50
AVERAGES	5.70	13.44	369.93

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.70
CO2 %	13.44
CO PPM	369.56
CO LB/MMBTU	0.360

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ANALYZER RESPONSE

SPAN SETTING	GAS UNITS	TANK VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	O2 %	0.00	0.0	0.0	0.0	
25	O2 %	12.00	12.0	0.0	0.0	1420/B153
	O2 %	22.50	22.5	0.0	0.0	
	CO2 %	0.00	0.0	0.0	0.0	
20	CO2 %	11.00	11.0	0.0	0.0	01410B139
	CO2 %	17.30	17.2	-0.1	-0.5	
	CO ppm	0.00	0.5	0.5	0.0	
2000	CO ppm	1078.00	1085.0	7.0	0.4	48C-71754-369
	CO ppm	1685.00	1690.0	5.0	0.3	

RUN 9 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
O2 %	0.00	0.0	0.0	0.0	0.0	0.0
O2 %	12.00	12.0	0.0	12.0	0.0	0.0
CO2 %	0.00	0.0	0.0	0.0	0.0	0.0
CO2 %	11.00	11.0	0.0	10.9	-0.5	-0.5
CO ppm	0.50	0.3	0.0	0.2	0.0	0.0
CO ppm	1085.00	1079.0	-0.3	1076.0	-0.5	-0.2

RUN 9 --- UNCORRECTED ANALYZER DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11/9/2005 13:25	5.71	13.44	354.00
11/9/2005 13:26	5.74	13.40	371.50
11/9/2005 13:27	5.81	13.36	308.50
11/9/2005 13:28	5.83	13.31	252.00
11/9/2005 13:29	5.70	13.41	251.00
11/9/2005 13:30	5.74	13.40	308.50
11/9/2005 13:31	5.78	13.37	313.50
11/9/2005 13:32	5.73	13.39	341.00
11/9/2005 13:33	5.69	13.42	392.00
11/9/2005 13:34	5.73	13.40	335.50
11/9/2005 13:35	5.78	13.37	330.00
11/9/2005 13:36	5.74	13.37	360.00
11/9/2005 13:37	5.79	13.35	363.00
11/9/2005 13:38	5.85	13.30	294.50
11/9/2005 13:39	5.81	13.32	308.00
11/9/2005 13:40	5.79	13.33	251.00
11/9/2005 13:41	5.78	13.34	262.00
11/9/2005 13:42	5.78	13.34	320.00
11/9/2005 13:43	5.74	13.37	265.50
11/9/2005 13:44	5.73	13.39	278.00
11/9/2005 13:45	5.71	13.43	295.50
11/9/2005 13:46	5.79	13.38	257.50
AVERAGES	5.76	13.37	309.66

FUEL FACTOR	1800

CORRECTED RESULTS	
O2 %	5.76
CO2 %	13.43
CO PPM	309.62
CO LB/MMBTU	0.302

APPENDIX 2
Reference Method Quality Assurance

AGA
Member of the Linde Gas Group

Linde

Certificate of Analysis

EPA Protocol

Performed according to EPA-600/R-97/121, Procedure G1

Notice: This Cylinder is not to be used when pressure is under 150 psig.

Manufactured and certified at:
Linde Gas LLC
Maumee Specialty Gas Plant
6421 Monclova Road
MAUMEE OH 43537
419-893-7226

Produced for customer:
LINDE SANFORD INTERBRANCH
103 COMMERCE WAY
SANFORD FL 32771
USA
407-321-4030

Material:	6683	**Blend Tolerance:**	5 % Relative
EPA SO2/NO/CO2/CO/N2	A31	**Blend Type:**	EPA Protocol
Production #:	100091954	**Cyl. Pressure:**	2000 psig
Lot #:	02499L4160UA	**Balance Gas:**	Nitrogen
Cylinder #:	CC174810	**CGA:**	660
Expiration Date:	12/3/2006	**Analytical Accuracy:**	1.00 % Relative
Shelf Life:	24 months	**Confidence:**	95 %

CAS #	Certified Components	Requested Concentration	Concentration and Uncertainty	Date of Analysis
7446-09-5	Sulfur Dioxide	165	160 +/- 2 ppm	12/03/2004
10102-43-9	Nitric Oxide	550	555 +/- 6 ppm	12/03/2004
124-38-9	Carbon Dioxide	11	11.0 +/- 0.1 %	12/03/2004
630-08-0	Carbon Monoxide	1100	1078 +/- 11 ppm	12/03/2004
7727-37-9	Nitrogen		Balance	12/03/2004

CAS #	Analyzed For Ref Use Only	Concentration	Analysis Date
N/A	NOx	556 ppm	12/03/2004

CAS #	Reference Standard	Cylinder Standard #	Concentration	Expiration Date
10102-43-9	Nitric Oxide	CC128875 , GMIS	968.3 ppm	06/05/2005
630-08-0	Carbon Monoxide	CC167409 , GMIS	2512 ppm	01/09/2006
7446-09-5	Sulfur Dioxide	CC7797 , GMIS	500.3 ppm	09/07/2006
124-38-9	Carbon Dioxide	CC59164 , NTRM 1886	6.900 %	10/02/2008

Instrument	Serial #	Analytical Principle	Calibration Date
Horiba VIA-510	569466011	Non-Dispersive Infrared	09/16/2004
Horiba VIA-510	568849043	Non-Dispersive Infrared	09/13/2004
Horiba CLA-510SS	569466055	Chemiluminescence	07/16/2004
Horiba VIA-510	4131546004	Non-Dispersive Infrared	09/16/2004

All analyses are performed under controlled environmental conditions.This product is manufactured using equipment which has been calibrated with NIST traceable, or equivalent, standards, weights, or equipment.

Analytical report approved by Jennifer Carney

REC'D DEC 15 2004

Jennifer Carney

HiQ Analysis Certificate

#3 Gas

AGA
Member of the Linde Gas Group

Linde

Certificate of Analysis

EPA Protocol

Performed according to EPA-600/R-97/121, Procedure G1

Notice: This Cylinder is not to be used when pressure is under 150 psig.

Manufactured and certified at:
Linde Gas LLC
Maumee Specialty Gas Plant
6421 Monclova Road
MAUMEE OH 43537
419-893-7226

Produced for customer:
LINDE JACKSONVILLE INTERBRANCH
4502 LENOX AVE
JACKSONVILLE FL 32205
USA
904-388-4999

Material:	2205	**Blend Tolerance:**	5 % Relative
EPA MISC 5 COMPONENT	A31	**Blend Type:**	EPA Protocol
Production #:	100099029	**Cyl. Pressure:**	1700 psig
Lot #:	02499B3260EE1	**Balance Gas:**	Nitrogen
Cylinder #:	CC154315	**CGA:**	660
Expiration Date:	4/15/2007	**Analytical Accuracy:**	1.00 % Relative
Shelf Life:	24 months	**Confidence:**	95 %

* Recertification of Cylinder

CAS #	Certified Component	Requested Concentration	Concentration and Uncertainty	Date of Certification
7446-09-5	Sulfur Dioxide	246	245 +/- 3 ppm	04/15/2005
10102-43-9	Nitric Oxide	838	838 +/- 8 ppm	04/15/2005
630-08-0	Carbon Monoxide	1685	1685 +/- 17 ppm	04/15/2005
124-38-9	Carbon Dioxide	17.2	17.3 +/- 0.2 %	04/15/2005
7727-37-9	Nitrogen		Balance	04/15/2005

CAS #	Analyzed (For Ref Use Only)	Concentration	Analysis Date
N/A	NOx	838 ppm	04/15/2005

CAS #	Reference Standard	Cylinder/Standard #	Concentration	Expire Date
630-08-0	Carbon Monoxide	CC167409 , GMIS	2512 ppm	01/09/2006
7446-09-5	Sulfur Dioxide	CC149383 , GMIS	501.8 ppm	01/24/2007
10102-43-9	Nitric Oxide	CC4124 , GMIS	985.9 ppm	01/24/2007
124-38-9	Carbon Dioxide	CC59228 , NTRM	19.91 %	08/01/2005

Instrument	Serial #	Analytical Principle	Calibration Date
Horiba VIA-510	569466011	Non-Dispersive Infrared	02/09/2005
Horiba VIA-510	568849043	Non-Dispersive Infrared	02/14/2005
Nicolet Magna 550	ACJ9300713	FTIR	02/17/2005
Horiba CLA-510SS	568093024	Chemiluminescence	02/17/2005

All analyses are performed under controlled environmental conditions.This product is manufactured using equipment which has been calibrated with NIST traceable, or equivalent, standards, weights, or equipment.

Analytical report approved by Roy Yoder

Roy Yoder

HiQ Analysis Certificate

AGA
Member of the Linde Gas Group

Linde

Certificate of Analysis

EPA Protocol

Performed according to EPA-600/R-97/121, Procedure G1

Notice: This Cylinder is not to be used when pressure is under 150 psig.

Manufactured and certified at:
Linde Gas LLC
Maumee Specialty Gas Plant
6421 Monclova Road
MAUMEE OH 43537
419-893-7226

Produced for customer:
LINDE SANFORD INTERBRANCH
103 COMMERCE WAY
SANFORD FL 32771
USA
407-321-4030

Material:	2179		**Blend Tolerance:**	5 % Relative
MISC 3 COMPONENT EPA		A31	**Blend Type:**	EPA Protocol
Production #:	100105399		**Cyl. Pressure:**	2000 psig
Lot #:	02499H5220GH		**Balance Gas:**	Nitrogen
Cylinder #:	CC34525		**CGA:**	590
Expiration Date:	8/29/2008		**Analytical Accuracy:**	1.00 % Relative
Shelf Life:	36 months		**Confidence:**	95 %

CAS #	Certified Component	Requested Concentration	Concentration and Uncertainty	Date of Certification
7782-44-7	Oxygen	12	12.0 +/- 0.1 %	08/29/2005
124-38-9	Carbon Dioxide	10	9.89 +/- 0.1 %	08/29/2005
7727-37-9	Nitrogen		Balance	08/29/2005

CAS #	Reference Standard	Cylinder/Standard #	Concentration	Expire Date
7782-44-7	Oxygen	CC73283 , NTRM	20.89 %	10/02/2008
124-38-9	Carbon Dioxide	CC73874 , GMIS	16.01 %	05/08/2007

Instrument	Serial #	Analytical Principle	Calibration Date
Horiba VIA-510	568849043	Non-Dispersive Infrared	07/05/2005
Rosemount 755R	1000559	Paramagnetic	07/05/2005

All analyses are performed under controlled environmental conditions.This product is manufactured using equipment which has been calibrated with NIST traceable, or equivalent, standards, weights, or equipment.

Analytical report approved by Jennifer Carney

Jennifer Carney

Analysis Certificate

AIR LIQUIDE

CERTIFICATION OF ANALYSIS

EPA Protocol Gases

Cyl. Number: CC 148551	**Cyl. Pressure:*** 2000PSIG	**Lot Number:** SFS52435
Assay Date: 02/20/03	**Expiration Date:** 02/20/06	**Document Number:** 11354037
Customer: AIR LIQUIDE ORLANDO, FL	**P.O. Number:** STOCK	**Item Number:**

COMPONENT Name	REQUESTED Concentration	ASSAY Concentration
Carbon Dioxide	16-20 %	18.1 ± 0.2 %
Oxygen	22.5 %	22.5 ± 0.3 %
Nitrogen	Balance	Balance

*Mixture is valid only to 150 psig

EPA Protocol
Section No. 2.2, Procedure : G-1

Analyst: Eric Barron
Approved by: Thuan Tran

REFERENCE STANDARD EMPLOYED FOR ANALYSIS

Concentration	Component	Balance	Cyl. No.	Batch	Exp. Date	Sample No	Type
22.06 ± 0.21 %	Carbon Dioxide	Nitrogen	CC-55368	82745x	10/02/03	95080107	NTRM
22.41 ± 0.16 %	Oxygen	Nitrogen	CC 62855	82659x	09/01/06	98080615	NTRM

Carbon Dioxide
GAS ANALYZER EMPLOYED

Manufacturer:	Hewlett Packard
Model Number:	5890A
Serial Number:	3336A54620
MPR Last Calibrated:	01/24/03
Analytical Principle:	FID & TCD

Oxygen
GAS ANALYZER EMPLOYED

Manufacturer:	Hewlett Packard
Model Number:	5890A
Serial Number:	3336A54620
MPR Last Calibrated:	02/12/03
Analytical Principle:	FID & TCD

ANALYSIS SUMMARY

	02/20/03 Triad 1	02/20/03 Triad 2	02/20/03 Triad 3	Carbon Dioxide Units
Zero	0	0	0	Area
Reference	1296106	1298608	1296563	Area
Candidate	1062536	1063033	1063144	Area
Result	18.06	18.06	18.09	%
Evaluation	VALID	VALID	VALID	
MEAN ANALYTICAL RESULT:				18.08 %

	02/20/03 Triad 1	02/20/03 Triad 2	02/20/03 Triad 3	Oxygen Units
Zero	0	0	0	Area
Reference	1062146	1060467	1063120	Area
Candidate	1064073	1064989	1066159	Area
Result	22.45	22.51	22.47	%
Evaluation	VALID	VALID	VALID	
MEAN ANALYTICAL RESULT:				22.48 %

Analyst:	Approved by:

CERTIFIED ISO - 9002 INTERTEK

APEX INSTRUMENTS METHOD 5 PRE-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
5-POINT ENGLISH UNITS

Meter Console Information	
Console Model Number	CAC 1
Console Serial Number	
DGM Model Number	
DGM Serial Number	

Calibration Conditions			
Date	Time	24-Oct-05	5:45
Barometric Pressure		29.6	in Hg
Theoretical Critical Vacuum[1]		14.0	in Hg
Calibration Technician		SCW	

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	oR/in Hg

[1]For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

[2]The Critical Orifice Coefficient, K', must be entered in English units, $(ft^3 \cdot {}^oR^{1/2})/(in.Hg \cdot min)$.

