Memorandum

Florida Department of
Environmental Protection

TO: Trina Vielhauer

THRU: J. F. Koerner

FROM: Michael P. Halpin

DATE: March 30, 2006

SUBJECT: JEA, St. Johns River Power Park
Petcoke increase
DEP File No. PSD-FL-010, PA 81-13

Attached is a revision to the Technical Evaluation and Final Determination of permit 0310045-014-AC. The applicant has revised the historical emissions for carbon monoxide and is in the process of updating the relevant AOR's. The revision should improve the historical accuracy, as CEMS are being used rather than AP-42 emission factors which were used in the past.

No change to the permit itself is required as the language simply requires that the applicant be able to demonstrate for a period of 5 years that no emission increase has occurred. The Technical Evaluation and Final Determination is referenced as an attachment to the permit, and it is within that document that baseline emissions were established.

It is my recommendation that no public notice be required, as the permit itself is unchanged. Furthermore, all parties to the original permit change have been included in this action, and the cover letter provides them with a right of appeal.

I recommend your approval.

Attachments

/mph

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

March 30, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Paul M. Smith
Plant Manager
JEA – St. Johns River Power Park
11201 New Berlin Road
Jacksonville, Florida 32226

Re: DEP File No. 0310045-014-AC, PSD-FL-010
St. Johns River Power Park (SJRPP)

Dear Mr. Smith:

The Department is in receipt of your letter dated March 14, 2006 and supporting documentation. Based upon your submittal, it is our understanding that SJRPP is in the process of revising the facility AOR's for years 2000 through 2004, with respect to carbon monoxide (CO) emissions. Your documentation indicates that SJRPP Units 1 and 2 have been equipped with CEMS for CO since the mid-1990's, and that based upon the Department's recent adoption of Rule 62-210.370 Emissions Computation and Reporting, the preferred approach for determining the most accurate computation of annual emissions is through a hierarchy of technical methods, with CEMS being the most preferable.

The Department accepts SJRPP's analysis and supporting documentation. Additionally, the Department recognizes that as a result of the changes to the historical emissions for CO, a revision to an attachment (the Technical Evaluation and Final Determination) related to air construction permit 0310045-014-AC is required, and has been attached.

A copy of this amendment letter and the Technical Evaluation and Final Determination shall be attached to and shall become a part of Permit PSD-FL-010. All other conditions of the referenced permits remain unchanged. A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

This action is final unless a petition is received in accordance with the following requirements:

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as

a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Any party to the original permit has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina Vielhauer, Bureau Chief
Division of Air Resource
Management

James M. Chansler, JEA *
Jay A. Worley, JEA
Gregg Worley, EPA
John Bunyak, NPS
Chris Kirts, DEP-NED
Richard Robinson, P.E. ERMD
Hamilton S. Oven, DEP-Siting
Yi Zhu, DEP (ARMS)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Technical Evaluation and Final Determination revision" package was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3/30/06 to the persons listed below.

James M. Chansler, JEA *
Jay A. Worley, JEA
Gregg Worley, EPA
John Bunyak, NPS
Chris Kirts, NED
Richard Robinson, P.E. ERMD
Mr. Hamilton S. Oven, DEP-Siting

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Mary L. Harvey 3/30/06
(Clerk) (Date)

TECHNICAL EVALUATION

AND

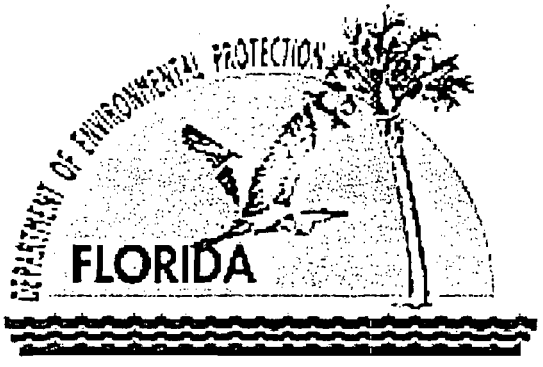
FINAL DETERMINATION

St. Johns River Power Park

Increased Co-Firing of Petroleum Coke

JEA / DUVAL COUNTY

0310045-014-AC



Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section

March 30, 2005
Revised March 30, 2006

TECHNICAL EVALUATION AND FINAL DETERMINATION

1. GENERAL INFORMATION

1.1 APPLICANT NAME AND ADDRESS

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

Authorized Representative: James M. Chansler, V.P. Operations and Maintenance

1.2 REVIEWING AND PROCESS SCHEDULE

February 2, 2005	Received permit application
March 4, 2005	Issued Draft Intent
March 31, 2005	Issued Final permit revision

2. FACILITY INFORMATION

2.1 FACILITY LOCATION

The facility is located in Jacksonville, Duval County. The UTM coordinates are Zone 17; 446.90 km E; 3359.15 km N. This site is approximately 54 kilometers from the Okefenokee National Wildlife Refuge and 98 kilometers from the Wolf Island National Wildlife Refuge, both Class I PSD Areas.

