



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

October 9, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Breitmoser, Director  
Environmental Health and Safety  
St. Johns River Power Park  
11202 New Berlin Road  
Jacksonville, Florida 32226

Dear Mr. Breitmoser:

Re: Modification of PSD-FL-010 and PA 81-13, Petcoke Project  
St. Johns River Power Park Units 1 & 2

Thank you for your prompt submittal of the report on the performance tests recently conducted at St. Johns River Power Park (SJRPP) Unit 1 while burning blends of coal and petroleum coke (petcoke). We are reviewing the report, but wanted to advise you as soon as possible of some items which will need to be addressed before we can modify your PSD permit and Site Certification to burn petcoke in SJRPP Units 1 and 2.

Any requests to change Site Certification PA 81-13 must be made through the Power Plant Siting Office. Please contact Mr. Buck Oven, P.E., at (904)487-0472 regarding the procedures and fees, if any, required to process the request.

The Bureau of Air Regulation can process your request to change the PSD permit simultaneously with the Certification request. It will be necessary to submit an application (through the Siting Office) on DEP form No. 62-210.900(1) (Long Form) unless you are able to show that there will be no increases in actual emissions due to firing of petcoke. According to the applicable rules, it is not enough to show that the units will continue to comply with their present emission limits.

A key item in our Test Authorization letter of March 30, 1995 is the second paragraph of page 2 about "screening to determine if this change results in a modification and to determine PSD applicability, etc." Condition 8 on page 4 indicates that for "PSD, NAA, and modification assessment purposes, the actual pollutant emissions results from the petcoke-coal blend performance tests shall be compared with the actual pollutant emission results from the baseline performance tests when firing coal only."

Mr. Richard Breitmoser  
October 9, 1995  
Page Two

Your letter refers to Attachment E as compliance with Condition 8. It appears that from the data given therein, you will be able to make these comparisons. They must be made between estimates of historical actual emissions before the petcoke project and estimates of future actual emissions after implementation of the petcoke project.

Actual emissions prior to the petcoke project should be calculated based on annual estimates of emissions prior to the project and on actual hours of operation, actual fuel combusted, capacity factors, etc. Estimates of SO<sub>2</sub> and NO<sub>x</sub> can be based upon historical CEMS data. In the case of pollutants other than SO<sub>2</sub> and NO<sub>x</sub>, actual emissions reflecting past operation, should be based on past (or new) compliance tests, applicable inferences from the petcoke baseline tests, engineering estimates, etc. Baseline data should be used only to supplement (not replace) existing data representative of operation during previous years.

Actual emissions (representative actual annual emissions) following the proposed change should be projected in accordance with the definitions given in FAC 62-212.200(2)(d) and 40 CFR 52.21(b)(33). Actual emissions after the change should be estimated from information and inferences derived from the petcoke blend tests, projections of future electrical production, engineering estimates, etc.

A comparison of emissions estimates before and after the petcoke project must be made to determine if there will be any significant increases in emissions with respect to the values given in Table 212.400-2, from Chapter 62-212, Florida Administrative Code (F.A.C.). Based on Attachment E-3, there were ten-fold or greater increases in Carbon Monoxide (CO) emissions when firing petcoke, which are very likely significant if calculated on an annual basis and compared with the Significant Emission Rate of 100 tons per year (TPY) given in the referenced table. There was also a 50-100 percent (%) increase in sulfuric acid mist (SO<sub>3</sub>) emissions which may exceed the 7 TPY significance value.

If the proposed modification triggers the Significant Emissions Rates in Table 212.400-2, it will be necessary to conduct a PSD review and, possibly, make a BACT determination for the significant pollutants. We recommend that SJRPP begin to prepare some strategies and basic cost data to control any pollutants which increase as a result of the petcoke project.

Z 127 632 535



### Receipt for Certified Mail

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Name Richard Breitmeyer	
Street and No. St. Johns River Power Park	
City, State and ZIP Gax, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date PSD-FL-010 10-10-95 PA 81-13 units 142	

PS Form 3800, March 1993

Is your RETURN ADDRESS completed on the reverse side?

#### SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
Richard Breitmeyer  
St. Johns River Power Park  
11202 New Berlin Rd  
Jacksonville, FL 32226

4a. Article Number  
Z 127 632 535

4b. Service Type  
 Registered     Insured  
 Certified     COD  
 Express Mail     Return Receipt for Merchandise

7. Date of Delivery  
10-13-95

5. Signature (Addressee)  
W. Crawley

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

11201

Thank you for using Return Receipt Service.

CERTIFIED MAIL



SJRO LC 95 483

RECEIVED

OCT 9 1995

October 2, 1995

Bureau of  
Air Regulation

DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

OCT 06 1995

SITING COORDINATION

Mr. Hamilton Oven  
Adm. of Power Plant Siting  
Florida Dept. of Environmental Protection  
3900 Commonwealth Blvd.  
Tallahassee, Florida 32399-2400

RE: St. Johns River Power Park Unit 1  
Site Certification No. (PA 81-13)  
Petroleum Coke/Coal Test Burn Final Report

Dear Mr. Oven:

The above referenced facility was authorized by the Florida Department of Environmental Protection's (FDEP) March 30, 1995 letter to test burn a blend of petroleum coke with coal. The test burn was performed August 8 - 19, 1995. Condition #1 of the FDEP authorization letter specifies that a written test report be submitted within 45 days upon completion of the last test run. Please find enclosed the test report with supporting documentation.