Calibration Data

Run Time	Metering Console					Critical Orifice				
Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Outlet Temp Initial	Outlet Temp Final	Serial Number	Coefficient	Amb Temp Initial	Amb Temp Final	Actual Vacuum
(Θ)	(P_m)	(V_{mi})	(V_{mf})	(t_{mi})	(t_{mf})		K'	(t_{amb})	(t_{amb})	
min	in H_2O	cubic feet	cubic feet	°F	°F		see above2	°F	°F	in Hg
17.0	0.3	178.402	183.980	72	74	40	0.2430	68	68	17
11.0	0.7	184.528	189.820	74	75	48	0.3570	68	68	16
9.0	1.2	191.308	197.010	75	75	55	0.4710	68	68	16
7.0	1.9	197.602	203.305	75	75	63	0.6000	68	68	16
5.0	3.8	204.508	210.210	75	75	73	0.8410	68	68	16

Results

Standardized Data				Dry Gas Meter				
				Calibration Factor		Flowrate	ΔH @	
Dry Gas Meter		Critical Orifice		Value	Variation	Std & Corr	0.75 SCFM	Variation
($V_{m(std)}$)	($Q_{m(std)}$)	($Vcr_{(std)}$)	($Q_{cr(std)}$)	(Y)	(ΔY)	($Q_{m(std)(corr)}$)	(ΔH@)	(ΔΔH@)
cubic feet	cfm	cubic feet	cfm			cfm	in H2O	
5.478	0.322	5.329	0.313	0.973	0.001	0.313	1.577	-0.152
5.187	0.472	5.065	0.460	0.977	0.005	0.460	1.694	-0.035
5.591	0.621	5.468	0.608	0.978	0.006	0.608	1.800	0.071
5.602	0.800	5.418	0.774	0.967	-0.005	0.774	1.762	0.034
5.627	1.125	5.424	1.085	0.964	-0.008	1.085	1.811	0.082
				0.972	Y Average		1.729	ΔH@ Average

Note: 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.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR Title 40, Part 60, Appendix A-3, Method 5, 16.2.3

Signature Stephen C. Welch Date 10-24-05

APEX INSTRUMENTS METHOD 5 POST-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
3-POINT ENGLISH UNITS

Meter Console Information	
Console Model Number	CAC 1
Console Serial Number	
DGM Model Number	
DGM Serial Number	

Calibration Conditions			
Date	Time	25-Nov-05	3:45:00 PM
Barometric Pressure		30.2	in Hg
Theoretical Critical Vacuum[1]		14.3	in Hg
Calibration Technician			

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	oR/in Hg

[1]For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

[2]The Critical Orifice Coefficient, K', must be entered in English units, $(ft^3 \cdot {}^oR^{1/2})/(in.Hg \cdot min)$.

Calibration Data

Run Time	Metering Console					Critical Orifice				
Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Outlet Temp Initial	Outlet Temp Final	Serial Number	Coefficient	Amb Temp Initial	Amb Temp Final	Actual Vacuum
(Θ)	(P_m)	(V_{mi})	(V_{mf})	(t_{mi})	(t_{mf})		K'	(t_{amb})	(t_{amb})	
min	in H_2O	cubic feet	cubic feet	°F	°F		see above2	°F	°F	in Hg
10.0	1.9	593.071	601.126	76	78	63	0.6000	78	78	16
10.0	1.9	601.126	609.206	78	80	63	0.6000	78	78	16
10.0	1.9	609.206	617.286	80	81	63	0.6000	78	78	16

Results

Standardized Data				Dry Gas Meter				
				Calibration Factor		Flowrate	ΔH @	
Dry Gas Meter		Critical Orifice		Value	Variation	Std & Corr	0.75 SCFM	Variation
($V_{m(std)}$)	($Q_{m(std)}$)	($Vcr_{(std)}$)	($Q_{cr(std)}$)	(Y)	(ΔY)	($Q_{m(std)(corr)}$)	(ΔH@)	(ΔΔH@)
cubic feet	cfm	cubic feet	cfm			cfm	in H2O	
8.039	0.804	7.820	0.782	0.973	-0.001	0.782	1.754	0.006
8.034	0.803	7.820	0.782	0.973	-0.001	0.782	1.747	-0.001
8.012	0.801	7.820	0.782	0.976	0.002	0.782	1.742	-0.005
Pretest Gamma		% Deviation	Enter Data	0.974	Y Average		1.748	ΔH@ Average

Note: 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.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR Title 40, Part 60, Appendix A-3, Method 5, 16.2.3

Signature Stephen C. Webb Date 11-25-05

DRY GAS METER
THERMOCOUPLE CALIBRATION DATA

Frequency: Annual (two point) calibration.

Standard: ASTM Hg in glass thermometer, NBS ice point reference chamber, and potentiometer.

Reference: EPA Method 5, Section 2.1.8

Procedure: 1. Place ASTM thermometer and dry gas meter thermocouples (inlet and outlet) in hot water bath where the temperature is maintained between 100 F and 125 F. When the temperature has stabilized the thermocouple and ASTM thermometer are compared.

2. Remove ASTM thermometer and thermocouples from the warm bath, dry thoroughly, and place in a room with constant temperature and humidity. Allow a period of stabilization and record the readings.

Tolerance: +/- 5.4 F

Therm ID No.	Location	Reference Temp. (F)		Observed Temp. (F)		Difference (F)	
		1	2	1	2	1	2
1 MB	Meter Box No. CAC1	117.0	62.0	117.0	62.0	0.0	0.0
2 MB	Meter Box No. CAC1	117.0	62.0	117.0	62.0	0.0	0.0
1 MB	Meter Box No. CAC2	117.0	62.0	116.0	62.0	1.0	0.0
2 MB	Meter Box No. CAC2	117.0	62.0	117.0	62.0	0.0	0.0
1 MB	Meter Box No. CAC3	117.0	62.0	117.0	62.0	0.0	0.0
2 MB	Meter Box No. CAC3	117.0	62.0	117.0	62.0	0.0	0.0

CALIBRATED BY: S. Webb
DATE: 01/03/05
DUE: 01/03/06

FILE:MBTCCAL.XLS

THERMOCOUPLE CALIBRATION DATA

STANDARD: National Bureau of Standards Thermocouple

REFERENCE: EPA Method 2.

FREQUENCY: Annualy

PROCEDURE: Thermocouple and NBS thermocouple are inserted into a thermostatically controlled oil bath. Temperatures are stabilized at approximately 230 & 340 F. Potentiometer and thermocouple readings are compared.

TOLERENCE: + / - 1.5% of actual absolute temperature.

REFERENCE TEMPERATURES

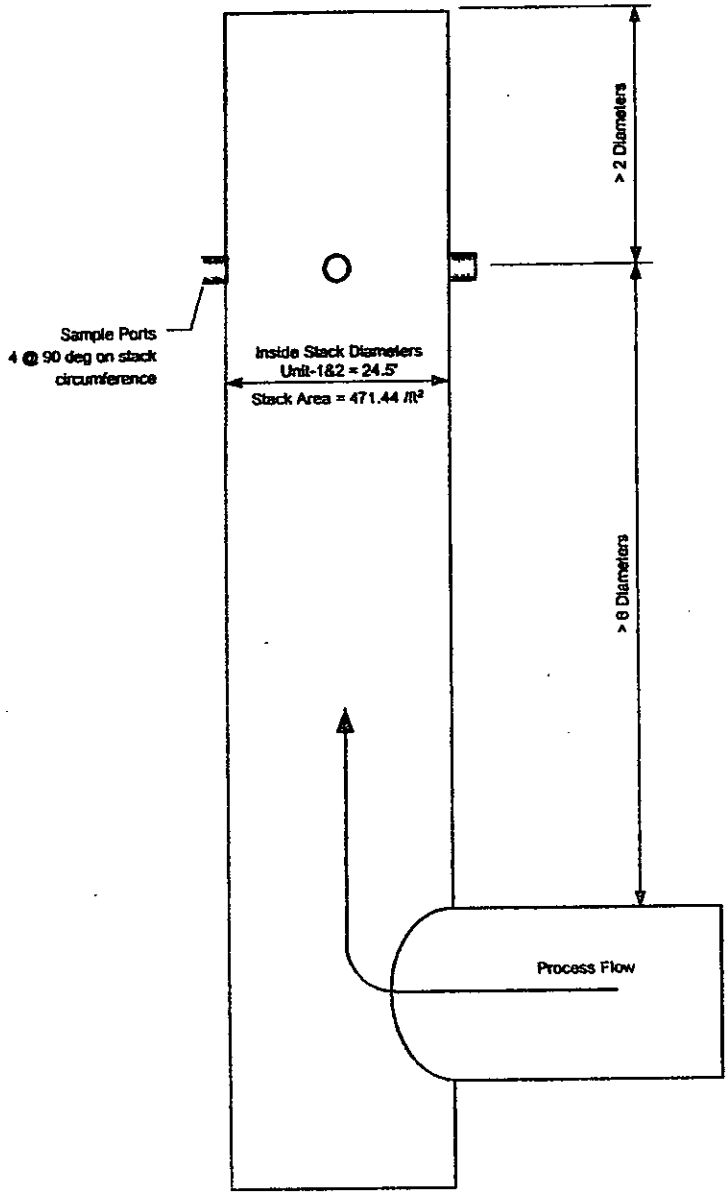
AMBIENT	62.0	MID	230.0	HIGH	350.0

T/C. Number	Length (ft)	OBS TEMP (F)	DIFF (%)	OBS TEMP (F)	DIFF (%)	OBS TEMP (%)	DIFF (%)
4	4	62.0	0.00	231.0	0.14	349.0	-0.12
Inco 4	4	63.0	0.19	232.0	0.29	348.0	-0.25
6	6	63.0	0.19	230.0	0.00	349.0	-0.12
7	7	62.0	0.00	230.0	0.00	349.0	-0.12
8	8	61.0	-0.19	230.0	0.00	350.0	0.00
9	9	62.0	0.00	229.0	-0.14	351.0	0.12
10	10	62.0	0.00	232.0	0.29	353.0	0.37
11G	11	62.0	0.00	231.0	0.14	351.0	0.12
Flow	12	62.0	0.00	232.0	0.29	351.0	0.12
15	15	64.0	0.38	234.0	0.58	353.0	0.37

Calibrated by: S. C. Webb
Date: 1/3/05
Due: 1/3/06

FILE.STKTCCAL.XLS

APPENDIX 3
Figures



SAMPLE POINT PROFILE
Particulate, CEMS & FLOW

UNIT 1 Particulate

1. 84.0"
2. 42.9"
3. 12.9"

UNIT 1 CEMS

1. 1.3'
2. 4.0'
3. 6.5'

UNIT 1 Flow

1. 95.0"
2. 57.0"
3. 30.9"
4. 9.4"

UNIT 2 Particulate

1. 84.0"
2. 42.9"
3. 12.9"