2.2 STANDARD INDUSTRIAL CLASSIFICATION CODES (SIC)

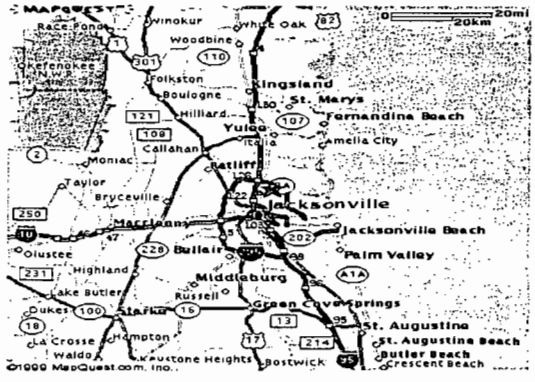
Industry Group No.	49	Electric, Gas and Sanitary Services
Industry No.	4911	Electric Services

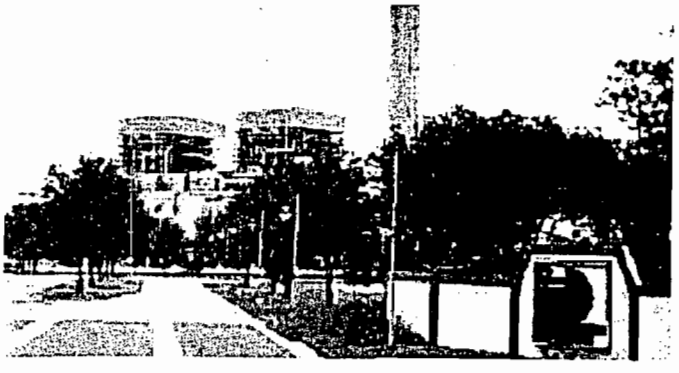
2.3 FACILITY CATEGORY

This facility consists of five boilers, Northside Generating Station (NGS) Boilers Nos. 1, 2 and 3 (No. 2 was placed on long-term reserve shutdown on March 1, 1984) and St. Johns River Power Park (SJRPP) Boilers Nos. 1 and 2; four combustion turbines, NGS Nos. 3, 4, 5 and 6 (Nos. 1 and 2 are inactive); and, an auxiliary boiler, NGS No. 1.

SJRPP Boilers Nos. 1 and 2 are fossil fuel-fired steam generators, each having a nominal nameplate rating of 679.6 megawatts (electric). The emissions units are allowed to fire pulverized coal, a blend of petroleum coke and coal, new No. 2 distillate fuel oil (startup and low-load operation), and "on-specification" used oil. The maximum heat input to each emissions unit is 6,144 million Btu per hour. SJRPP Boilers Nos. 1 and 2 are dry bottom wall-fired boilers and will use an electrostatic precipitator (ESP) to control particulate matter, a wet limestone flue gas desulphurization (FGD) unit to control sulfur dioxide, low NO_X burners and low excess-air firing to control nitrogen oxides, and good combustion to control carbon monoxide.

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs). This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).





3. PROJECT DESCRIPTION

This project primarily addresses the following emissions unit(s):

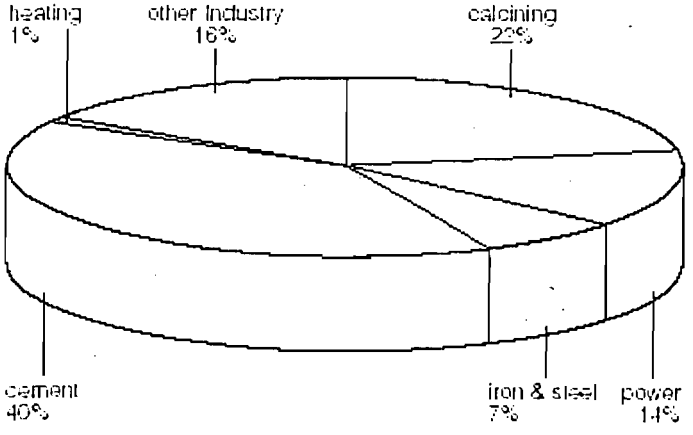
Emissions Unit No.	Emissions Unit Description
016	SJRPP Boiler Number 1 – dry bottom wall-fired boiler w/FGD, ESP and LNB
017	SJRPP Boiler Number 2 – dry bottom wall-fired boiler w/FGD, ESP and LNB

The applicant proposes to increase the combustion of petroleum coke (petcoke) from a maximum of 20% (on a weight basis) to 30%. The facility currently combusts coal as its primary fuel. The applicant indicates that this permit modification can be made in such a way that air emissions will not increase beyond historical levels, thus a PSD Review will not be triggered. The applicant further proposes that data can be provided in accordance with 40 CFR 52.21(b)(21)(v) and 40 CFR 52.21(b)(33) showing that the operational change associated with the use of increased petroleum coke did not result in significant emission increases for PSD pollutants (i.e., the WEPCO provision); emission analyses follow.

3.1 PETCOKE DISCUSSION

Much of this review was obtained from The Clean Coal Centre of the United Kingdom, in an article entitled "*The use of petroleum coke in a coal-fired plant*". Petroleum coke is a by-product from oil refineries and is composed mainly of carbon though it also contains high levels of sulfur and some heavy metals such as vanadium and nickel. There has been considerable interest in petcoke for several years, where it is available, as it is generally significantly cheaper than coal. The price does vary depending on the volumes produced and worldwide demand. The world production of petcoke grew by 50% from 1987 to 1998. It reached nearly 50 Million Tons (Mt) in 1999 and is expected to reach 100 Mt by 2010. The USA is the world's largest producer, producing three-quarters of world supplies. There are three types of petroleum coke, which can be produced depending on the process of production. The three processes are delayed, fluid and flexicoking with delayed coking producing over 90%. All three types of petcoke have higher calorific values than coal and contain less volatile matter and ash. The main uses of petcoke are as an energy source for power generation, in cement production and iron and steel production (which account for about two thirds of production) and the remainder is used mainly as a carbon source.