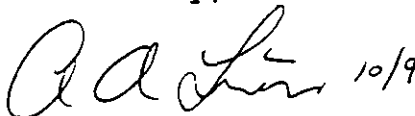
The results of the baseline and blend testing indicate that a blend of 80% coal and 20% petroleum coke can be burned successfully at SJRPP. Please note that SJRPP Units 1 and 2 are identical in design and are both required to comply with the limitations set forth in the Conditions of Certification. Based on the successful test of Unit 1 depicted in the enclosed test report, SJRPP requests that the Conditions of Certification be modified to burn petroleum coke in Units 1 & 2.

Condition #14 of the Certification states "Coal fired in Units 1 & 2 shall have an ash content not to exceed 18% and a sulfur content not to exceed 4% by weight." Condition #6 of the Letter of Authorization states "The maximum sulfur content of the coal shall not exceed 1.50%, by weight, during the baseline tests and the petroleum coke-coal blend tests. The maximum sulfur content of the petroleum coke shall not exceed 4%, by weight, which is the permitted value of the coal sulfur content at the facility."

Mr. Richard Breitmoser  
October 9, 1995  
Page Three

We look forward to receiving your application and are prepared to discuss these matters with you at your convenience. If you have any questions, please call Syed Arif at (904)488-1344.

Sincerely,



A. A. Linero, P.E.  
Administrator,  
New Source Review Section

AAL/aal/1

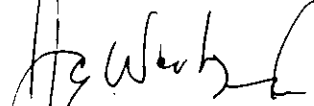
cc: J. Harper EPA  
P. Bunyak NPS  
C. Fancy DEP  
B. Oven DEP  
J. Braswell DEP  
C. Kirts, NED  
S. Pace, RESD

SJRO IOC 95 482  
September 29, 1995  
PETROLEUM COKE/COAL TEST BURN FINAL REPORT  
Page 2

The sulfur content of the coal and petroleum coke were below 1.5% and 4.0% respectively during the baseline and blend testing. In order to remain consistent with the Conditions of Certification as well as derive the most beneficial usage of a coal/petroleum coke fuel, SJRPP requests that the Conditions of Certification Condition #14 be modified to reflect that the sulfur content of the coal/petroleum coke blend not exceed 4%.

Please contact Jay Worley at (904)751-7729 if you have any question or require any additional information regarding this report and request for modification.

Sincerely,



Richard Breitmoser  
Director Environmental, Health & Safety



RB/JAW/sj

xc: J. Worley (SJRPP)

## **ST. JOHNS RIVER POWER PARK UNIT 1**

### **PETROLEUM COKE/COAL TEST BURN**

#### **BACKGROUND**

St. Johns River Power Park (SJRPP) investigated the feasibility of fueling the facility with a blend of bituminous coal and petroleum coke. SJRPP submitted a request to the Florida Department of Environmental Protection (FDEP) on December 20, 1994 to conduct a test burn of petroleum coke/bituminous coal. The FDEP's authorization letter dated March 30, 1995 approved the test burn in accordance with conditions as specified in the letter (Attachment A). The conditions specified notifications and coal baseline and petroleum coke/coal blend operational requirements, data collection and air emissions testing with fuel sampling and analyses. In addition, SJRPP collected in-house unit data to record and review operational performance.

#### **DISCUSSION**

The petroleum coke was received at SJRPP on July 15, 1995. FDEP baseline testing was conducted from July 18 - 20, 1995. Baseline testing was delayed due to pulverizer mechanical repairs. Upon repair, the final baseline test was conducted on August 8, 1995.

The petroleum coke/bituminous coal blend was introduced August 9, 1995 to commence the loading process to achieve the steady state operation of an 80% bituminous coal / 20% petroleum coke blend. SJRPP Unit 1 achieved a steady state 80/20 blend on August 11, 1995 in conjunction with the commencement of the FDEP blend testing.

The 80/20 blend was steady state through August 15, 1995. A new blend of approximately 87/13 and 83/17 was introduced on August 16 and 17, 1995, respectively, to assess the on-site bituminous coal supply. On August 18, 1995 an 80/20 blend was returned to the unit for the remainder of the test burn. By the morning of August 20, 1995, the supply of petroleum coke had been completely consumed.

**RESULTS** - Results of conditions set forth in FDEP's Letter of Authorization.

The following corresponds to the numbered Conditions 1 - 21 of the FDEP's Letter of Authorization (Attachment A).

Condition 1:            1) Please refer to Attachment B for the written notification of commencement. 2) This report submittal and attachments serve as the written test result report which has been submitted within 45 days upon completion of the final test run (8-19-95).