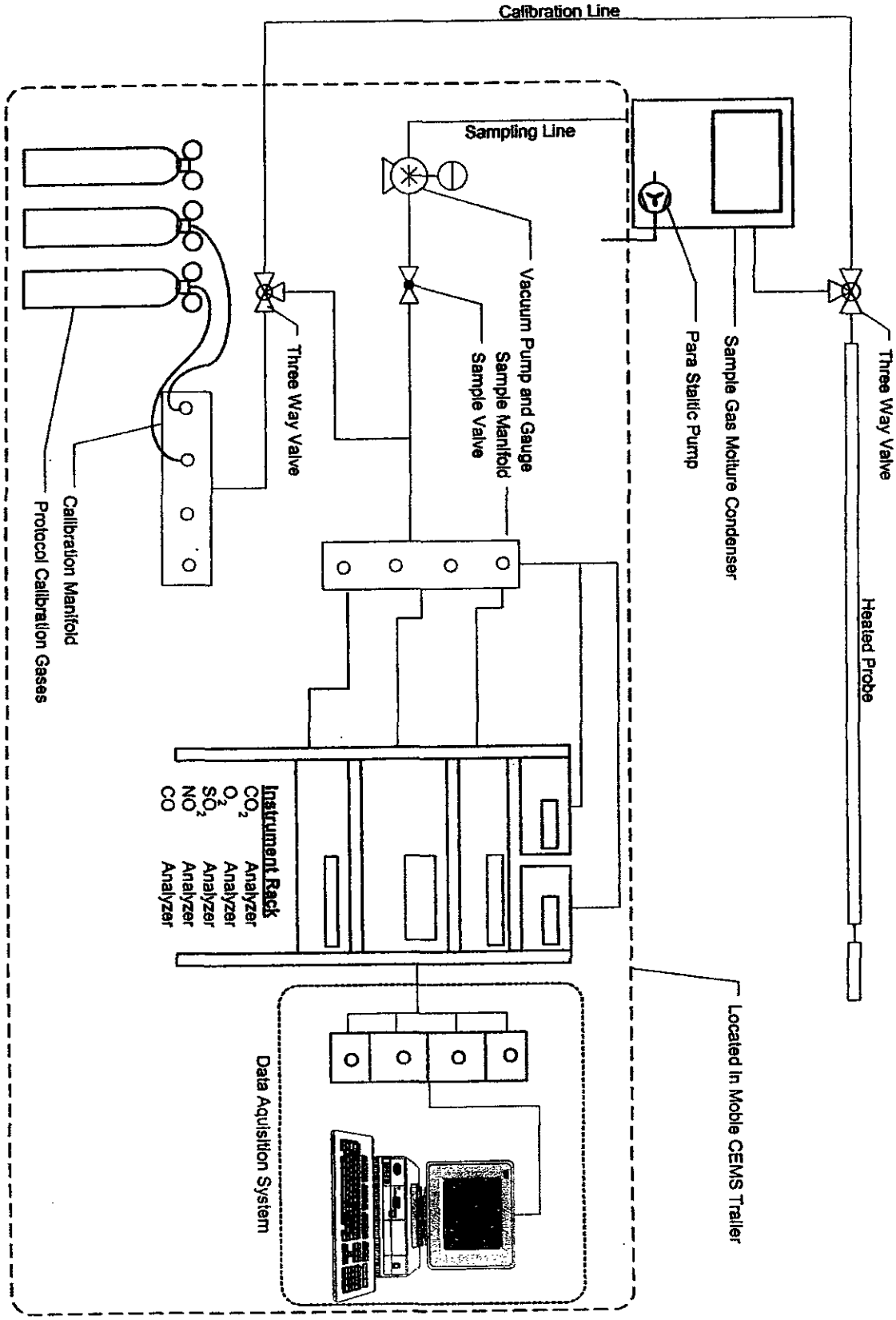
UNIT 2 CEMS

1. 1.3'
2. 4.0'
3. 6.5'

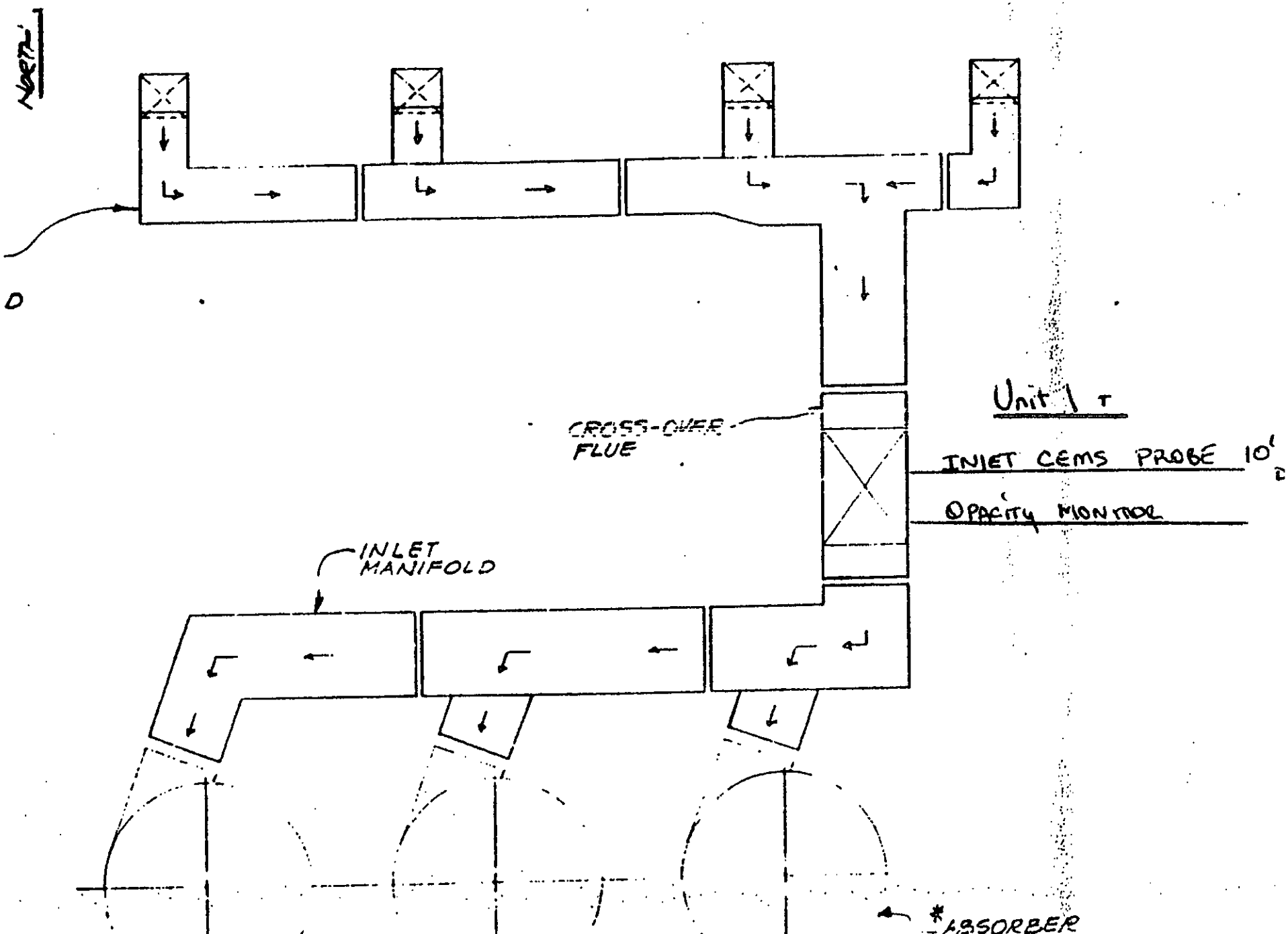
UNIT 2 Flow

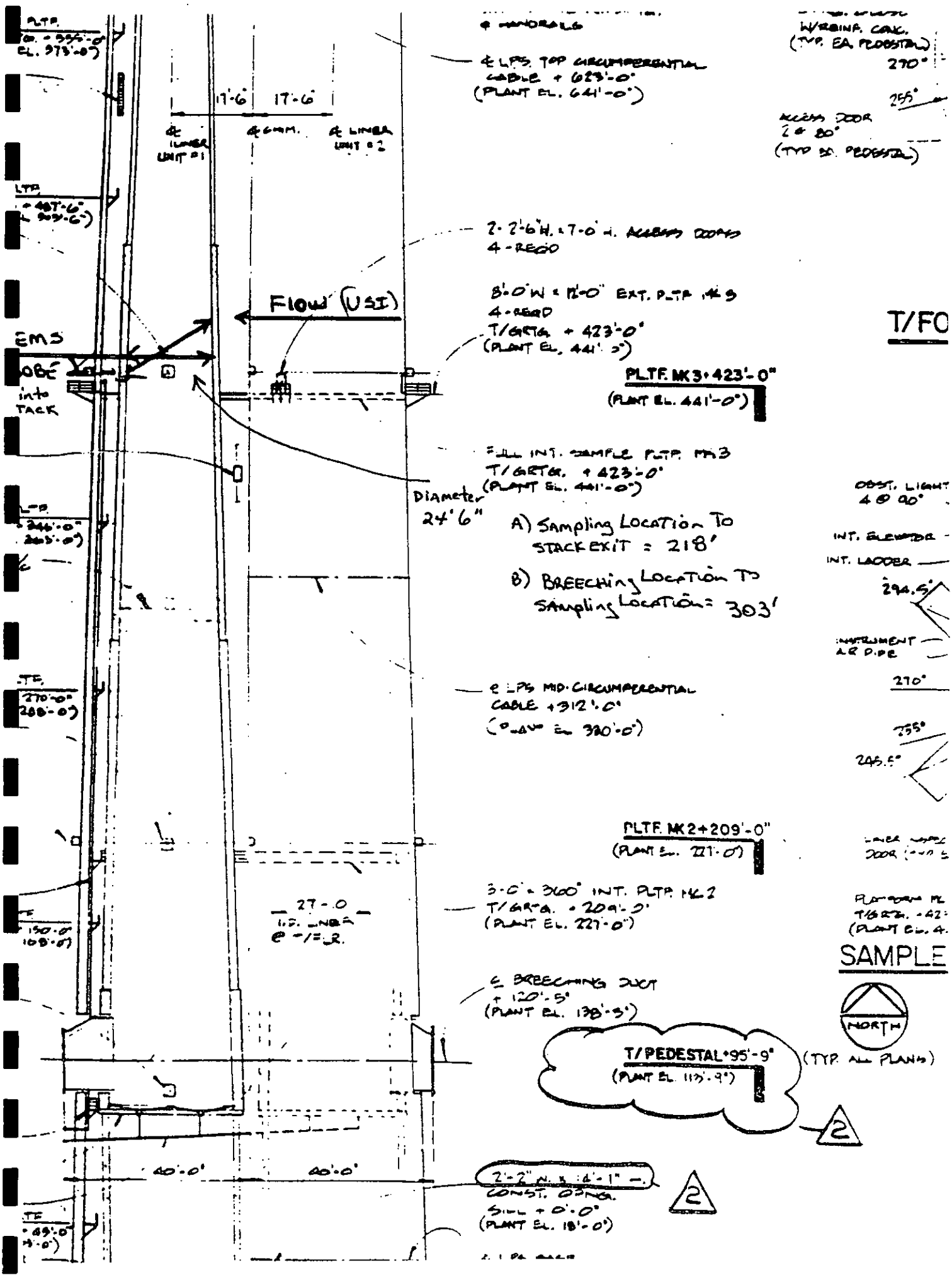
1. 95.0"
2. 57.0"
3. 30.9"
4. 9.4"

DRAWN BY		TITLE	Coastal Air Consulting, Inc.
R F Cobb		St Johns River Power Park - SJRPP	1531 Wyngate Drive, Deland FL
DATE	SCALE	DESCRIPTION	(386) 943-9241 Fax (386) 943 9212
12-06-02	NONE	Unit I & II Stack and Sample Port Configuration	



DRAWN BY		TITLE	Coastal Air Consulting, Inc
R F Cobb		EPA Instrumental Sample Train	1531 Wyngate Drive, Deland FL
DATE	SCALE	DESCRIPTION	(386) 943-9241 Fax (386) 943 9212
4/15/02	NONE	Sample Train Schematic	


NORTH
D
Unit 1
CROSS-OVER FLUE
INLET CEMS PROBE 10'
OPACITY MONITOR
INLET MANIFOLD
ABSORBER TOWER
SR


PLTF.
EL. 973'-0"
17'-6"
17'-6"
℄ LINER UNIT #1
℄ CHIM.
℄ LINER UNIT #2
℄ LPS TOP CIRCUMFERENTIAL CABLE + 623'-0"
(PLANT EL. 641'-0")
W/REINF. CONC.
(TYP. EA. PEDESTAL)
270°
255°
ACCESS DOOR
2 @ 80°
(TYP. EA. PEDESTAL)
LTF.
+ 487'-6"
2 - 2'-6" W. x 7'-0" H. ACCESS DOORS
4 - REQD
Flow (USI)
EMS
8'-0" W x 12'-0" EXT. PLTF. MK 3
4 - REQD
T/GRTG. + 423'-0"
(PLANT EL. 441'-0")
T/FO
PLTF. MK3 + 423'-0"
(PLANT EL. 441'-0")
into TACK
FULL INT. SAMPLE PLTF. MK3
T/GRTG. + 423'-0"
(PLANT EL. 441'-0")
Diameter 24'6"
OBST. LIGHT
4 @ 90°
A) Sampling Location To STACK EXIT = 218'
INT. ELEVATOR
INT. LADDER
B) BREECHING LOCATION TO SAMPLING LOCATION = 303'
294.5°
INSTRUMENT AIR PIPE
270°
℄ LPS MID-CIRCUMFERENTIAL CABLE + 312'-0"
(PLANT EL. 320'-0")
255°
245.5°
PLTF. MK2 + 209'-0"
(PLANT EL. 227'-0")
3'-0" x 360° INT. PLTF. MK2
T/GRTG. + 209'-0"
(PLANT EL. 227'-0")
27'-0
I.D. LINER
℄ - / = R.
℄ BREECHING DUCT
+ 120'-5"
(PLANT EL. 138'-5")
SAMPLE
NORTH
T/PEDESTAL + 95'-9"
(PLANT EL. 113'-9")
(TYP. ALL PLANS)
2
40'-0"
40'-0"
2'-2" W. x 4'-1" H.
CONST. OPNG.
SILL + 0'-0"
(PLANT EL. 18'-0")
2