FIGURE 3 - 1999 WORLD PETROLEUM COKE MARKET PROFILE



The following additional information was compiled for the Year 2001. The source of this data is FERC Form 423, although the Energy Information Administration (EIA) summarized it in a report entitled "*Cost and Quality of Fuels for Electric Utility Plants 2001*", dated March 2004. This data was accumulated for electric generating plants with nameplate capacity of 50 megawatts or more. Tables 25 and 28 from that report are shown below:

Table 25. The Top 20 Electric Utilities, Ranked by Receipts of Coal, 2001

Electric Utility	Receipts (thousand short tons)	Average Delivered Cost		Total Delivered Cost (million dollars)
		(cents per million Btu)	(dollars per short ton)	
1. Tennessee Valley Authority	36,556	121.92	27.99	1,023.15
2. Georgia Power Co	33,639	166.28	39.06	1,313.94
3. TXU Electric Co	27,297	131.74	18.01	491.74
4. Alabama Power Co	24,211	141.68	30.07	728.00
5. PacifiCorp	22,216	87.26	17.25	383.23
6. Detroit Edison Co	20,185	122.38	25.05	505.59
7. Ameren UE	18,797	98.10	17.28	324.57
8. Duke Power Co	17,395	157.31	38.53	670.23
9. Public Service Co of Indiana	16,542	110.30	24.35	402.81
10. Reliant HL&P	16,423	157.06	24.47	401.93
11. Basin Electric Power Coop	16,275	59.00	8.85	143.95
12. Ohio Power Co	15,598	143.01	34.03	530.79
13. Kansas Power and Light Co	13,942	115.59	20.09	280.03
14. MidAmerican Energy	13,607	74.96	12.90	175.50
15. Northern States Power Co	13,255	94.62	16.70	221.36
16. Arkansas Power and Light Co	12,651	78.54	13.74	174.20
17. Indiana Michigan Power	11,904	117.41	22.71	270.30
18. Southwestern Electric Power	11,883	150.44	24.11	286.51
19. Wisconsin Electric Power Co	11,868	102.91	19.29	228.91
20. Appalachian Power Co	11,858	129.66	31.09	368.64

Note: Data are for electric generating plants with a total steam-electric and combined-cycle nameplate capacity of 50 or more megawatts.
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 28. Receipts of Petroleum Coke by Electric Utility, 2001

Electric Utility	Receipts (thousand short tons)	Average Quality			Average Delivered Cost	
		Btu (per pound)	Sulfur (percent by weight)	Ash (percent by weight)	(cents per million Btu)	(dollars per short ton)
Ameren UE	297	14,303	5.72	0.40	66.55	19.12
Central Elec Power Coop-Missouri[1]	*	14,255	5.20	.56	52.82	15.04
Jacksonville Electric Auth	568	14,255	6.28	.30	62.65	17.85
Lakeland City of	18	13,955	4.19	.44	127.02	35.45
Manitowoc Public Utilities	36	14,214	5.51	.65	54.73	15.58
Michigan South Central Power	*	14,002	4.65	.43	150.01	42.01
Northern States Power Co	201	13,613	5.64	.70	39.12	10.65
Northern Indiana Pub Serv Co	149	13,927	4.34	.20	69.32	19.31
Reliant HL&P	132	13,609	1.66	.44	156.57	42.61
Salt River Proj Ag I & P Dist	17	14,500	5.67	.60	100.48	29.14
Seminole Electric Coop	152	14,394	5.58	.41	110.74	31.85
Tampa Electric Power Co	303	13,945	4.90	.46	82.67	23.06
Wisconsin Power & Light	71	13,920	5.70	.56	96.25	26.80
Wisconsin Electric Power Co	145	14,201	5.24	.20	87.79	24.93
Total	2,019	14,079	5.13	.40	78.38	22.07

[1] Includes a small amount of coal.
* = Number less than 0.5.
Note: • Totals may not equal sum of components because of independent rounding. • Data are for electric generating plants with a total steam-electric and combined-cycle nameplate capacity of 50 or more megawatts.
Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Of interest, no Florida utilities show up in the top 20 listing of coal users, even though Florida is one of the most populous states. It is observed that the cost of petroleum coke in year 2000 was approximately ½ that of coal. According to Table 28, Florida had 4 users of petcoke out of 14 listed users. The tables also show that receipts of petcoke totaled 2019 thousand short tons, or about 0.5% of the sum of coal receipts of the top 20 coal users. Only 4 utilities are listed on both tables: Northern States Power, Ameren UE, Wisconsin Electric Power Co. and Reliant HL&P (Northern States Power is now known as XCEL Energy, headquartered in Minnesota). Jacksonville Electric Authority (JEA) is indicated as the largest utility user of petcoke during year 2001 for electrical generation.

4. PROJECT EMISSIONS

4.1 HISTORICAL EMISSIONS

The following table summarizes the historical emissions (EU-016 and 017) based upon Department records (ARMS):

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	*14463.5*	*12891.6*	*13677.5*	100	*13776.5*
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.

5. RULE APPLICABILITY

This facility is located in an area designated, in accordance with Rule 62-204.340, F.A.C., as attainment for all pollutants. Rule 62-4.030, F.A.C., prohibits modification of any existing emissions unit without first receiving a permit. It further specifies that a permitted installation may only be modified in a manner that is consistent with the terms of such a permit. Rule 62-210.200, F.A.C., defines "modification" to mean generally a physical change or change in the method of operation that results in an increase in actual emissions of regulated air pollutants. Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C., also reiterate the requirement for construction permits. Additionally, Rule 62-210.300 requires an Air Construction permit for all new sources of air pollution unless specifically exempt.