- Condition 2: The petroleum coke - coal blend performance tests were not conducted for more than 21 days. The blend tests commenced August 11, 1995 and were completed August 19, 1995 (9 days). An 80/20 blend steady state operation was established within 2 days of introduction of the blend. No problems were encountered that prevented steady state operation. The petroleum coke was first introduced into SJRPP's Unit 1 on August 9, 1995 and was completely consumed by the morning of August 20, 1995 (11.5 days).
- Condition 3: Please refer to Attachment C.
- Condition 4: Please refer to Attachment C.
- Condition 5: The petroleum coke and coal were fed into the reclaim hoppers located in the SJRPP coal yard (one hopper receiving petroleum coke and the other receiving coal). The belt feeders at the bottom of the hoppers each deliver fuel to the loading conveyor. The belt feeders were scale tested and adjusted prior to the test to operate at 80% and 20% of the conveyor's normal capacity of 1,600 tons/hour. A consistent 80/20 blend was accomplished by having both feeders operating simultaneously during this test.
- Condition 6: Please refer to Attachment D for the baseline coal and petroleum coke as-received analytical results.
- Condition 7: Please refer to Attachment E for the 1)Continuous Emissions Monitoring Systems (CEMS) data, 2)CEMS Quality Assurance data - most recent relative accuracy test audit and cylinder gas/linearity audit and 3)stack test results for particulate matter, carbon monoxide and sulfuric acid mist.
- Condition 8: Please refer to Attachment E for the baseline and blend pollutant emissions results.
- Condition 9: Please refer to Attachment F.
- Condition 10: The test burn was completed within the specified time frame.
- Condition 11: Please refer to Attachment G for the boiler operations and control equipment data.
- Condition 12: Please contact Duval County's R&ESD office.
- Condition 13: Complete documentation shall be kept on file for a minimum of five years.

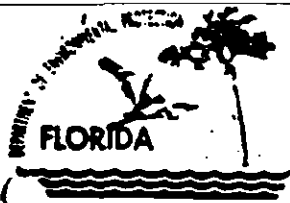


- Condition 14: There was no release of objectional odors.
- Condition 15: Performance testing was conducted in accordance to these conditions and testing was not required to cease.
- Condition 16: Please refer to the Total Source Analysis, Inc. final baseline and blend test reports in Attachment E for the signature and stamp of the Florida Professional Engineer.
- Condition 17: Please refer to Attachment H.
- Condition 18: Please refer to Attachment I.
- Condition 19: SJRPP Unit 1 was operating at permitted capacity during the emissions testing. Please refer to Attachment G for boiler operational data.
- Condition 20: Please refer to Attachment J.
- Condition 21: Please refer to Attachment A.

### **CONCLUSIONS**

The results of the baseline and blend testing indicate that a blend of 80% coal and 20% petroleum coke can be burned successfully at SJRPP. There was not observed adverse effects on equipment or operational activities. The pollutant emissions testing and CEMS data resulted in no increases above the permitted limitations.

# ATTACHMENT A



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

March 30, 1995

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Mr. Richard Breitmoser, P.E.  
Division Chief  
Environmental Affairs Division  
St. Johns River Power Park  
11201 New Berlin Road  
Jacksonville, Florida 32226

Dear Mr. Breitmoser:

Re: Request to Conduct Tests for Pollutant Emissions While Firing a Blend of Petroleum Coke and Bituminous Coal in the St. Johns River Power Park (SJRPP) Unit #1; Site Certification No. PA 81-13; and, Amendment to the Federal Permit No. PSD-FL-010(A)

The Department has reviewed the request that you provided in a letter on December 20, 1994, and supplementary material on February 7, 1995, via the FAX. We have also considered the Department's legal authority to allow SJRPP to conduct the performance tests on Unit #1. Paragraph 403.061(15), Florida Statutes (F.S.), authorizes the Department to consult with any person proposing to construct, install, or otherwise acquire a pollution control device or system concerning the efficacy of such device or system, or the pollution problem which may be related to the source, device, or system. Paragraph 403.061(16), F.S., authorizes the Department to encourage voluntary cooperation by persons in order to achieve the purposes of the state environmental control act. Paragraph 403.061(18), F.S., authorizes the Department to encourage and conduct studies, investigations, and research relating to the causes and control of pollution. Rule 62-210.700(5), Florida Administrative Code (F.A.C.), authorizes the Department to consider variations in industrial equipment and make allowances for excess emissions that provide practical regulatory controls consistent with the public interest.

In accordance with the provisions of Paragraphs 403.061(15), (16), (18), and 403.516(1), F.S., and contingent on 14 days prior public notice and on resolution of any written responses by persons whose substantial interests are negatively affected by your proposal, you are hereby authorized to conduct performance tests for pollutant emissions on SJRPP's Unit #1 while firing a blend

Letter to Authorize a Test Burn Using Petroleum Coke with Coal  
St. Johns River Power Park: Unit #1  
Site Certification No. PA 81-13/Federal Permit No. PSD-FL-010(A)  
March 30, 1995  
Page Two

of petroleum coke and bituminous coal. SJRPP's Unit #1 was permitted under Site Certification, No. PA 81-13, and Federal Permit No. PSD-FL-010, and is certified/permitted to fire only coal in accordance with the referenced Site Certification/Federal Permit.