APPENDIX 4
Sample Calculations

SAMPLE EQUATIONS
FOR CEMS RELATIVE ACCURACY TEST AUDITS

CALCULATIONS FOR FLUE GAS VOLUME AND MOISTURE

Time	Dry Gas Meter Ft^3	Pitot ΔP In. H_2O	Orifice ΔH In. H_2O	Dry Gas Temp.°F In	Dry Gas Temp.°F Out	Flue Gas Static Pressure In. H_2O	Stack Temp.°F
T	V_m	Δp	ΔH	TMI	TMO	P_g	t_s

1. P_{bar} = Barometric Pressure (in. Hg)

2. TT = Net Sampling Time (minutes)

3. V_m = V_m Final - V_m Initial = Sample Gas Volume (Ft^3)

4. T_m = Average Dry Gas Temperature at Meter (°F)

$$T_m = \frac{Avg.TMI + Avg.TMO}{2}$$

5. Δp = Velocity head of stack gas (in. H_2O)

6. ΔH = Average Orifice Pressure Drop (in.H_2O)

7. Volume of dry gas sampled at standard conditions[a] (DSCF)

$$V_{m(std)} = \frac{(17.64)(V_m)(Y)\left(P_{bar} + \frac{\Delta H}{13.6}\right)}{(T_m + 460)}$$

8. V_{lc} = Total Water Collected = gm H_2O Silica gel + ml Imp. H_2O = ml

9. Volume of water vapor at standard conditions[b] (SCF)

$$V_{w(std)} = 0.0471(V_{lc}) = SCF$$

10. Percent moisture in flue gas

$$\%M = \frac{100(V_{w(std)})}{V_{m(std)} + V_{w(std)}}$$

11. Mole fraction of water vapor in flue gas

$$B_{ws} = \frac{\%M}{100}$$

12. Molecular Weight of dry flue gas

$$M_d = 0.44(\%CO_2) + 0.32(\%O_2) + 0.28(\%N_2 + \%CO)$$

13. Molecular weight of wet flue gas

$$M_s = M_d(1 - B_{ws}) + 18(B_{ws})$$

14. A = Cross-sectional area of stack (Ft^2)

$$\frac{\pi r^2}{144}$$

15. P_s = Flue gas pressure (in, Hg)

$$P_s = P_{bar} + P_g$$

NOTE: $$P_g(Hg) = \frac{P_g(in.H_2O)}{13.6}$$

16. T_s = Absolute stack temperature (°R)

$$T_s = 460 + t_s$$

17. Flue velocity at stack conditions (FT/SEC)

$$V_s = (K_p)(C_p)\left[\left(\sqrt{\Delta p}\right)avg\right]\sqrt{\frac{T_s(avg)}{P_s * M_s}}$$

C_p = pitot tube coefficient
K_p = pitot tube constant = 85.49ft/sec

18. Flue gas volumetric flow rate at standard conditions[b] (SCFM)

$$Q_s = (V_s)(A)\left(\frac{528}{T_s(avg.)}\right)\left(\frac{P_s}{29.92}\right)(60)$$

19. Flue gas volumetric flow rate at standard conditions[c] (DSCFM)

$$Q_{sd} = (1 - B_{ws})(V_s)(A)\left(\frac{528}{T_s(avg.)}\right)\left(\frac{P_s}{29.92}\right)(60)$$

20. Flue gas volumetric flow rate at stack conditions (ACFM)

$$Q_a = (V_s)(A)(60)$$

NOTES:
[a]Dry standard cubic feet at 68°F, 29.92 in. Hg
[b]Standard conditions at 68°F, 29.92 in. Hg
[c]Dry standard cubic feet per minute at 68°F, 29.92 in. Hg

F-FACTOR DETERMINATION

THE WET F-FACTOR (F_w):

Includes all components of combustion

$$F_w = \frac{10^6\, Btu / mmBtu\left[5.57(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O_2) + 0.21(\%H_2O)\right]}{GCV_{wet}}$$

THE DRY F-FACTOR (F_d):

Includes all components of combustion less water

$$F_d = \frac{10^6\, Btu / mmBtu\left[3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O_2)\right]}{GCV_{dry}}$$

THE CARBON F-FACTOR (F_c):

Includes only Carbon Dioxide

$$F_c = \frac{10^6\, Btu / mmBtu\left[0.321(\%C)\right]}{GCV_{dry}}$$

References for the above equations (i.e. %H, %C, %N, %S, $\%O_2$) can be found in 40 CFR Part 60, Appendix A, Method 19.

LBS/MMBTU CALCULATIONS USING THE F-FACTOR

1. EMISSION RATE *E(lb/mmbtu)*, O_2 based

$$E(lb/mmbtu) = C \times F_d \left(\frac{20.9}{20.9 - \%O_2} \right)$$

Where:

C(lb/dscf) = Pollutant concentration (ppm) x conversion factor.

Conversion Factors:

NOx = 1.194×10^{-7}

SO_2 = 1.660×10^{-7}

CO = 7.274×10^{-8}

C_3H_8 = 1.145×10^{-7}

F_d*(dscf/mmbtu)* = "F" Factor for fuel type, (Ref. EPA Method 19)

F_d (Coal) = 9780

F_d (Gas) = 8710

F_d (Oil) = 9190

2. EMISSION RATE *E(lb/mmbtu)*, CO_2 based

$$E(lb/mmbtu) = C \times F_c \left(\frac{100}{\%CO_2} \right)$$

Where:

C(lb/dscf) = Pollutant concentration (ppm) x conversion factor.

Conversion Factors:

NOx = 1.194×10^{-7}

SO2 = 1.660×10^{-7}

CO = 7.274×10^{-8}

C_3H_8 = 1.145×10^{-7}

F_c*(dscf/mmbtu)* = "F" Factor for fuel type, (Ref. EPA Method 19)

F_d (Coal) = 1800

F_d (Gas) = 1040

F_d (Oil) = 1420

CALCULATION FOR GAS CONCENTRATION

GAS CONCENTRATION (C_{gas})

$$C_{gas} = \left(\overline{C} - C_0\right)\left(\frac{C_{ma}}{C_m - C_o}\right)$$

C_{gas} = Effluent gas concentration, ppm

$\overline{C}$ = Average gas concentration indicated by gas analyzer, dry basis, ppm

C_0 = Average of initial and final system calibration bias check responses for the zero gas, ppm

C_m = Average of initial and final system calibration bias check responses for the upscale calibration gas, ppm

C_{ma} = Actual concentration of the upscale calibration gas, ppm

GAS CONCENTRATION @ 15% O_2 (C_{gas} @ 15% O_2)

$$C_{gas} @ 15\% O_2 = C_{gas} * ((20.9-15)/(20.9-\%O_2))$$

GAS CONCENTRATION @ 7% O_2 (C_{gas} @ 7% O_2)

$$C_{gas} @ 7\% O_2 = C_{gas} * ((20.9-7)/(20.9-\%O_2))$$

CALCULATION OF RELATIVE ACCURACY

ARITHMETIC MEAN (OF THE DIFFERENCE , {d}, OF A DATA SET)

$$\bar{d} = \frac{1}{n}\sum_{i=1}^{n} d_i$$

Where n = Number of data points.

ALGEBRAIC SUM (OF THE INDIVIDUAL DIFFERENCES, $\{d_i\}$)

$$\sum_{i=1}^{n} d_i$$

STANDARD DEVIATION, S_d

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left(\frac{\left(\sum_{i=1}^{n} d_i\right)^2}{n}\right)}{n-1}}$$

CONFIDENCE COEFFICIENT, CC

$$CC = t_{0.975}\frac{S_d}{\sqrt{n}}$$

For 9 tests $t_{0.975} = 2.306$

For 10 tests $t_{0.975} = 2.262$

For 11 tests $t_{0.975} = 2.228$

For 12 tests $t_{0.975} = 2.201$

RELATIVE ACCURACY, RA

$$RA = \frac{|\bar{d}| + |CC|}{\overline{RM}} x100$$

APPENDIX 5
Lab Analysis

LIMS Label:	F051110NGKOLPP04
Lab ID:	05-1897
Sample Matrix:	Coal / Pet Coke
Sample Description:	Unit 1 SJRPP Composite
Sample Date:	11/10/2005
Sample Time:	9:00:00

Moisture	137047 %		Analyst	Analysis Date	Analysis Time
Air Dry Loss	8.41	For samples without Air-Dry Loss result, enter zero (0).	jakeb	11/15/05	9:00:00
Residual 60 Mesh Loss	3.40		jakeb	11/22/05	8:30:00

Results Weight %	As-Determined	Dry	Dry,Ash-Free (MAF)	With moisture As-Received	Without Moisture As-Received	Analyst	Analysis Date	Analysis Time
Total Moisture	----------	----------	----------	----------	**11.52**	jakeb	11/22/05	8:30:00
Carbon	78.63	**81.40**	87.24	----------	**72.02**	danm	11/18/05	15:00:00
Hydrogen	4.80	**4.57**	4.90	5.33	**4.04**	danm	11/18/05	15:00:00
Nitrogen	1.60	**1.65**	1.77	----------	**1.46**	danm	11/18/05	15:00:00
Sulfur	2.22	**2.30**	2.46	----------	**2.03**	carolynj	11/16/05	12:00:00
Ash	6.47	**6.70**	----------	----------	**5.93**	jakeb	11/22/05	8:30:00
Oxygen (% Difference)	6.28	**3.38**	3.62	13.23	**2.99**	danm	11/18/05	15:00:00
Total %	100.00	100.00	106.70	100.00	88.48	Calculated - Not in LIMS		
Total Moisture weight %	----------	----------	----------	-11.52	11.52	Calculated - Not in LIMS		
Moisture Weight %	3.40	----------	----------	----------	100.00	Calculated - Not in LIMS		

Calorific Value						Analyst	Analysis Date	Analysis Time
Gross BTU/lb (corrected)	13386.10	**13857.2**	14852.67	----------	**12260.3**	carolynj	11/16/05	12:00:00
Net BTU/lb	12891.9	**13345.7**	14304.34	----------	**11807.7**	Calculated - Entered into LIMS		
Gross BTU/lb (no S corr.)	13438.80	**13911.8**	14911.15	----------	**12308.6**	carolynj	11/16/05	12:00:00

Other Analyses						Analyst	Date	Time
Fixed Carbon	61.80	**63.98**	68.58	----------	**56.61**	jakeb	11/22/05	8:30:00
Volatile % UnCalibrated	29.32	30.35	32.53	----------	26.85	Not Reported		
Volatile % Calibrated	27.36	**28.32**	30.35	----------	**25.06**	jakeb	11/22/05	8:30:00
Chlorine		**0.00**	0.00	----------	**0.00**			
Fluorine		**0.00**	0.00	----------	**0.00**			

LIMS Label:	F051109NGKOLPP07
Lab ID:	05-1900
Sample Matrix:	Coal / Pet Coke
Sample Description:	Unit 2 SJRPP Composite
Sample Date:	11/9/2005
Sample Time:	09:00:00

Moisture	137050 %		Analyst	Analysis Date	Analysis Time
Air Dry Loss	9.45	For samples without Air-Dry Loss result, enter zero (0).	jakeb	11/09/05	9:00:00
Residual 60 Mesh Loss	2.73		jakeb	11/22/05	8:30:00

Results Weight %	As-Determined	Dry	Dry,Ash-Free (MAF)	With moisture As-Received	Without Moisture As-Received	Analyst	Analysis Date	Analysis Time
Total Moisture	----------	----------	----------	----------	**11.92**	jakeb	11/22/05	8:30:00
Carbon	77.91	**80.09**	87.69	----------	**70.55**	danm	11/18/05	15:00:00
Hydrogen	4.74	**4.56**	4.99	5.35	**4.02**	danm	11/18/05	15:00:00
Nitrogen	1.60	**1.64**	1.80	----------	**1.44**	danm	11/18/05	15:00:00
Sulfur	1.98	**2.04**	2.23	----------	**1.79**	carolynj	11/18/05	13:00:00
Ash	8.42	**8.66**	----------	----------	**7.63**	jakeb	11/22/05	8:30:00
Oxygen (% Difference)	5.35	**3.01**	3.29	13.24	**2.65**	danm	11/18/05	15:00:00
Total %	100.00	100.00	108.66	100.00	88.08	Calculated - Not in LIMS		
Total Moisture weight %	----------	----------	----------	-11.92	11.92	Calculated - Not in LIMS		
Moisture Weight %	2.73	----------	----------	----------	100.00	Calculated - Not in LIMS		