FDEP deems that a change to the quantity or quality of fuel burned is a change in the method of operation. Given that the source is major with regard to PSD, an analysis must be performed to verify that the increased burning of petcoke will not result in a significant net emissions increase and that, consequently, use of additional petcoke is not a major modification subject to PSD review. The emission units affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein).

6. PSD POLLUTANT ANALYSIS

6.1 COAL VERSUS PETCOKE

The following table was excerpted from a paper presented at the 2003 International Power-Gen Conference in Las Vegas, Nevada. The paper is entitled "Reducing NO_X and LOI at the St. Johns River Power Park":

	Pet. Coke	Colombian Coal
Prox. Analysis		
Fixed Carbon	83.92	47.60
VM	8.50	33.40
Ash	0.52	7.40
Moisture	7.06	11.60
Total	100.00	100.00
Ult. Analysis		
Carbon	82.22	66.54
Hydrogen	3.35	4.50
Oxygen	0.00	7.99
Nitrogen	1.71	1.32
Sulfur	5.14	0.65
Ash	0.52	7.40
Moisture	7.06	11.60
Total	100.00	100.00
HHV, Btu/lb as-rec'd	14,200	11,800

This table was excerpted from a cement plant application in the United Kingdom (Castle Cement dated May 17, 1999):

Chemical Names	Units	Coal	Petroleum coke	Increase or Decrease
Heat Content	CV-MJ/kg	25.5	31.41	Increase
Carbon	% Carbon	73.4	85	Increase
Chlorine	Cl %	0.03	NA	Decrease
Copper	Cu (ppm)	12	3	Decrease
Lead	Pb	16	5	Decrease
Zinc	Zn	NA	17	Increase
Cadmium	Cd	10	0.04	Decrease
Chromium	Cr	8	5	Decrease
Thallium	Th	10	0.05	Decrease
Arsenic	As	7	1	Decrease
Mercury	Hg	10	NA	Decrease
Antimony	Sb	3	1	Decrease
Cobalt	Co	2	3	Increase
Manganese	Mn	71	NA	Decrease
Nickel	N	6	252	Increase
Tin	Sn	10	1	Decrease
Vanadium	V	4	150	Increase
Sulfur	S%	1.4	5.0	Increase

The purpose of the above tables is to illustrate that the PSD pollutant of most concern is sulfur. Due to the decreases in the lead and ash content in petcoke, increased firing should lead to reductions in the emissions of PM, PM_{10} and Pb. The Department notes that the emissions of nickel and vanadium are not subject to PSD, but may subject the facility to a future MACT requirement.

6.2 CARBON MONOXIDE (CO) AND VOLATIVE ORGANIC COMPOUNDS (VOC)

The applicant contends that there will be no increase in CO or VOC emissions from the increased co-firing of petcoke. The annual CO emissions for these emission units averaged 13677.5 TPY, while annual VOC emissions averaged 118.5 TPY. The Significant Emission Rate for CO is 100 TPY, and for VOC is 40 TPY. Given that the available data shows reduced CO and VOC emissions from the firing of petcoke as compared to coal, the Department finds it unlikely that the increased co-firing of petcoke will cause annual emissions to exceed the PSD thresholds of each pollutant beyond representative past emission rates. Accordingly, a BACT review is not required for these pollutants.

6.3 NITROGEN OXIDE (NO_X)

Test results from other facilities indicate that NO_X emissions are typically less for petcoke firing as compared to coal firing. The annual NO_X emissions for these emission units averaged 26558.8 TPY and the Significant Emission Rate for NO_X is 40 TPY. The Department accepts the premise that increased petcoke firing (and decreased coal firing) will not cause annual NO_X emissions to increase, nor specifically to exceed an average of 26598.7 TPY per emission unit. Accordingly, a BACT review is not required.

6.4 SULFUR DIOXIDE (SO_2) AND SULFURIC ACID MIST (SAM)

The past actual average emissions of SO_2 and SAM were 21718.8 and 1316.9 TPY respectively. The Significant Emission Rate (SER) is 40 TPY for SO_2 and 7 TPY for SAM. The Department accepts the applicant's proposal that SO_2 and SAM emissions can be maintained below the respective SER by additional scrubbing with the existing wet FGD. The applicant additionally proposes to reduce the SO_2 limit (while co-firing) below the existing permit limit, as an additional means of providing assurance to the Department that SO_2 (as well as SAM) emissions will not increase. The combination of additional scrubbing and a reduced emission limit is acceptable to the Department and should ensure that the annual emission levels of SO_2 and SAM do not exceed the PSD thresholds for each pollutant beyond representative past emission rates (21758.7 TPY SO_2 and 1323.8 TPY SAM). In addition to this, the Department will place a limit on the throughput of petcoke at 30% on a heat input basis. Accordingly, the SO_2 and SAM emission increases are considered insignificant for PSD purposes and BACT reviews are not required.

6.5 PARTICULATE MATTER (PM/PM_{10})

As indicated above, it is reasonable to assume that PM10 and PM emissions will be lowered as a result of the ten-fold decrease in fuel ash. Accordingly, the annual PM/PM_{10} emissions from the stack are likely to be maintained with no increase above the PSD significant emission rate of 25/15 tons/year.