The emissions tests are being proposed in order to gather data regarding pollutant emissions while firing a maximum of 20%, by weight, blend of petroleum coke and bituminous coal. Screening to determine whether this change results in a modification and to determine Prevention of Significant Deterioration (PSD) and/or Nonattainment Area (NAA) applicability shall be in accordance with Chapter 403, F.S.; Chapters 62-209 thru 62-297 and 62-4, F.A.C.; and, Title 40 Code of Federal Regulations (CFR; July 1, 1993 version), which will compare the actual pollutant emissions of the baseline tests (100% coal) with the actual pollutant emissions of the performance tests while firing a blend of petroleum coke and bituminous coal. The performance test results will be reviewed by the Department's Bureau of Air Regulation (BAR) and involved agencies/parties (i.e., Duval County's Regulatory and Environmental Services Department (R&ESD), U.S. EPA, National Park Service, etc.).

The performance tests shall be subject to the following conditions:

1. The permittee shall notify, in writing, the Department's BAR office, the Duval County's R&ESD office, and the Site Certification office at least 15 days prior to commencement of the baseline and the petroleum coke-coal blend performance tests. A written test result report shall be submitted to these offices within 45 days upon completion of the last test run.
2. The petroleum coke-coal blend performance tests shall be conducted for not more than 21 days. Based on the proposed testing protocol (faxed letter dated February 7, 1995, included as an attachment) to establish steady state operation and to achieve a maximum (20%) blend for which the tests shall be conducted, the Department will allow the first 4 days of petroleum coke-coal blend burning to establish these parameters. If, for any reasons, a steady state operation of 20% petroleum coke-coal blend, or less, is not achieved, the testing shall be curtailed. The Department shall be immediately notified of the problems that have prevented steady state operations and what steps will be initiated to correct this. Note that all petroleum coke-coal blend firing counts

Letter to Authorize a Test Burn Using Petroleum Coke with Coal  
St. Johns River Power Park: Unit #1  
Site Certification No. PA 81-13/Federal Permit No. PSD-FL-010(A)  
March 30, 1995  
Page Three

against the 21 days of approved time for conducting tests. All testing shall be concluded within 60 days of when petroleum coke is first introduced into SJRPP's Unit #1.

3. As-burned fuel samples shall be collected and analyzed for the sulfur, nitrogen, and metals (see condition No. 4) content throughout the petroleum coke-coal blend and the baseline coal test periods. Weekly composites from daily sampling shall be required; in addition and during the particulate matter test runs, a minimum of three (3) separate samples shall be taken and analyzed.
4. The concentration of chromium, lead, mercury, nickel, beryllium, vanadium, and zinc in the petroleum coke-coal blend shall be compared with the concentration of the same metals in the coal used during the baseline tests.
5. The trial burn of the petroleum coke-coal blends shall be limited to a maximum of 20% petroleum coke, by weight. The maximum weight of the petroleum coke burned during the petroleum coke-coal blend performance tests shall not exceed 100,000 lbs/hr.
6. The maximum sulfur content of the coal shall not exceed 1.50 percent, by weight, during the baseline tests and the petroleum coke-coal blend tests. The maximum sulfur content of the petroleum coke shall not exceed 4 percent, by weight, which is the permitted value of the coal sulfur content at the facility.
7. Sulfur dioxide, nitrogen oxides (NOx), and opacity emissions data shall be recorded using continuous emissions monitors (CEMS) during the baseline and the petroleum coke-coal blend tests. If the plant CEMS are used for these tests, these systems shall be quality assured pursuant to 40 CFR 60, Appendix F requirements. The data assessment report from 40 CFR 60, Appendix F, for the most recent relative accuracy test audit (RATA) and most recent cylinder gas audit (CGA), shall be submitted with the test report. In addition, stack tests shall be conducted for the pollutants particulate matter (PM; assume that all of PM is PM10), carbon monoxide, and sulfuric acid mist. A satisfactory performance test for each baseline test and each petroleum coke-coal blend shall consist of a minimum of three tests at three runs per test.

Letter to Authorize a Test Burn Using Petroleum Coke with Coal  
St. Johns River Power Park: Unit #1  
Site Certification No. PA 81-13/Federal Permit No. PSD-FL-010(A)  
March 30, 1995  
Page Four

8. For PSD, NAA, and modification assessment purposes, the actual pollutant emissions results from the petroleum coke-coal blend performance tests shall be compared with the actual pollutant emissions results from the baseline performance tests when firing coal only.
9. Any performance tests shall be conducted using EPA Reference Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), and 40 CFR 266, Appendix IX (Multi-metals), or any other method approved by the Department, in writing, in accordance with Chapter 62-297, F.A.C.
10. If additional time is needed, the permittee shall request an extension of time and provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
11. Daily records (i.e., heat input, steam production, pressure, temperature, MW, fuel input rates, etc.) of boiler operations while firing the petroleum coke-coal blend and while firing only coal (baseline) during the tests shall be required. Also, daily record keeping of the control equipment parameters (i.e., the pH of the scrubbing medium, the mix ratio of the water and medium and the injection rate to the scrubber, the pressure drop across the scrubber, etc.) shall be required and any alteration of the control equipment operational parameters between the baseline and the petroleum coke-coal blend tests shall be documented and summarized in the final report.
12. A Type I or II stack audit may be conducted by the Duval County's R&ESD office.
13. Complete documentation (recording) of any firing of the petroleum coke-coal blend shall be required (i.e., all CEMs records; testing results; materials utilized, by weight; etc.) and kept on file for a minimum of five years.
14. The authorized petroleum coke-coal blend performance tests shall not result in the release of objectionable odors pursuant to Rule 62-296.320(2), F.A.C.