Calorific Value						Analyst	Analysis Date	Analysis Time
Gross BTU/lb (corrected)	13223.80	**13594.4**	14883.44	----------	**11974.2**	carolynj	11/18/05	13:00:00
Net BTU/lb	12727.9	**13084.6**	14325.29	----------	**11525.1**	Calculated - Entered into LIMS		
Gross BTU/lb (no S corr.)	13270.80	**13642.7**	14936.34	----------	**12016.7**	carolynj	11/18/05	13:00:00

Other Analyses						Analyst	Date	Time
Fixed Carbon	59.51	**61.18**	66.98	----------	**53.89**	jakeb	11/22/05	8:30:00
Volatile % UnCalibrated	30.16	31.01	33.95	----------	27.31	Not Reported		
Volatile % Calibrated	28.54	**29.34**	32.12	----------	**25.84**	jakeb	11/22/05	8:30:00
Chlorine		**0.00**	0.00	----------	**0.00**			
Fluorine		**0.00**	0.00	----------	**0.00**			

APPENDIX 6
Plant Data

UNIT 1

Average Values Report
Generated: 11/10/2005 10:39

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1
Run 1

Period Start: 11/10/2005 10:15
Period End: 11/10/2005 10:36
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 10:15	56.7	0.071	11.71	0.391	176.6	0.450	100818	654.0
11/10/2005 10:16	70.7	0.072	11.74	0.390	177.5	0.453	100818	651.2
11/10/2005 10:17	73.6	0.083	11.81	0.385	176.8	0.448	100674	651.1
11/10/2005 10:18	114.7	0.125	11.85	0.378	175.8	0.443	100194	651.7
11/10/2005 10:19	150.6	0.164	11.89	0.374	178.1	0.448	100218	651.8
11/10/2005 10:20	145.6	0.164	11.96	0.368	178.5	0.447	100230	651.7
11/10/2005 10:21	156.7	0.169	11.97	0.367	178.4	0.446	99978	654.6
11/10/2005 10:22	144.6	0.158	11.96	0.367	179.4	0.448	99294	662.0
11/10/2005 10:23	141.5	0.154	12.00	0.365	182.2	0.454	99294	665.9
11/10/2005 10:24	145.6	0.159	12.01	0.366	181.4	0.451	99282	666.9
11/10/2005 10:25	122.7	0.133	11.94	0.367	182.1	0.455	99528	668.8
11/10/2005 10:26	106.0	0.117	11.88	0.375	181.4	0.456	99540	669.9
11/10/2005 10:27	86.6	0.096	11.78	0.383	179.2	0.455	99546	669.2
11/10/2005 10:28	81.9	0.091	11.80	0.385	178.9	0.453	100002	668.3
11/10/2005 10:29	59.7	0.072	11.82	0.384	181.3	0.458	101286	666.0
11/10/2005 10:30	50.3	0.056	11.81	0.387	179.8	0.455	101274	660.4
11/10/2005 10:31	54.3	0.062	11.77	0.390	178.9	0.454	101274	652.0
11/10/2005 10:32	59.7	0.066	11.84	0.385	177.3	0.448	101328	648.6
11/10/2005 10:33	71.1	0.076	11.90	0.380	177.7	0.447	101352	651.3
11/10/2005 10:34	97.4	0.106	11.93	0.374	180.4	0.452	101352	653.5
11/10/2005 10:35	109.3	0.120	11.97	0.372	182.3	0.455	101118	653.4
11/10/2005 10:36	143.3	0.155	12.03	0.367	183.4	0.456	100470	657.9
Daily Average*	**101.9**	**0.112**	**11.88**	**0.377**	**179.4**	**0.451**	**100403**	**658.2**
Maximum*	**156.7**	**0.169**	**12.03**	**0.391**	**183.4**	**0.458**	**101352**	**669.9**
Minimum*	**50.3**	**0.056**	**11.71**	**0.365**	**175.8**	**0.443**	**99282**	**648.6**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 12:29

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1

Run 2

Period Start: 11/10/2005 10:47
Period End: 11/10/2005 11:08
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 10:47	66.6	0.074	11.83	0.387	176.7	0.446	100530	651.0
11/10/2005 10:48	90.2	0.095	11.85	0.383	175.8	0.444	100518	649.9
11/10/2005 10:49	98.0	0.109	11.91	0.377	177.0	0.444	100518	650.1
11/10/2005 10:50	101.1	0.111	11.96	0.375	176.9	0.442	100572	654.6
11/10/2005 10:51	142.4	0.154	12.08	0.364	178.2	0.441	100572	660.0
11/10/2005 10:52	143.3	0.155	12.06	0.363	178.9	0.443	100110	662.6
11/10/2005 10:53	145.1	0.156	12.04	0.364	179.6	0.446	99594	662.7
11/10/2005 10:54	154.3	0.167	12.04	0.364	177.9	0.442	99606	662.0
11/10/2005 10:55	150.5	0.164	12.02	0.366	177.2	0.440	99606	664.5
11/10/2005 10:56	126.7	0.138	11.99	0.368	178.5	0.445	99570	668.7
11/10/2005 10:57	129.7	0.142	11.99	0.368	178.0	0.443	99582	669.4
11/10/2005 10:58	104.5	0.116	11.96	0.373	176.9	0.442	99606	669.4
11/10/2005 10:59	101.4	0.111	11.95	0.376	178.2	0.446	99594	668.6
11/10/2005 11:00	74.1	0.082	11.83	0.381	174.5	0.441	99606	667.6
11/10/2005 11:01	74.1	0.082	11.83	0.379	172.6	0.436	99498	666.0
11/10/2005 11:02	95.7	0.106	11.84	0.376	172.6	0.436	99414	663.5
11/10/2005 11:03	86.8	0.097	11.87	0.378	173.0	0.436	99396	657.9
11/10/2005 11:04	79.5	0.088	11.81	0.380	171.8	0.435	99408	654.3
11/10/2005 11:05	83.0	0.091	11.84	0.376	173.0	0.437	99252	652.8
11/10/2005 11:06	89.8	0.099	11.86	0.374	172.8	0.436	98796	654.6
11/10/2005 11:07	118.8	0.130	11.93	0.367	174.6	0.437	98760	654.4
11/10/2005 11:08	149.6	0.163	12.01	0.363	175.5	0.437	98664	656.7
Daily Average*	**109.3**	**0.120**	**11.93**	**0.373**	**175.9**	**0.441**	**99671**	**660.1**
Maximum*	**154.3**	**0.167**	**12.08**	**0.387**	**179.6**	**0.446**	**100572**	**669.4**
	11/10/2005 10:54	11/10/2005 10:54	11/10/2005 10:51	11/10/2005 10:47	11/10/2005 10:53	11/10/2005 10:59	11/10/2005 10:51	11/10/2005 10:58
Minimum*	**66.6**	**0.074**	**11.81**	**0.363**	**171.8**	**0.435**	**98664**	**649.9**
	11/10/2005 10:47	11/10/2005 10:47	11/10/2005 11:04	11/10/2005 11:08	11/10/2005 11:04	11/10/2005 11:04	11/10/2005 11:08	11/10/2005 10:48

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 11:46

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1
Run 3

Period Start: 11/10/2005 11:21
Period End: 11/10/2005 11:42
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 11:21	97.3	0.107	11.93	0.368	165.1	0.414	99636	651.8
11/10/2005 11:22	109.7	0.120	11.94	0.367	165.9	0.415	99558	654.0
11/10/2005 11:23	157.4	0.171	12.03	0.363	168.9	0.420	99264	659.6
11/10/2005 11:24	158.8	0.173	12.04	0.362	169.6	0.421	99294	661.1
11/10/2005 11:25	141.7	0.155	11.98	0.363	169.5	0.423	99150	662.0
11/10/2005 11:26	127.4	0.139	12.02	0.362	169.0	0.420	98712	662.5
11/10/2005 11:27	160.9	0.174	12.05	0.362	167.9	0.417	98694	662.1
11/10/2005 11:28	154.3	0.168	12.02	0.365	168.4	0.419	98706	664.4
11/10/2005 11:29	166.4	0.181	12.02	0.363	170.4	0.424	98748	667.2
11/10/2005 11:30	153.2	0.171	11.99	0.366	169.4	0.422	98802	668.3
11/10/2005 11:31	108.1	0.124	11.92	0.369	167.6	0.420	98826	669.1
11/10/2005 11:32	101.2	0.112	11.85	0.376	164.3	0.415	98826	667.2
11/10/2005 11:33	95.7	0.106	11.84	0.375	164.0	0.414	99234	666.4
11/10/2005 11:34	97.2	0.107	11.89	0.374	166.1	0.417	99372	665.1
11/10/2005 11:35	96.3	0.107	11.82	0.378	166.4	0.421	99354	660.8
11/10/2005 11:36	103.8	0.115	11.85	0.376	169.0	0.426	99672	656.2
11/10/2005 11:37	129.9	0.143	11.89	0.369	168.4	0.424	99954	655.3
11/10/2005 11:38	133.3	0.146	11.97	0.365	167.5	0.419	99942	654.8
11/10/2005 11:39	140.2	0.153	11.98	0.362	167.3	0.417	99936	654.6
11/10/2005 11:40	169.2	0.184	12.03	0.361	168.2	0.418	99876	658.5
11/10/2005 11:41	171.4	0.187	12.02	0.361	167.8	0.417	99792	662.8
11/10/2005 11:42	171.2	0.186	12.04	0.362	167.5	0.416	99810	667.1
Daily Average*	**133.8**	**0.147**	**11.96**	**0.367**	**167.6**	**0.419**	**99325**	**661.4**
Maximum*	**171.4**	**0.187**	**12.05**	**0.378**	**170.4**	**0.426**	**99954**	**669.1**
Minimum*	**95.7**	**0.106**	**11.82**	**0.361**	**164.0**	**0.414**	**98694**	**651.8**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 12:17

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1
Run 4

Period Start: 11/10/2005 11:53
Period End: 11/10/2005 12:14
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 11:53	103.8	0.114	11.89	0.368	163.2	0.410	100572	658.0
11/10/2005 11:54	116.4	0.128	11.90	0.365	163.4	0.411	100188	658.3
11/10/2005 11:55	135.8	0.148	11.98	0.363	166.2	0.414	100194	660.1
11/10/2005 11:56	151.4	0.164	11.97	0.365	166.4	0.416	100188	662.9
11/10/2005 11:57	147.1	0.161	11.98	0.363	165.5	0.413	100194	664.0
11/10/2005 11:58	135.8	0.148	11.99	0.367	165.4	0.413	100200	666.6
11/10/2005 11:59	138.8	0.152	11.95	0.366	166.7	0.418	100164	668.9
11/10/2005 12:00	119.9	0.131	11.95	0.367	165.9	0.414	100188	668.5
11/10/2005 12:01	105.3	0.116	11.95	0.368	163.2	0.409	100194	667.3
11/10/2005 12:02	83.1	0.091	11.83	0.375	161.6	0.408	100200	667.4
11/10/2005 12:03	75.0	0.083	11.80	0.377	161.3	0.409	100230	667.2
11/10/2005 12:04	65.1	0.073	11.78	0.378	160.5	0.407	100266	667.4
11/10/2005 12:05	74.9	0.083	11.81	0.374	162.9	0.412	100266	666.5
11/10/2005 12:06	78.6	0.087	11.87	0.375	164.8	0.415	100266	664.1
11/10/2005 12:07	71.8	0.080	11.84	0.376	165.5	0.418	100266	663.0
11/10/2005 12:08	77.5	0.086	11.83	0.374	164.8	0.416	100212	661.1
11/10/2005 12:09	96.1	0.106	11.85	0.368	164.1	0.414	100188	659.5
11/10/2005 12:10	124.9	0.137	11.95	0.367	164.8	0.412	100176	658.7
11/10/2005 12:11	109.2	0.120	11.92	0.370	163.9	0.411	100122	659.3
11/10/2005 12:12	111.6	0.123	11.93	0.367	163.9	0.411	100122	659.9
11/10/2005 12:13	116.6	0.128	11.98	0.364	164.9	0.412	100098	660.9
11/10/2005 12:14	92.2	0.102	11.87	0.368	164.8	0.415	100110	663.0
Daily Average*	**106.0**	**0.116**	**11.90**	**0.369**	**164.3**	**0.413**	**100209**	**663.3**
Maximum*	**151.4**	**0.164**	**11.99**	**0.378**	**166.7**	**0.418**	**100572**	**668.9**
Minimum*	**65.1**	**0.073**	**11.78**	**0.363**	**160.5**	**0.407**	**100098**	**658.0**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 12:45