With regard to ancillary (or fugitive) emissions, the applicant estimates that particulate matter emissions will be reduced. This is based upon the increased heat input value of petcoke as compared to coal, meaning that a reduction in the overall tons of fuel handled will occur. In summary, the average PM/PM_{10} emissions from each emission unit are likely to remain less that the PSD thresholds for each pollutant and no PSD Review is required.

6.6 SUMMARY

A preliminary review supports the applicant's contention that PSD is not triggered, eliminating the requirement for a BACT review and related modeling. PSD regulations (under the provisions commonly known as the "WEPCO rule") allow a source undertaking a non-routine change that could affect emissions at an electric utility steam generating unit to lawfully avoid the major source permitting process by using the unit's representative actual annual emissions to calculate emissions following the change, if the source submits information for 5 years following the change to confirm its pre-change projection. Under the WEPCO rule, SJRPP must compute baseline actual emissions and must project the future actual emissions from the modified units for a period after the physical change. In addition, SJRPP must maintain and submit to the Department on an annual basis for a period of at least 5 years

from the date the units resume regular operation, information demonstrating that the change did not result in a significant emissions increase. If SJRPP fails to comply with the reporting requirements of the WEPCO rule or if the submitted information indicates that emissions have increased above PSD thresholds as a consequence of the change, it will be required to obtain a PSD permit for petcoke co-firing (meaning that a BACT Review would then be applicable). Finally, even though a PSD review is not triggered due to the co-firing project, SJRPP must meet all other applicable federal, state, and local air pollution requirements.

7. ADDITIONAL COMPLIANCE PROCEDURES (AVERAGE PER EMISSION UNIT)

Pollutant	Compliance Procedures
NO_X	Five years of annual reporting by CEMS proving annual emissions do not exceed 26598.7 TPY
CO	Five years of annual reporting by stack test proving annual emissions do not exceed *13776.5* TPY
VOC	Five years of annual reporting by historical AOR methods, proving annual emissions do not exceed 158.5 TPY
SO_2	Five years of annual reporting by CEMS proving annual emissions do not exceed 21758.7 TPY
SAM	Five years of annual reporting by stack test proving annual emissions do not exceed 1323.8 TPY
PM	Five years of annual reporting by stack test proving annual facility emissions do not exceed 346.7 TPY

Specific permit conditions shall further describe these limitations. The reporting procedures are to begin during the first calendar year in which petcoke is fired.

8. CONCLUSION

Based on the foregoing technical evaluation of the application, additional information submitted by the applicant and other available information, the Department has made a final determination that the proposed project will comply with all applicable state and federal air pollution regulations.

Michael P. Halpin, P.E. Review Engineer
Department of Environmental Protection, Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

9. 2006 REVISION

The tables within Section 4.1 and 7 herein are revised as of March of 2006 in order to more accurately reflect historical carbon monoxide emissions, since the related permit references these tables. The data reflected within this revision is based upon historical CEMS data which the Department considers more accurate than AP-42 emission factors (see 62-210.370, F.A.C.).

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Paul Smith, Plant Manager
JEA-St. Johns River Power Park
11201 New Berlin Road
Jacksonville, Florida 32226

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Ted St Martin ☐ Agent ☐ Addressee

B. Received by (Printed Name) Ted St Martin
C. Date of Delivery 4-4-06

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
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☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7000 1670 0013 3110 1656

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

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Mr. James M. Chansler
V.P. Operations and Maintenance
JEA
St. Johns River Power Park
21 West Church Street
Jacksonville, Florida 32202

PS Form 3800, May 2000 See Reverse for Instructions

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U.S. Postal Service
CERTIFIED MAIL RECEIPT
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Mr. Paul Smith, Plant Manager
JEA-St. Johns River Power Park
11201 New Berlin Road
Jacksonville, Florida 32226

PS Form 3800, May 2000 See Reverse for Instructions

7000 1670 0013 3110 1656

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. James M. Chansler
V.P. Operations and Maintenance
JEA
St. Johns River Power Park
21 West Church Street
Jacksonville, Florida 32202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Robert A Perry ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery 4-4-06

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7000 1670 0013 3110 0789

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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:

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

RECEIVED
MAR 27 2006
BUREAU OF AIR REGULATION

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

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

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LETTER OF TRANSMITTAL

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STATEMENT OF VALIDITY

PROJECT STATISTICS

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4 Description of Source
5 Sampling Procedures
6 Operating Conditions
7 Quality Assurance

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2 Reference Method Quality Assurance
3 Figures
4 Sample Calculations
5 Lab Analysis
6 Plant Data

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

ST. JOHNS RIVER POWER PARK 11/10/05
UNIT NO. 1 OUTLET STACK (CO)

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

ST. JOHNS RIVER POWER PARK 11/10/05
UNIT NO. 1 OUTLET STACK (CO)

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

ST. JOHNS RIVER POWER PARK 11/10/05
UNIT NO. 1 OUTLET STACK (CO)

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

ST. JOHNS RIVER POWER PARK 11/10/05
UNIT NO. 1 OUTLET STACK (CO)

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

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 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

ST. JOHNS RIVER POWER PARK 11/10/05
UNIT NO. 1 OUTLET STACK (CO)

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

ST. JOHNS RIVER POWER PARK 11/10/05
UNIT NO. 1 OUTLET STACK (CO)

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
SITE: SJRPP
UNIT: 2
LOAD: Normal
DATE: 11/09/05