Letter to Authorize a Test Burn Using Petroleum Coke with Coal  
St. Johns River Power Park: Unit #1  
Site Certification No. PA 81-13/Federal Permit No. PSD-FL-010(A)  
March 30, 1995  
Page Five

15. Performance testing shall immediately cease if SJRPP's Unit #1 operations are not in accordance with the conditions in the air section of the Site Certification, No. PA 81-13; the Federal Permit, No. PSD-FL-010; and, this authorization protocol. Performance testing shall not resume until appropriate measures to correct the problem(s) have been implemented.
16. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.
17. This Department action is only to authorize the performance tests for a petroleum coke-coal blend performance tests, where prior public notice was published in a newspaper of general circulation in the Jacksonville area. Any firing of petroleum coke after the last performance test run is completed will be deemed a violation of the Site Certification, No. PA 81-13, and the Federal Permit, No. PSD-FL-010.
18. The Duval County's R&ESD office shall be notified, in writing, on the date of the last test run completion.
19. The testing series shall include emissions tests for each of the petroleum coke-coal blends and pollutants with the source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the Site Certification (PA 81-13) and Federal Permit (PSD-FL-010) capacity allowed. If it is impracticable to test at this capacity, then the source may be tested at less than capacity for the petroleum coke-coal blend and the baseline tests, but the tests must be conducted at the same capacity; and, in this case, subsequent source operation with a petroleum coke-coal blend, if requested and approved by the Department, shall be limited to 110 percent of the tested capacity until new tests are conducted, which requires prior Department authorization.
20. Prior written approval of the pollutants to be tested for and the appropriate test methods are mandatory prior to commencement of testing. The proposal shall be submitted to the Site Certification office, the Department's BAR office, and the Duval County's R&ESD office for approval.

Letter to Authorize a Test Burn Using Petroleum Coke with Coal  
St. Johns River Power Park: Unit #1  
Site Certification No. PA 81-13/Federal Permit No. PSD-FL-010(A)  
March 30, 1995  
Page Six

21. Attachments to be incorporated:

- o SJRPP's December 20, 1994 letter with Attachment.
- o SJRPP's February 7, 1995 facsimile.

This letter amendment must be attached to the Federal Permit, No. PSD-FL-010(A) (Site Certification No. PA 81-13), and shall become a part of the permit.