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1
Run 5

Period Start: 11/10/2005 12:24
Period End: 11/10/2005 12:45
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 12:24	63.3	0.071	11.76	0.380	163.4	0.416	100662	661.5
11/10/2005 12:25	64.1	0.072	11.73	0.380	163.0	0.416	100566	657.2
11/10/2005 12:26	106.2	0.117	11.88	0.369	167.3	0.420	100218	654.0
11/10/2005 12:27	123.8	0.134	11.94	0.368	168.4	0.422	100188	651.9
11/10/2005 12:28	150.1	0.164	11.94	0.365	169.5	0.424	100200	656.3
11/10/2005 12:29	154.0	0.167	11.99	0.360	172.1	0.430	100020	662.3
11/10/2005 12:30	182.4	0.196	12.02	0.359	172.3	0.428	99474	667.6
11/10/2005 12:31	171.1	0.188	12.01	0.360	171.7	0.428	99462	671.6
11/10/2005 12:32	156.1	0.171	11.93	0.362	169.2	0.424	99462	673.8
11/10/2005 12:33	141.8	0.156	11.91	0.361	170.0	0.427	99606	673.5
11/10/2005 12:34	113.3	0.125	11.88	0.366	169.5	0.427	99606	672.0
11/10/2005 12:35	85.4	0.095	11.81	0.374	168.7	0.427	99606	670.6
11/10/2005 12:36	68.1	0.076	11.74	0.379	168.6	0.429	99594	668.7
11/10/2005 12:37	56.5	0.063	11.69	0.383	167.4	0.428	100482	667.3
11/10/2005 12:38	51.5	0.058	11.69	0.382	166.0	0.425	100494	665.8
11/10/2005 12:39	58.5	0.062	11.71	0.380	164.6	0.420	100608	662.1
11/10/2005 12:40	68.8	0.077	11.74	0.377	164.2	0.418	100944	657.1
11/10/2005 12:41	96.9	0.107	11.82	0.374	164.4	0.416	100968	653.3
11/10/2005 12:42	106.6	0.118	11.90	0.369	166.4	0.418	100956	655.2
11/10/2005 12:43	168.7	0.181	12.01	0.362	170.9	0.425	100956	660.2
11/10/2005 12:44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/10/2005 12:45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Daily Average*	**109.4**	**0.120**	**11.85**	**0.370**	**167.9**	**0.423**	**100204**	**663.1**
Maximum*	**182.4**	**0.196**	**12.02**	**0.383**	**172.3**	**0.430**	**100968**	**673.8**
Minimum*	**51.5**	**0.058**	**11.69**	**0.359**	**163.0**	**0.416**	**99462**	**651.9**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 14:05

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1

Run 6

Period Start: 11/10/2005 13:04
Period End: 11/10/2005 13:25
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 13:04	71.2	0.079	11.81	0.354	175.0	0.442	96594	645.4
11/10/2005 13:05	68.2	0.076	11.80	0.357	175.8	0.445	96366	644.7
11/10/2005 13:06	60.2	0.067	11.81	0.358	177.3	0.449	96384	640.9
11/10/2005 13:07	60.3	0.067	11.78	0.359	176.5	0.448	96378	642.3
11/10/2005 13:08	58.8	0.065	11.79	0.358	176.4	0.447	96552	642.3
11/10/2005 13:09	66.2	0.074	11.79	0.362	174.7	0.443	96762	643.9
11/10/2005 13:10	58.7	0.065	11.78	0.363	174.8	0.443	96780	644.3
11/10/2005 13:11	61.5	0.068	11.79	0.361	172.7	0.438	97332	647.9
11/10/2005 13:12	75.3	0.083	11.82	0.362	172.1	0.435	97872	651.7
11/10/2005 13:13	75.3	0.084	11.86	0.361	173.4	0.437	97860	652.6
11/10/2005 13:14	92.9	0.100	11.88	0.358	178.6	0.449	97848	654.4
11/10/2005 13:15	90.9	0.101	11.84	0.360	177.4	0.449	99438	656.9
11/10/2005 13:16	92.6	0.103	11.83	0.362	176.1	0.445	99450	658.5
11/10/2005 13:17	100.3	0.111	11.84	0.363	174.6	0.441	99432	661.5
11/10/2005 13:18	102.6	0.116	11.82	0.363	171.8	0.435	100386	663.4
11/10/2005 13:19	76.5	0.085	11.76	0.370	170.5	0.433	100542	667.3
11/10/2005 13:20	69.7	0.078	11.74	0.375	170.6	0.435	100560	668.3
11/10/2005 13:21	67.8	0.076	11.74	0.375	170.1	0.433	100572	668.0
11/10/2005 13:22	75.3	0.084	11.76	0.376	172.8	0.439	101790	669.8
11/10/2005 13:23	64.4	0.072	11.70	0.380	172.5	0.441	101790	669.1
11/10/2005 13:24	57.1	0.064	11.70	0.380	171.6	0.438	101784	669.3
11/10/2005 13:25	64.9	0.074	11.70	0.380	171.9	0.440	102120	668.8
Daily Average*	**73.2**	**0.081**	**11.79**	**0.365**	**174.0**	**0.441**	**98845**	**656.0**
Maximum*	**102.6**	**0.116**	**11.88**	**0.380**	**178.6**	**0.449**	**102120**	**669.8**
Minimum*	**57.1**	**0.064**	**11.70**	**0.354**	**170.1**	**0.433**	**96366**	**640.9**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 14:07

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1

Run 7

Period Start: 11/10/2005 13:33
Period End: 11/10/2005 13:54
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 13:33	65.4	0.073	11.77	0.379	173.3	0.440	103770	666.7
11/10/2005 13:34	75.3	0.084	11.78	0.377	173.7	0.441	103770	664.8
11/10/2005 13:35	70.2	0.078	11.75	0.378	172.2	0.438	103758	663.9
11/10/2005 13:36	74.3	0.083	11.79	0.376	172.8	0.438	103440	664.0
11/10/2005 13:37	87.2	0.097	11.74	0.379	171.4	0.436	103476	663.7
11/10/2005 13:38	87.8	0.100	11.75	0.379	171.1	0.435	103464	663.9
11/10/2005 13:39	68.2	0.077	11.72	0.381	168.8	0.431	102690	665.0
11/10/2005 13:40	59.8	0.067	11.69	0.378	165.2	0.422	102708	666.3
11/10/2005 13:41	58.3	0.065	11.69	0.379	163.9	0.419	102714	666.1
11/10/2005 13:42	68.5	0.076	11.72	0.375	164.9	0.421	102714	664.8
11/10/2005 13:43	76.9	0.088	11.73	0.377	166.7	0.424	102426	660.7
11/10/2005 13:44	45.1	0.051	11.63	0.382	166.1	0.427	102342	652.3
11/10/2005 13:45	34.6	0.039	11.60	0.383	167.4	0.431	102384	647.7
11/10/2005 13:46	44.5	0.048	11.63	0.377	167.2	0.430	101616	647.0
11/10/2005 13:47	52.2	0.059	11.63	0.373	164.8	0.424	101418	647.4
11/10/2005 13:48	67.4	0.075	11.70	0.368	166.2	0.425	101406	644.8
11/10/2005 13:49	73.6	0.082	11.78	0.366	168.4	0.428	101406	643.5
11/10/2005 13:50	71.8	0.080	11.80	0.362	167.3	0.424	100206	645.7
11/10/2005 13:51	71.6	0.078	11.84	0.361	166.3	0.420	99912	644.0
11/10/2005 13:52	95.9	0.104	11.88	0.359	168.4	0.424	99858	651.1
11/10/2005 13:53	110.0	0.121	11.90	0.355	170.1	0.427	99354	659.0
11/10/2005 13:54	103.0	0.113	11.89	0.359	168.5	0.424	98826	662.3
Daily Average*	**71.0**	**0.079**	**11.75**	**0.373**	**168.4**	**0.429**	**101984**	**657.0**
Maximum*	**110.0**	**0.121**	**11.90**	**0.383**	**173.7**	**0.441**	**103770**	**666.7**
Minimum*	**34.6**	**0.039**	**11.60**	**0.355**	**163.9**	**0.419**	**98826**	**643.5**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 14:31

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1
Run 8

Period Start: 11/10/2005 14:03
Period End: 11/10/2005 14:24
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 14:03	49.5	0.056	11.62	0.371	161.3	0.415	98772	635.1
11/10/2005 14:04	64.2	0.072	11.71	0.366	162.6	0.415	98736	634.2
11/10/2005 14:05	71.2	0.081	11.75	0.362	164.4	0.418	98760	637.4
11/10/2005 14:06	71.7	0.080	11.74	0.359	165.5	0.421	98748	643.7
11/10/2005 14:07	80.8	0.090	11.78	0.357	166.3	0.422	98682	644.6
11/10/2005 14:08	111.7	0.123	11.88	0.352	167.9	0.423	98670	642.6
11/10/2005 14:09	101.2	0.113	11.83	0.354	165.2	0.417	98682	641.3
11/10/2005 14:10	85.2	0.094	11.81	0.355	164.9	0.417	98352	643.2
11/10/2005 14:11	94.4	0.105	11.83	0.355	164.4	0.415	98256	648.8
11/10/2005 14:12	75.6	0.084	11.81	0.358	164.5	0.417	98232	650.8
11/10/2005 14:13	80.5	0.087	11.81	0.359	163.2	0.413	98244	649.8
11/10/2005 14:14	92.4	0.103	11.75	0.362	165.4	0.421	98244	651.6
11/10/2005 14:15	73.8	0.082	11.74	0.367	166.9	0.425	98268	647.2
11/10/2005 14:16	69.7	0.077	11.70	0.368	165.8	0.424	98256	642.1
11/10/2005 14:17	69.2	0.078	11.72	0.367	165.4	0.422	98616	641.7
11/10/2005 14:18	59.1	0.066	11.69	0.368	163.4	0.418	98736	641.5
11/10/2005 14:19	69.2	0.076	11.72	0.365	163.6	0.417	98748	645.2
11/10/2005 14:20	87.9	0.097	11.81	0.361	164.4	0.416	98748	649.6
11/10/2005 14:21	105.4	0.118	11.81	0.360	163.8	0.415	99252	648.6
11/10/2005 14:22	93.0	0.103	11.83	0.359	166.4	0.420	99414	646.7
11/10/2005 14:23	96.9	0.108	11.80	0.360	167.6	0.425	99408	649.2
11/10/2005 14:24	120.4	0.133	11.89	0.357	168.9	0.424	99726	648.6
Daily Average*	**82.9**	**0.092**	**11.77**	**0.361**	**165.1**	**0.419**	**98707**	**644.7**
Maximum*	**120.4**	**0.133**	**11.89**	**0.371**	**168.9**	**0.425**	**99726**	**651.6**
Minimum*	**49.5**	**0.056**	**11.62**	**0.352**	**161.3**	**0.413**	**98232**	**634.2**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/10/2005 14:59

Company: St. Johns River Power Park U#1
Plant: 11201 New Berlin Road
City/St: Jacksonville, FL 32226
Source: Unit 1
Run9

Period Start: 11/10/2005 14:37
Period End: 11/10/2005 14:58
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1outCO_C ppm	Average 1outCO_MM #/M	Average 1outCO2_C %	Average 1outNOX_MM #/M	Average 1outSO2_C ppm	Average 1outSO2_MM #/M	Average 1Stk_kscfh kscfh	Average 1Unit_Load MW
11/10/2005 14:37	79.3	0.086	11.77	0.370	162.3	0.412	101316	649.3
11/10/2005 14:38	75.0	0.083	11.79	0.370	160.9	0.408	101328	649.2
11/10/2005 14:39	84.4	0.094	11.75	0.371	158.7	0.404	101262	650.5
11/10/2005 14:40	88.5	0.098	11.81	0.368	158.0	0.400	101274	654.5
11/10/2005 14:41	98.3	0.109	11.82	0.364	158.4	0.400	101208	657.7
11/10/2005 14:42	98.2	0.109	11.81	0.367	160.6	0.406	101010	660.5
11/10/2005 14:43	80.3	0.089	11.83	0.368	161.1	0.407	100992	662.5
11/10/2005 14:44	78.7	0.087	11.84	0.368	161.9	0.409	101010	661.0
11/10/2005 14:45	82.9	0.091	11.79	0.374	163.1	0.414	100932	662.3
11/10/2005 14:46	60.2	0.067	11.72	0.378	160.7	0.410	100746	663.8
11/10/2005 14:47	56.6	0.063	11.71	0.377	157.7	0.403	100734	664.5
11/10/2005 14:48	54.2	0.060	11.69	0.377	155.6	0.398	100956	663.1
11/10/2005 14:49	63.3	0.071	11.72	0.377	157.2	0.401	101670	662.0
11/10/2005 14:50	58.5	0.065	11.76	0.377	159.7	0.406	101634	661.2
11/10/2005 14:51	55.7	0.062	11.80	0.376	158.8	0.403	101640	660.6
11/10/2005 14:52	48.9	0.054	11.74	0.378	157.9	0.402	101604	659.2
11/10/2005 14:53	65.3	0.073	11.80	0.374	159.8	0.405	101388	654.8
11/10/2005 14:54	64.3	0.070	11.84	0.374	158.8	0.400	101388	652.5
11/10/2005 14:55	76.7	0.085	11.86	0.374	159.8	0.403	101406	652.0
11/10/2005 14:56	78.4	0.087	11.86	0.372	161.1	0.406	101388	655.3
11/10/2005 14:57	85.7	0.094	11.88	0.368	159.1	0.400	101394	657.9
11/10/2005 14:58	108.1	0.119	11.90	0.365	161.3	0.404	101406	660.3
Daily Average*	**74.6**	**0.083**	**11.80**	**0.372**	**159.7**	**0.405**	**101258**	**657.9**
Maximum*	**108.1**	**0.119**	**11.90**	**0.378**	**163.1**	**0.414**	**101670**	**664.5**
Minimum*	**48.9**	**0.054**	**11.69**	**0.364**	**155.6**	**0.398**	**100734**	**649.2**