TECO
MODEL # 48

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

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 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

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 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

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 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

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 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

ST. JOHNS RIVER POWER PARK 11/09/05
UNIT NO. 2 OUTLET STACK (CO)

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

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 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

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 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 Component	Requested Concentration	Concentration and Uncertainty	Date of Certification
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	Expire 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 EPA MISC 5 COMPONENT A31	**Blend Tolerance:**	5 % Relative
Production #:	100099029	**Blend Type:**	EPA Protocol
Lot #:	02499B3260EE1	**Cyl. Pressure:**	1700 psig
Cylinder #:	CC154315	**Balance Gas:**	Nitrogen
Expiration Date:	4/15/2007	**CGA:**	660
Shelf Life:	24 months	**Analytical Accuracy:**	1.00 % Relative
		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

FTIR Analysis Certificate

AIR LIQUIDE™

CERTIFICATION OF ANALYSIS

EPA Protocol Gases

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

*Mixture is valid only to 150 psig

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

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	18.08	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, $(ft^3 °R^{1/2})/(in.Hg*min)$.

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. Wells 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, $(ft^3*°R^{1/2})/(in.Hg*min)$.

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) 1	Reference Temp. (F) 2	Observed Temp. (F) 1	Observed Temp. (F) 2	Difference (F) 1	Difference (F) 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

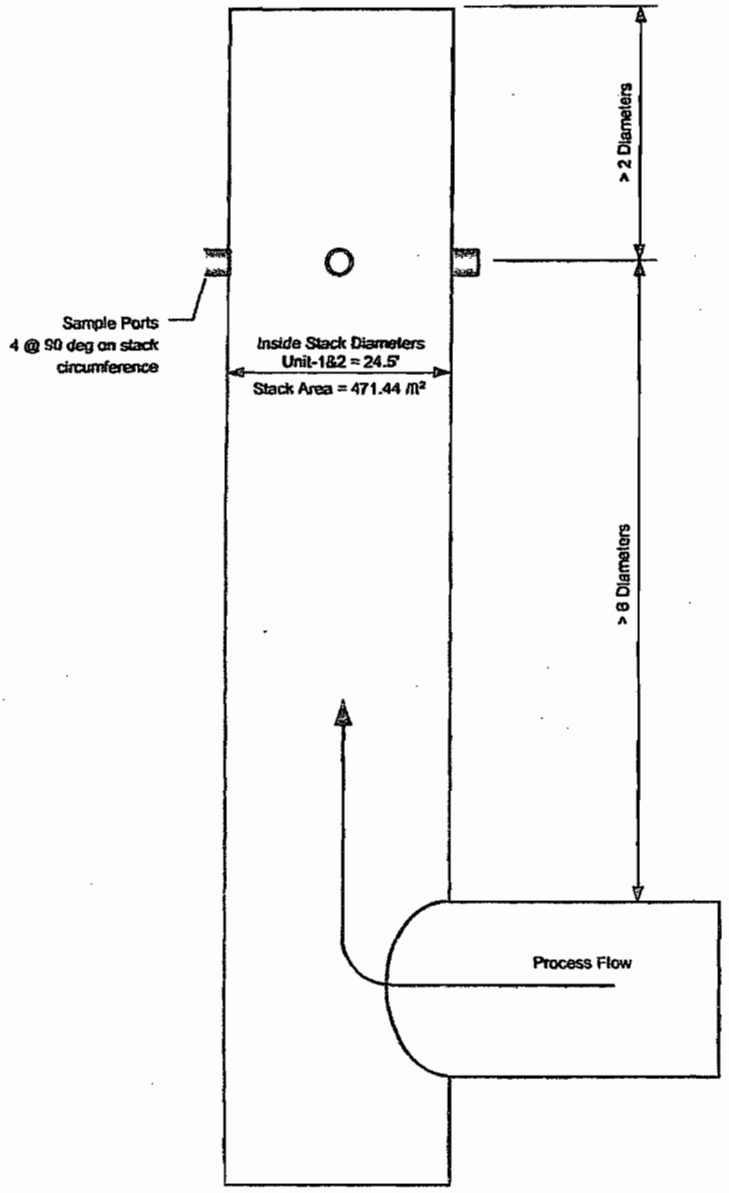
AMBIENT	62.0	MID	230.0	HIGH	350.0

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"