Sincerely,



Howard L. Rhodes, Director  
Division of Air Resources  
Management

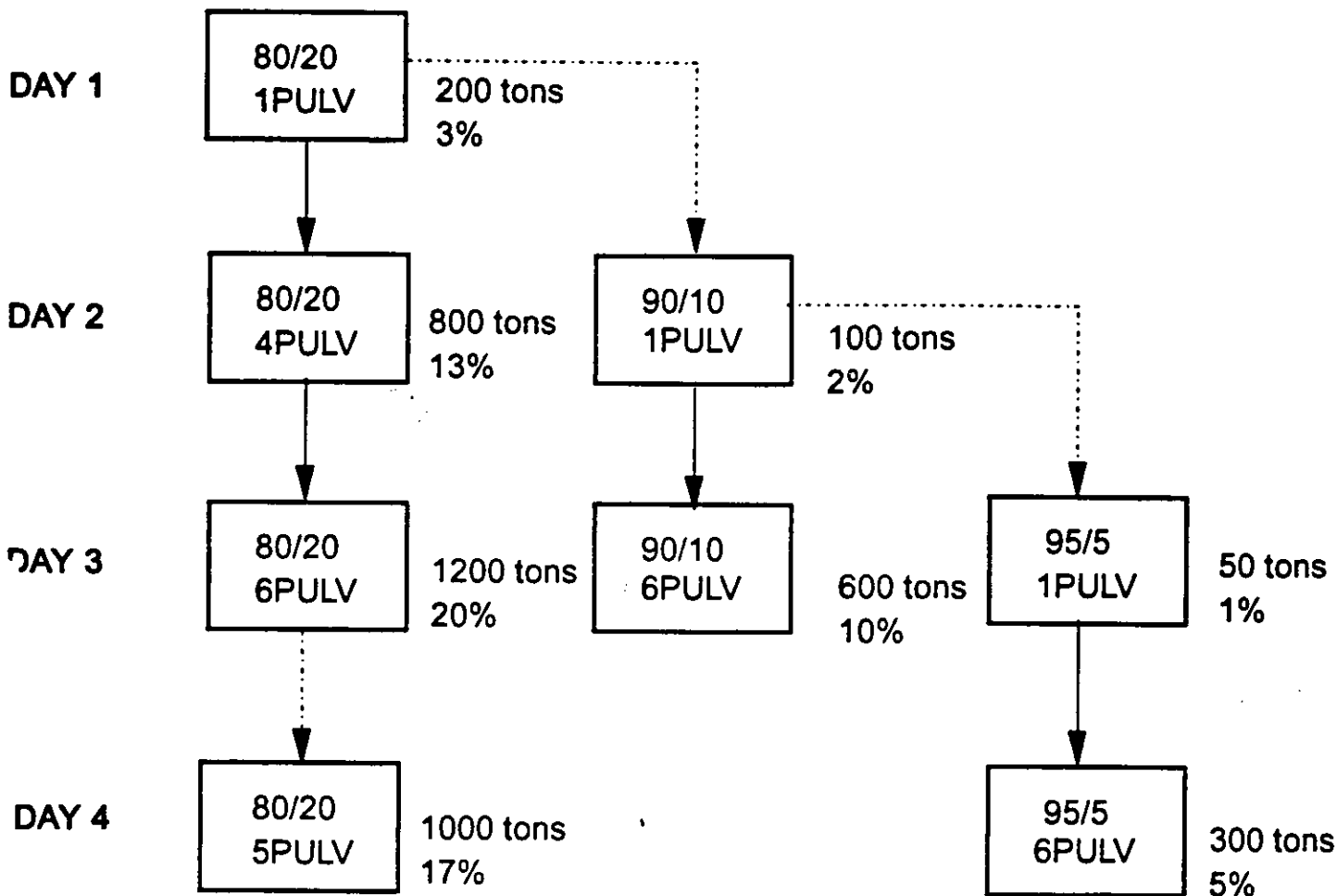
HLR/sa/t

Enclosure

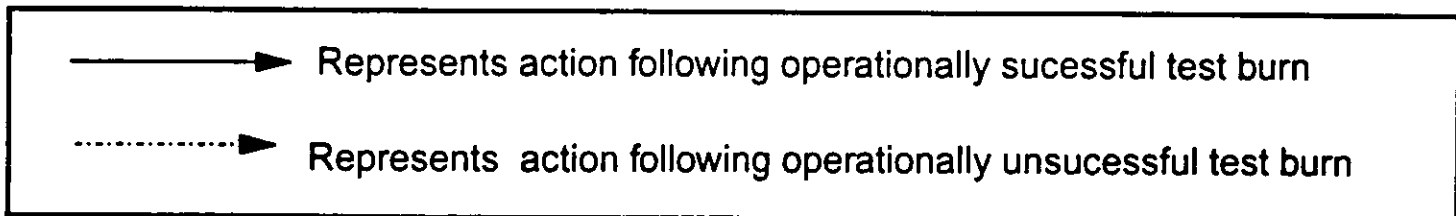
cc: Buck Oven, DEP  
Steve Pace, R&ESD  
Jewell Harper, EPA/Region IV  
John Bunyak, NPS  
Doug Beason, Esq., DEP  
Jay Worley, SJRPP



# St. Johns River Power Park PETROLEUM COKE TEST BURN SCHEDULE



## LEGEND



Note: Incremental loading of petroleum coke fuel is required to anticipate operational limitations.

# ATTACHMENT B

**CERTIFIED MAIL**

SJRO LC 95 104

June 22, 1995



Mr. Clair Fancy  
FDEP  
Bureau of Air Regulation  
Mail Station 5505  
2600 Blairstone Road  
Tallahassee, FL 32399-2400

RE: Site Certification No. PA 81-13  
St. Johns River Power Park (SJRPP) Unit I  
Notification of Test Burn Petroleum Coke-Coal Blend

Dear Mr. Fancy:

The above referenced facility was authorized by the Florida Department of Environmental Protection's March 30, 1995, letter to test burn a blend of petroleum coke with coal. Condition #1 requires that "the permittee shall notify, in writing, the Department's BAR office, the Duval County's RESD office and the Site Certification Office at least 15 days prior to commencement of the baseline and the petroleum coke-coal blend performance tests. In accordance with Condition #1, the tentative date to commence the baseline and petroleum coke-coal blend performance tests is July 11, 1995.

Please contact me at (904) 751-7729 if you have any questions.

Sincerely,

  
Jay Worley  
Environmental & Safety Manager

JAW/pct

**CERTIFIED MAIL**



SJRO LC 95 120

July 20, 1995

Mr. Clair Fancy  
Fla. Dept. of Environmental Protection  
Bureau of Air Regulation  
Mail Station 5505  
2600 Blair Stone Rd.  
Tallahassee, FL 32399-2400

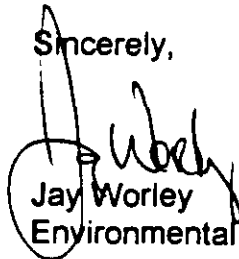
RE: Site Certification No. PA 81-13  
St. Johns River Power Park (SJRPP) Unit 1  
Notification of Petroleum Coke/Coal Test Burn Delay

Dear Mr. Fancy:

The above referenced testing at SJRPP has been delayed due to pulverizer mechanical repairs. The unit loading of petroleum coke is now anticipated to commence August 7, 1995. Please note that the baseline testing was completed July 20, 1995, however, these repairs have become necessary to ensure that the unit will remain available throughout the pet coke testing period.