* Does not include Invalid Averaging Periods ("N/A")

UNIT 2

Average Values Report
Generated: 11/9/2005 09:22

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2
Run 1

Period Start: 11/9/2005 08:55
Period End: 11/9/2005 09:16
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 08:55	477.5	0.520	12.02	0.345	159.0	0.395	91314	594.8
11/09/2005 08:56	444.3	0.485	11.99	0.346	158.6	0.395	91464	594.7
11/09/2005 08:57	394.6	0.432	11.96	0.348	157.9	0.394	91470	596.5
11/09/2005 08:58	506.6	0.554	11.97	0.343	157.1	0.392	91470	597.0
11/09/2005 08:59	511.1	0.557	12.04	0.340	158.4	0.393	91308	596.7
11/09/2005 09:00	479.3	0.521	12.04	0.342	158.3	0.393	91296	597.1
11/09/2005 09:01	430.1	0.468	12.02	0.345	157.0	0.390	91308	599.1
11/09/2005 09:02	443.1	0.483	12.01	0.346	157.5	0.392	91134	598.6
11/09/2005 09:03	464.9	0.508	11.96	0.348	156.3	0.390	90684	597.6
11/09/2005 09:04	506.3	0.553	11.99	0.346	156.1	0.389	90684	595.5
11/09/2005 09:05	566.6	0.616	12.05	0.344	157.8	0.392	90672	595.6
11/09/2005 09:06	514.3	0.562	11.97	0.348	155.7	0.389	90648	596.3
11/09/2005 09:07	417.6	0.455	12.01	0.347	156.9	0.391	90636	596.5
11/09/2005 09:08	408.9	0.444	12.05	0.346	157.6	0.391	90636	597.2
11/09/2005 09:09	499.6	0.544	12.02	0.343	158.4	0.394	90636	596.9
11/09/2005 09:10	515.1	0.559	12.06	0.340	158.6	0.393	90636	594.6
11/09/2005 09:11	455.7	0.496	12.01	0.345	158.9	0.395	90636	598.5
11/09/2005 09:12	411.9	0.448	12.03	0.345	158.7	0.394	90648	597.1
11/09/2005 09:13	410.8	0.449	11.99	0.346	161.0	0.402	90804	600.1
11/09/2005 09:14	483.9	0.526	12.03	0.343	160.7	0.399	90846	597.7
11/09/2005 09:15	427.0	0.466	11.99	0.348	158.7	0.396	90870	596.3
11/09/2005 09:16	430.8	0.470	12.00	0.348	158.4	0.394	90858	596.2
Daily Average*	**463.6**	**0.505**	**12.01**	**0.345**	**158.1**	**0.393**	**90939**	**596.8**
Maximum*	**566.6**	**0.616**	**12.06**	**0.348**	**161.0**	**0.402**	**91470**	**600.1**
Minimum*	**394.6**	**0.432**	**11.96**	**0.340**	**155.7**	**0.389**	**90636**	**594.6**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 10:04

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2
Run 2

Period Start: 11/9/2005 09:28
Period End: 11/9/2005 09:49
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 09:28	384.8	0.422	11.95	0.347	160.1	0.400	91188	595.0
11/09/2005 09:29	464.5	0.508	11.96	0.345	160.2	0.401	91242	593.4
11/09/2005 09:30	487.4	0.531	12.00	0.343	160.0	0.399	90858	593.2
11/09/2005 09:31	443.3	0.485	11.97	0.344	160.0	0.400	90738	594.4
11/09/2005 09:32	496.8	0.541	12.01	0.343	160.3	0.399	90726	597.9
11/09/2005 09:33	494.2	0.538	12.03	0.342	159.8	0.397	90660	598.1
11/09/2005 09:34	497.0	0.538	12.09	0.339	161.2	0.399	90636	598.2
11/09/2005 09:35	435.4	0.471	12.10	0.340	161.8	0.400	90636	599.3
11/09/2005 09:36	373.3	0.406	12.03	0.347	160.4	0.398	90636	598.4
11/09/2005 09:37	452.5	0.495	11.97	0.347	159.9	0.399	90636	595.3
11/09/2005 09:38	496.0	0.541	11.99	0.345	160.7	0.401	90648	594.4
11/09/2005 09:39	406.5	0.444	11.99	0.348	160.1	0.399	90624	595.6
11/09/2005 09:40	423.9	0.462	12.02	0.346	161.8	0.402	90636	594.5
11/09/2005 09:41	470.5	0.513	12.01	0.343	160.9	0.400	90636	594.6
11/09/2005 09:42	470.9	0.514	12.00	0.341	159.7	0.398	90636	596.0
11/09/2005 09:43	501.3	0.548	11.98	0.341	159.9	0.399	90570	596.9
11/09/2005 09:44	414.0	0.452	11.98	0.344	160.4	0.400	90354	594.0
11/09/2005 09:45	566.3	0.616	12.04	0.339	161.0	0.401	90372	594.4
11/09/2005 09:46	527.7	0.578	11.95	0.342	160.0	0.400	90372	593.7
11/09/2005 09:47	511.0	0.559	11.96	0.343	160.7	0.402	90438	594.1
11/09/2005 09:48	472.5	0.519	11.92	0.344	160.5	0.402	90462	594.2
11/09/2005 09:49	458.0	0.501	11.96	0.342	161.3	0.403	90444	592.9
Daily Average*	**465.8**	**0.508**	**12.00**	**0.343**	**160.5**	**0.400**	**90643**	**595.4**
Maximum*	**566.3**	**0.616**	**12.10**	**0.348**	**161.8**	**0.403**	**91242**	**599.3**
Minimum*	**373.3**	**0.406**	**11.92**	**0.339**	**159.7**	**0.397**	**90354**	**592.9**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 10:24

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2
Run 3

Period Start: 11/9/2005 10:00
Period End: 11/9/2005 10:21
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 10:00	450.8	0.493	11.98	0.341	159.4	0.397	90594	596.6
11/09/2005 10:01	471.0	0.516	11.95	0.340	158.3	0.396	90606	598.1
11/09/2005 10:02	442.6	0.484	11.96	0.339	158.4	0.396	90564	597.0
11/09/2005 10:03	446.0	0.488	11.98	0.340	159.1	0.397	90504	597.0
11/09/2005 10:04	467.5	0.510	11.99	0.340	159.8	0.398	90492	592.6
11/09/2005 10:05	393.9	0.432	11.94	0.343	159.4	0.399	90492	593.6
11/09/2005 10:06	432.0	0.475	11.90	0.345	159.5	0.401	90474	592.6
11/09/2005 10:07	426.1	0.468	11.92	0.343	160.4	0.402	90420	590.9
11/09/2005 10:08	403.1	0.442	11.93	0.342	160.5	0.402	90408	591.4
11/09/2005 10:09	471.6	0.516	11.96	0.339	161.6	0.404	90432	593.1
11/09/2005 10:10	482.1	0.528	11.95	0.340	161.1	0.403	90684	593.0
11/09/2005 10:11	441.0	0.484	11.92	0.340	161.0	0.404	90696	594.5
11/09/2005 10:12	481.3	0.528	11.93	0.340	162.1	0.406	90696	594.4
11/09/2005 10:13	469.2	0.516	11.91	0.340	161.3	0.405	91032	594.4
11/09/2005 10:14	483.3	0.531	11.92	0.340	160.3	0.402	91032	593.3
11/09/2005 10:15	470.1	0.515	11.94	0.340	160.3	0.401	91020	593.5
11/09/2005 10:16	455.1	0.501	11.90	0.344	159.2	0.400	91044	593.7
11/09/2005 10:17	453.7	0.499	11.90	0.340	160.0	0.402	91338	594.8
11/09/2005 10:18	511.8	0.558	12.01	0.337	162.1	0.403	91350	598.0
11/09/2005 10:19	556.2	0.606	12.01	0.337	161.3	0.401	91338	597.1
11/09/2005 10:20	533.6	0.582	11.99	0.339	160.7	0.400	91320	596.4
11/09/2005 10:21	466.9	0.512	11.93	0.342	159.6	0.400	91278	595.5
Daily Average*	**464.0**	**0.508**	**11.95**	**0.341**	**160.2**	**0.401**	**90810**	**594.6**
Maximum*	**556.2**	**0.606**	**12.01**	**0.345**	**162.1**	**0.406**	**91350**	**598.1**
Minimum*	**393.9**	**0.432**	**11.90**	**0.337**	**158.3**	**0.396**	**90408**	**590.9**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 11:04

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2

Run 4

Period Start: 11/9/2005 10:41
Period End: 11/9/2005 11:02
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 10:41	399.0	0.435	12.00	0.343	159.6	0.397	91164	592.5
11/09/2005 10:42	376.0	0.410	12.01	0.344	159.4	0.396	91068	595.2
11/09/2005 10:43	489.5	0.533	12.03	0.342	161.2	0.401	90768	596.0
11/09/2005 10:44	416.4	0.454	11.99	0.345	159.7	0.398	90768	595.0
11/09/2005 10:45	443.6	0.484	11.98	0.344	159.8	0.399	90768	593.7
11/09/2005 10:46	451.9	0.492	12.02	0.343	159.8	0.397	90594	593.1
11/09/2005 10:47	486.1	0.529	12.02	0.342	160.8	0.400	90552	592.5
11/09/2005 10:48	488.1	0.533	11.99	0.343	159.2	0.397	90564	593.9
11/09/2005 10:49	447.3	0.489	11.95	0.344	157.2	0.393	90540	595.0
11/09/2005 10:50	518.4	0.564	12.03	0.341	157.8	0.392	90594	592.0
11/09/2005 10:51	475.8	0.515	12.08	0.339	158.7	0.393	90606	592.7
11/09/2005 10:52	411.9	0.449	12.01	0.343	158.4	0.394	90594	593.7
11/09/2005 10:53	419.8	0.456	12.05	0.342	159.3	0.395	90330	594.9
11/09/2005 10:54	435.2	0.473	12.05	0.342	159.4	0.395	90066	597.6
11/09/2005 10:55	542.4	0.589	12.05	0.340	161.5	0.400	90066	597.7
11/09/2005 10:56	465.2	0.506	12.04	0.344	161.7	0.401	90174	595.8
11/09/2005 10:57	433.7	0.472	12.02	0.347	160.7	0.399	90594	592.4
11/09/2005 10:58	444.5	0.483	12.04	0.345	161.1	0.400	90606	592.0
11/09/2005 10:59	390.2	0.425	12.03	0.345	159.4	0.396	90594	590.8
11/09/2005 11:00	465.8	0.510	11.96	0.346	159.4	0.399	90384	591.8
11/09/2005 11:01	437.2	0.477	11.99	0.346	158.6	0.395	90132	592.7
11/09/2005 11:02	401.0	0.438	11.97	0.344	156.9	0.391	90144	591.7
Daily Average*	**447.2**	**0.487**	**12.01**	**0.343**	**159.5**	**0.397**	**90530**	**593.8**
Maximum*	**542.4**	**0.589**	**12.08**	**0.347**	**161.7**	**0.401**	**91164**	**597.7**
Minimum*	**376.0**	**0.410**	**11.95**	**0.339**	**156.9**	**0.391**	**90066**	**590.8**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 12:10