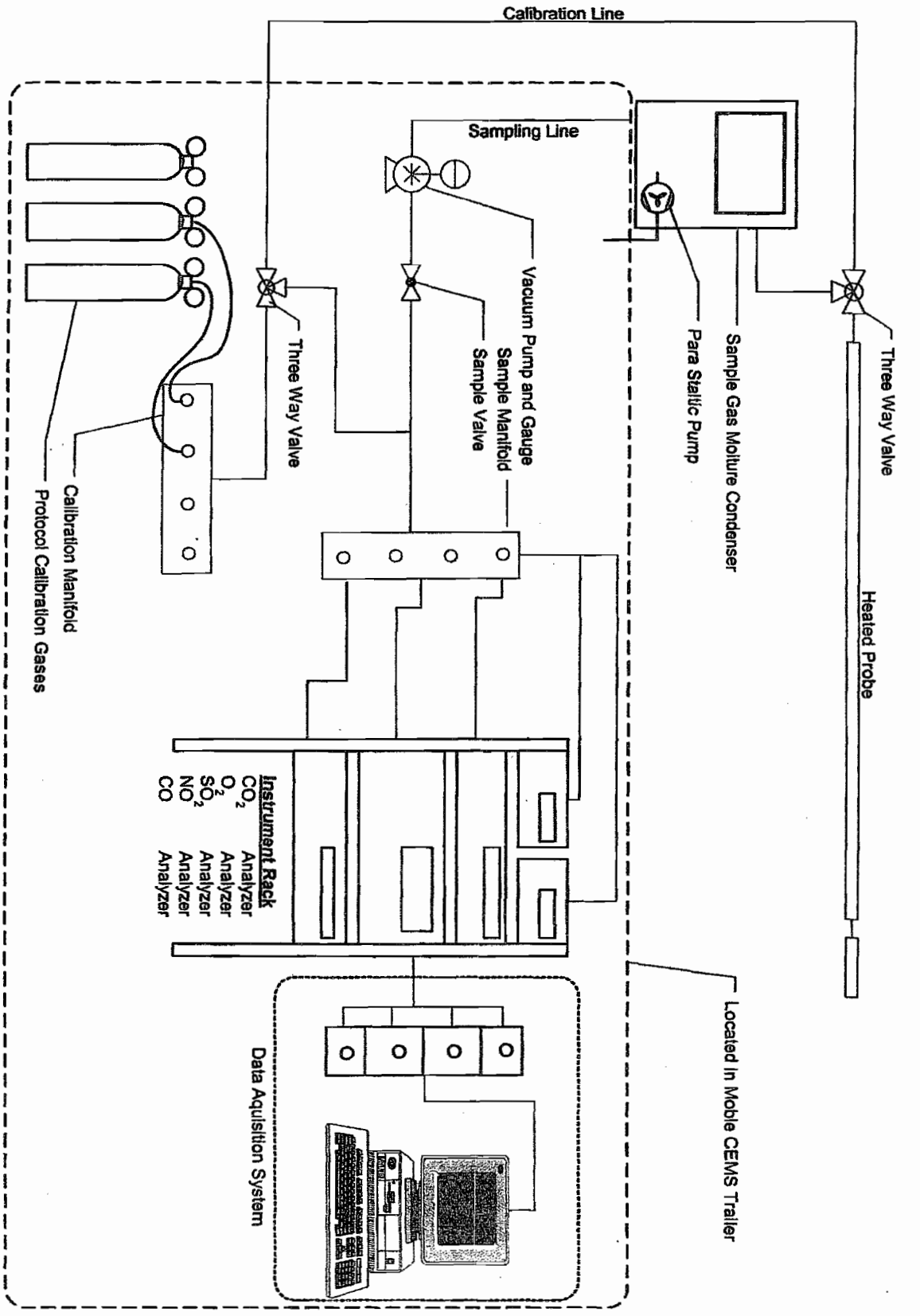
UNIT 2 CEMS

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

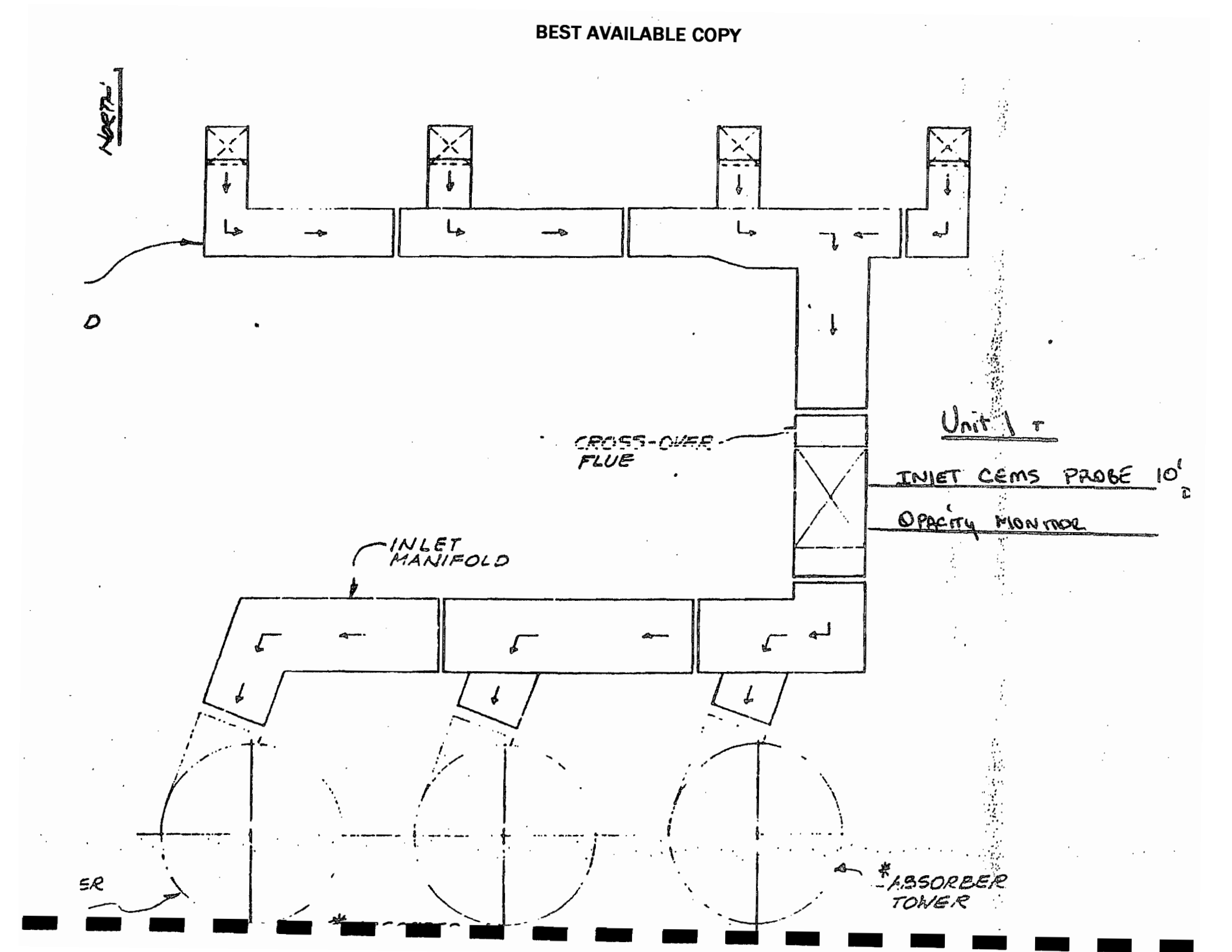
UNIT 2 Flow

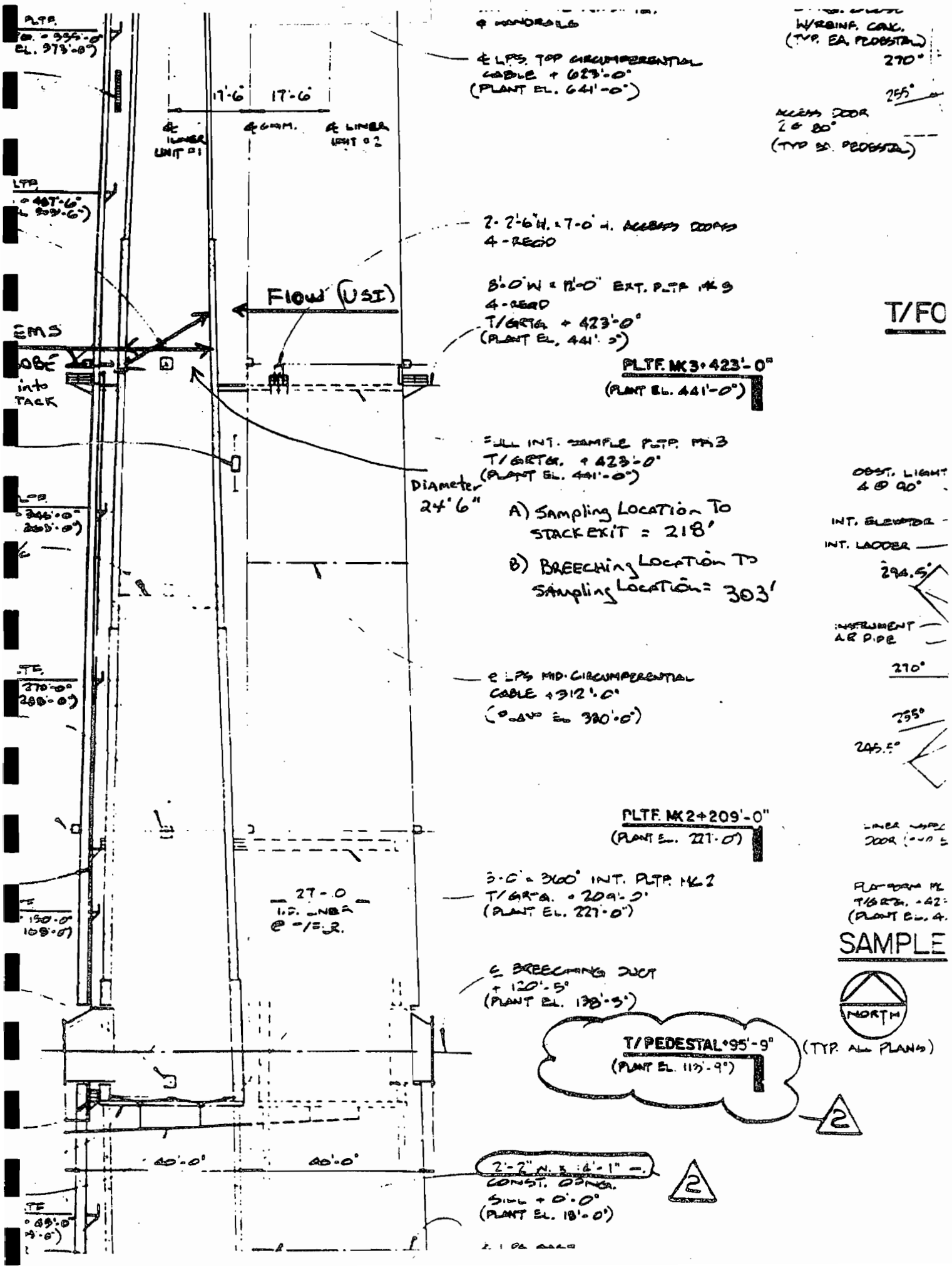
1. 95.0"
2. 57.0"
3. 30.9"
4. 9.4"

DRAWN BY R F Cobb		**TITLE** St Johns River Power Park - SJRPP	Coastal Air Consulting, Inc. 1531 Wyngate Drive, Deland FL (386) 943-9241 Fax (386) 943 9212
DATE 12-05-02	**SCALE** NONE	**DESCRIPTION** Unit I & II Stack and Sample Port Configuration	



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





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	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

Run 9

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
Run 7

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")