Please contact me at (904) 751-7729 if you have any questions.

Sincerely,

  
Jay Worley  
Environmental & Safety Manager

JAW/pct

xc: R. Breitmoser

# ATTACHMENT C

**SJRPP UNIT 1**  
**TEST BURN**  
**PETROLEUM COKE/BITUMINOUS COAL**  
**ANALYTICAL RESULTS**

**A) BASELINE - COMPOSITE - 7/18, 7/19, 7/20, 8/8 - (Analyses in ug/g)**

DATE	S	N	Cr	Pb	Hg	Ni	Be	V	Zn
BASELINE COMPOSITE	0.86	1.59	10	7	0.06	3	0.7	21	13

**B) DAILY - BASELINE - (Analyses in ug/g)**

DATE	S	N	Cr	Pb	Hg	Ni	Be	V	Zn
7/18	0.61	1.58	8	3	0.07	1	0.3	16	10
7/18	0.62	1.59	7	3	0.06	1	0.3	15	10
7/18	0.65	1.54	8	3	0.05	1	0.3	17	12
7/19	0.85	1.56	11	6	0.09	6	0.7	21	14
7/19	0.86	1.54	11	2	0.07	6	0.8	22	15
7/19	0.85	1.54	11	3	0.06	3	0.7	22	16
7/20	1.24	1.46	15	5	0.09	13	2.1	32	17
7/20	1.22	1.61	14	7	0.15	12	2.0	32	18
7/20	1.26	1.61	15	7	0.11	12	2.1	35	17
8/8	0.77	1.59	8	3	0.04	<1	0.3	18	12
8/8	0.72	1.58	8	5	0.03	1	0.3	17	10
8/8	0.72	1.55	8	3	0.04	1	0.3	18	11

SJRPP UNIT 1  
TEST BURN  
PETROLEUM COKE/BITUMINOUS COAL  
ANALYTICAL RESULTS

A) BLEND A - COMPOSITE - 8/9, 8/10, 8/11, 8/12, 8/13 (Analyses in ug/g)

DATE	S	N	Cr	Pb	Hg	Ni	Be	V	Zn
COMPOSITE BLEND A	1.05	1.42	8	3	0.05	33	0.5	220	12

B) BLEND B - COMPOSITE - 8/14, 8/15, 8/16, 8/17, 8/18, 8/19 (Analyses in ug/g)

DATE	S	N	Cr	Pb	Hg	Ni	Be	V	Zn
COMPOSITE BLEND B	1.62	1.50	12	7	0.05	62	1.3	400	18

SJRPP UNIT 1  
 TEST BURN  
 PETROLEUM COKE/BITUMINOUS COAL  
 ANALYTICAL RESULTS

A) DAILY BLEND - (Analyses in ug/g)

DATE	S	N	Cr	Pb	Hg	Ni	Be	V	Zn
8/14	1.34	1.52	7	3	0.06	57	0.7	380	13
8/14	1.44	1.55	7	4	0.03	73	1.2	500	13
8/14	1.31	1.53	8	4	0.06	50	1.0	350	14
8/15	1.48	1.53	6	3	0.04	77	1.1	500	11
8/15	1.32	1.51	7	3	0.05	58	1.0	380	12
8/15	1.33	1.53	8	3	0.05	54	1.2	360	15
8/16	1.40	1.53	7	4	0.07	60	1.0	390	14
8/16	1.40	1.53	7	3	0.03	61	1.2	390	13
8/16	1.32	1.45	7	<2	0.05	58	0.9	380	13
8/17	1.33	1.34	7	<2	0.04	54	1.0	360	13
8/17	1.94	1.56	11	9	0.07	65	1.7	430	16
8/17	1.49	1.43	24	11	0.04	58	2.0	330	25
8/18	1.77	1.50	18	11	0.07	71	2.0	460	23
8/18	1.72	1.51	17	10	0.08	65	2.1	380	20
8/18	1.86	1.46	15	11	0.08	68	2.0	420	21
8/19	1.89	1.49	15	11	0.09	68	1.8	420	22





# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 963-9300

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE  
P.O. BOX 752, HENDERSON, KY 4  
TELEPHONE: (502) 827-  
FAX: (502) 826-

▶ **ST. JOHNS RIVER POWER PARK**  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0928 Comp-A  
7/18, 7/19, 7/20, 8/8  
P.O. #002363

Kind of sample Coal  
reported to us

Sample taken at -----

7.31% A.D.L. Provided by Client

Sample taken by -----

~~BURN DATE~~  
Date sampled July 18,19,20, 1995  
August 8, 1995  
Date received August 22, 1995