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2
Run 5

Period Start: 11/9/2005 11:13
Period End: 11/9/2005 11:34
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 11:13	369.9	0.402	12.05	0.344	159.0	0.394	90594	593.9
11/09/2005 11:14	361.6	0.393	12.06	0.346	158.1	0.392	90582	595.3
11/09/2005 11:15	382.6	0.417	12.01	0.349	156.6	0.389	90816	591.4
11/09/2005 11:16	411.6	0.448	12.03	0.346	158.4	0.394	90846	591.1
11/09/2005 11:17	389.0	0.424	12.01	0.347	158.6	0.395	90858	592.0
11/09/2005 11:18	342.6	0.373	12.03	0.347	157.7	0.392	90870	593.8
11/09/2005 11:19	391.1	0.425	12.04	0.347	158.2	0.393	91164	597.0
11/09/2005 11:20	419.0	0.454	12.07	0.343	161.3	0.399	91164	597.1
11/09/2005 11:21	396.7	0.429	12.11	0.343	163.2	0.403	91068	597.8
11/09/2005 11:22	419.8	0.456	12.05	0.348	161.9	0.401	90834	593.2
11/09/2005 11:23	420.1	0.458	12.01	0.348	160.6	0.399	90858	592.7
11/09/2005 11:24	366.0	0.397	12.05	0.350	160.7	0.398	90840	595.8
11/09/2005 11:25	396.2	0.433	11.98	0.349	160.6	0.401	90840	597.3
11/09/2005 11:26	350.6	0.382	12.00	0.349	161.5	0.402	90912	595.9
11/09/2005 11:27	318.5	0.346	12.06	0.348	162.9	0.404	90900	594.7
11/09/2005 11:28	367.1	0.399	12.02	0.347	162.8	0.405	90924	597.6
11/09/2005 11:29	430.0	0.469	12.01	0.347	160.6	0.400	90990	594.8
11/09/2005 11:30	419.9	0.458	12.00	0.349	160.4	0.399	90990	594.5
11/09/2005 11:31	456.3	0.498	12.01	0.347	160.9	0.401	91002	595.8
11/09/2005 11:32	447.0	0.487	12.02	0.346	160.4	0.399	91206	597.4
11/09/2005 11:33	398.3	0.434	12.00	0.347	160.1	0.399	91428	594.1
11/09/2005 11:34	475.1	0.517	12.04	0.344	159.9	0.397	91440	593.3
Daily Average*	**396.8**	**0.432**	**12.03**	**0.347**	**160.2**	**0.398**	**90960**	**594.8**
Maximum*	**475.1**	**0.517**	**12.11**	**0.350**	**163.2**	**0.405**	**91440**	**597.8**
	11/09/2005 11:34	11/09/2005 11:34	11/09/2005 11:21	11/09/2005 11:24	11/09/2005 11:21	11/09/2005 11:28	11/09/2005 11:34	11/09/2005 11:21
Minimum*	**318.5**	**0.346**	**11.98**	**0.343**	**156.6**	**0.389**	**90582**	**591.1**
	11/09/2005 11:27	11/09/2005 11:27	11/09/2005 11:25	11/09/2005 11:21	11/09/2005 11:15	11/09/2005 11:15	11/09/2005 11:14	11/09/2005 11:16

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 12:11

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2

Run 6

Period Start: 11/9/2005 11:45
Period End: 11/9/2005 12:06
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 11:45	463.0	0.506	11.99	0.347	161.0	0.402	90948	592.9
11/09/2005 11:46	402.8	0.440	11.98	0.349	160.4	0.400	90948	591.0
11/09/2005 11:47	428.7	0.467	12.01	0.347	161.1	0.401	90660	588.7
11/09/2005 11:48	392.5	0.430	11.96	0.349	159.4	0.398	90540	592.3
11/09/2005 11:49	348.4	0.381	11.99	0.347	158.9	0.396	90564	594.8
11/09/2005 11:50	447.4	0.487	12.02	0.345	160.0	0.398	90552	596.0
11/09/2005 11:51	547.3	0.590	12.14	0.340	162.4	0.400	90618	596.6
11/09/2005 11:52	486.4	0.527	12.08	0.344	161.5	0.400	90636	594.0
11/09/2005 11:53	468.8	0.510	12.03	0.346	162.3	0.403	90636	591.4
11/09/2005 11:54	444.5	0.485	12.00	0.346	161.8	0.403	90636	593.2
11/09/2005 11:55	387.6	0.424	11.96	0.349	161.3	0.403	90990	593.0
11/09/2005 11:56	431.0	0.469	12.03	0.345	162.8	0.404	91002	593.2
11/09/2005 11:57	429.2	0.466	12.06	0.344	162.8	0.404	90990	592.9
11/09/2005 11:58	401.5	0.437	12.03	0.347	161.0	0.400	91002	593.7
11/09/2005 11:59	475.0	0.519	11.98	0.346	159.7	0.398	91020	593.7
11/09/2005 12:00	447.8	0.491	11.95	0.346	159.3	0.398	91032	594.9
11/09/2005 12:01	446.6	0.488	11.98	0.343	160.3	0.400	91032	592.8
11/09/2005 12:02	471.8	0.514	12.01	0.346	159.9	0.398	90912	594.9
11/09/2005 12:03	429.9	0.470	11.97	0.349	159.4	0.398	90846	596.4
11/09/2005 12:04	403.4	0.441	11.98	0.346	160.7	0.401	90858	595.9
11/09/2005 12:05	362.0	0.395	12.00	0.347	161.1	0.401	90780	593.8
11/09/2005 12:06	424.4	0.465	11.96	0.350	160.6	0.401	90504	593.5
Daily Average*	**433.6**	**0.473**	**12.00**	**0.346**	**160.8**	**0.400**	**90805**	**593.6**
Maximum*	**547.3**	**0.590**	**12.14**	**0.350**	**162.8**	**0.404**	**91032**	**596.6**
Minimum*	**348.4**	**0.381**	**11.95**	**0.340**	**158.9**	**0.396**	**90504**	**588.7**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 12:40

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2

Period Start: 11/9/2005 12:19
Period End: 11/9/2005 12:40
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 12:19	324.4	0.355	11.97	0.350	157.9	0.394	90132	591.7
11/09/2005 12:20	387.3	0.422	12.02	0.346	158.4	0.394	90054	597.4
11/09/2005 12:21	386.5	0.422	12.00	0.348	157.2	0.392	90054	597.3
11/09/2005 12:22	479.0	0.519	12.08	0.346	160.6	0.397	90066	593.5
11/09/2005 12:23	542.1	0.589	12.03	0.345	162.5	0.403	90264	592.3
11/09/2005 12:24	430.6	0.469	12.02	0.347	160.0	0.397	90330	592.9
11/09/2005 12:25	360.1	0.396	11.92	0.354	158.7	0.398	90330	592.9
11/09/2005 12:26	352.0	0.386	11.92	0.354	158.9	0.398	90450	596.6
11/09/2005 12:27	401.8	0.439	11.99	0.351	159.3	0.397	90828	597.2
11/09/2005 12:28	338.4	0.371	11.95	0.353	158.6	0.397	90828	596.9
11/09/2005 12:29	442.5	0.482	12.02	0.349	159.3	0.396	90966	592.5
11/09/2005 12:30	417.1	0.455	12.00	0.350	157.9	0.393	91230	590.7
11/09/2005 12:31	394.3	0.431	11.96	0.352	157.7	0.394	91218	593.7
11/09/2005 12:32	363.9	0.398	11.98	0.350	156.1	0.390	91218	596.8
11/09/2005 12:33	434.7	0.473	12.03	0.349	157.3	0.391	91206	597.3
11/09/2005 12:34	448.2	0.486	12.08	0.348	158.3	0.392	91062	594.4
11/09/2005 12:35	416.2	0.453	12.03	0.349	159.1	0.395	91074	593.6
11/09/2005 12:36	362.4	0.396	11.98	0.356	158.0	0.394	91074	590.3
11/09/2005 12:37	328.8	0.358	12.02	0.357	157.0	0.390	91062	590.4
11/09/2005 12:38	388.3	0.423	12.01	0.354	157.3	0.391	91062	590.9
11/09/2005 12:39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/09/2005 12:40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Daily Average*	**399.9**	**0.436**	**12.00**	**0.350**	**158.5**	**0.395**	**90725**	**594.0**
Maximum*	**542.1**	**0.589**	**12.08**	**0.357**	**162.5**	**0.403**	**91230**	**597.4**
Minimum*	**324.4**	**0.355**	**11.92**	**0.345**	**156.1**	**0.390**	**90054**	**590.3**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 13:12

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2
Run 8

Period Start: 11/9/2005 12:51
Period End: 11/9/2005 13:12
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 12:51	387.6	0.424	11.98	0.350	158.4	0.395	91350	592.7
11/09/2005 12:52	487.0	0.529	12.05	0.348	159.7	0.396	91326	594.3
11/09/2005 12:53	414.5	0.453	11.99	0.354	158.6	0.395	91320	594.9
11/09/2005 12:54	338.3	0.371	11.95	0.355	157.3	0.394	91296	594.2
11/09/2005 12:55	356.9	0.390	11.97	0.355	158.6	0.396	91296	592.3
11/09/2005 12:56	330.2	0.359	12.03	0.354	159.3	0.396	91296	593.2
11/09/2005 12:57	298.9	0.327	11.97	0.359	157.8	0.394	91548	594.4
11/09/2005 12:58	292.0	0.321	11.91	0.359	157.9	0.396	91638	595.1
11/09/2005 12:59	336.4	0.370	11.97	0.356	158.0	0.395	91662	594.0
11/09/2005 13:00	338.9	0.370	11.99	0.353	157.6	0.393	91782	595.7
11/09/2005 13:01	345.3	0.378	11.96	0.353	156.6	0.391	91926	595.2
11/09/2005 13:02	360.5	0.393	12.00	0.354	158.3	0.394	91926	593.7
11/09/2005 13:03	364.9	0.397	12.02	0.356	159.5	0.397	92034	595.3
11/09/2005 13:04	318.5	0.348	11.96	0.358	157.1	0.393	92154	595.1
11/09/2005 13:05	285.8	0.313	11.95	0.359	157.2	0.393	92130	595.3
11/09/2005 13:06	285.9	0.313	11.95	0.359	156.7	0.391	92130	595.7
11/09/2005 13:07	394.7	0.432	11.97	0.358	159.1	0.397	91998	593.3
11/09/2005 13:08	401.0	0.437	12.00	0.356	159.2	0.396	91998	594.2
11/09/2005 13:09	352.3	0.385	11.97	0.356	159.6	0.399	92010	596.5
11/09/2005 13:10	364.8	0.398	12.01	0.352	160.6	0.400	92022	598.9
11/09/2005 13:11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/09/2005 13:12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Daily Average*	**352.7**	**0.385**	**11.98**	**0.355**	**158.4**	**0.395**	**91742**	**594.7**
Maximum*	**487.0**	**0.529**	**12.05**	**0.359**	**160.6**	**0.400**	**92154**	**598.9**
Minimum*	**285.8**	**0.313**	**11.91**	**0.348**	**156.6**	**0.391**	**91296**	**592.3**

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 11/9/2005 13:56

Company: St. Johns Unit 2
Plant:
City/St:
Source: Unit 2
Run 9

Period Start: 11/9/2005 13:25
Period End: 11/9/2005 13:46
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 2outCO_C ppm	Average 2outCO_MM #/M	Average 2outCO2_C %	Average 2outNOX_MM #/M	Average 2outSO2_C ppm	Average 2outSO2_MM #/M	Average 2Stk_kscfh kscfh	Average 2Unit_Load MW
11/09/2005 13:25	342.3	0.373	12.02	0.355	160.7	0.400	91968	596.5
11/09/2005 13:26	309.0	0.339	11.94	0.358	160.6	0.402	91974	595.4
11/09/2005 13:27	335.9	0.367	11.97	0.358	161.0	0.402	92010	596.3
11/09/2005 13:28	336.6	0.369	11.96	0.356	161.2	0.403	92166	595.7
11/09/2005 13:29	269.8	0.296	11.92	0.359	158.5	0.397	92178	596.4
11/09/2005 13:30	239.2	0.263	11.90	0.361	157.2	0.395	92178	595.1
11/09/2005 13:31	261.4	0.286	11.95	0.359	157.4	0.393	92286	594.8
11/09/2005 13:32	305.2	0.333	11.98	0.358	158.8	0.396	92394	598.1
11/09/2005 13:33	283.3	0.310	11.94	0.360	158.9	0.398	92394	598.7
11/09/2005 13:34	352.4	0.385	12.00	0.354	159.2	0.397	92352	600.3
11/09/2005 13:35	335.3	0.366	11.99	0.356	159.3	0.397	92310	598.5
11/09/2005 13:36	320.4	0.350	11.98	0.359	159.7	0.399	92334	596.0
11/09/2005 13:37	307.5	0.336	11.98	0.363	160.6	0.401	92310	593.6
11/09/2005 13:38	344.4	0.376	11.97	0.359	160.3	0.400	92310	591.5
11/09/2005 13:39	323.4	0.355	11.92	0.361	159.0	0.399	92334	594.5
11/09/2005 13:40	272.4	0.300	11.88	0.363	157.4	0.396	92340	596.9
11/09/2005 13:41	281.8	0.310	11.90	0.362	158.7	0.399	92322	595.9
11/09/2005 13:42	237.7	0.261	11.93	0.361	158.5	0.397	92310	595.7
11/09/2005 13:43	287.7	0.317	11.90	0.363	158.7	0.398	92310	593.8
11/09/2005 13:44	273.0	0.299	11.96	0.359	156.8	0.391	92352	596.1
11/09/2005 13:45	261.1	0.286	11.94	0.360	157.3	0.394	92364	595.2
11/09/2005 13:46	266.9	0.292	11.97	0.359	159.9	0.399	92352	594.8
Daily Average*	**297.6**	**0.326**	**11.95**	**0.359**	**159.1**	**0.398**	**92266**	**595.9**
Maximum*	**352.4**	**0.385**	**12.02**	**0.363**	**161.2**	**0.403**	**92394**	**600.3**
Minimum*	**237.7**	**0.261**	**11.88**	**0.354**	**156.8**	**0.391**	**91968**	**591.5**

* Does not include Invalid Averaging Periods ("N/A")