Analysis report no. 63-90708

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.7
Chromium, Cr	10
Lead, Pb	7
Mercury, Hg	0.06
Nickel, Ni	3
Vanadium, V	21
Zinc, Zn	13
Sulfur, S	0.86
Nitrogen, N	1.59

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 853-9300

SINCE 1928

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1167  
FAX: (502) 828-0719

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0913A  
P.O. #002363

Kind of sample Coal  
reported to us

8.81% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

<sup>BURN DATE</sup>  
Date-sampled July 18, 1995

Date received August 22, 1995

Analysis report no. 63-90696

Parameter	Results
Beryllium, Be	0.3
Chromium, Cr	8
Lead, Pb	3
Mercury, Hg	0.07
Nickel, Ni	1
Vanadium, V	16
Zinc, Zn	10
Sulfur, S	0.61
Nitrogen, N	1.58

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

*[Handwritten Signature]*  
Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS, TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

Original Copy Watermarked For Your Protection



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 853-9300

SINCE 1924

Member of the SGS Group (Societe' Generale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0719

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Kind of sample Coal  
reported to us

60 Mesh Split  
Sample #0914B  
P.O. #002363

Sample taken at -----

8.81% A.D.L. Provided by Client

Sample taken by -----

<sup>BURN DATE</sup>  
Date sampled July 18, 1995

Date received August 22, 1995

Analysis report no. 63-90697

Parameter	Results
Beryllium, Be	0.3
Chromium, Cr	7
Lead, Pb	3
Mercury, Hg	0.06
Nickel, Ni	1
Vanadium, V	15
Zinc, Zn	10
Sulfur, S	0.62
Nitrogen, N	1.59

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Richard H. ...*  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0719

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0915C  
P.O. #002363

Kind of sample Coal  
reported to us

8.81% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

<sup>BURN DATE</sup>  
Date sampled July 18, 1995

Date received August 22, 1995

Analysis report no. 63-90698

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.3
Chromium, Cr	8
Lead, Pb	3
Mercury, Hg	0.05
Nickel, Ni	1
Vanadium, V	17
Zinc, Zn	12
Sulfur, S	0.65
Nitrogen, N	1.54

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.  
*Kevin A. Howard*

Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0719

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0918D  
P.O. #002363

Kind of sample reported to us Coal

8.70% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled July 19, 1995

Date received August 22, 1995

Analysis report no. 63-90699

Parameter	Results
Beryllium, Be	0.7
Chromium, Cr	11
Lead, Pb	6
Mercury, Hg	0.09
Nickel, Ni	6
Vanadium, V	21
Zinc, Zn	14
Sulfur, S	0.85
Nitrogen, N	1.56

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.  
*[Signature]*

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER PORTS, AND RIVER LOADING FACILITIES  
Watermarked For Your Protection



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-8300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0718

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Kind of sample reported to us Coal

60 Mesh Split  
Sample #0919E  
P.O. #002363

Sample taken at -----

8.70% A.D.L. Provided by Client

Sample taken by -----

Date ~~sampled~~ July 19, 1995

Date received August 22, 1995

Analysis report no. 63-90700

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.8
Chromium, Cr	11
Lead, Pb	2
Mercury, Hg	0.07
Nickel, Ni	6
Vanadium, V	22
Zinc, Zn	15
Sulfur, S	0.86
Nitrogen, N	1.54

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
*Kevin A. Howard*  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 952-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0718

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Kind of sample reported to us Coal

60 Mesh Split  
Sample #0920F  
P.O. #002363

Sample taken at -----

8.70% A.D.L. Provided by Client

Sample taken by -----

Burn Date sampled July 19, 1995

Date received August 22, 1995

Analysis report no. 63-90701

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.7
Chromium, Cr	11
Lead, Pb	3
Mercury, Hg	0.06
Nickel, Ni	3
Vanadium, V	22
Zinc, Zn	16
Sulfur, S	0.85
Nitrogen, N	1.54

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

*Richard D. Henderson*  
COMMERCIAL TESTING & ENGINEERING CO.  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 853-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0719

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0923G  
P.O. #002363

Kind of sample Coal  
reported to us

4.00% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

DATE Date ~~analyzed~~ July 20, 1995

Date received August 22, 1995

Analysis report no. 63-90702

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	2.1
Chromium, Cr	15
Lead, Pb	5
Mercury, Hg	0.09
Nickel, Ni	13
Vanadium, V	32
Zinc, Zn	17
Sulfur, S	1.24
Nitrogen, N	1.46

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
*Robert A. Lawrence*  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL PORT AND TRADING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING AREAS.

Original Copy Watermarked For Your Protection





# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 42420  
TELEPHONE: (502) 827-1187  
FAX: (502) 826-0719

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0924H  
P.O. #002363

Kind of sample Coal  
reported to us

4.00% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date ~~analyzed~~ analyzed July 20, 1995

Date received August 22, 1995

Analysis report no. 63-90703

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	2.0
Chromium, Cr	14
Lead, Pb	7
Mercury, Hg	0.15
Nickel, Ni	12
Vanadium, V	32
Zinc, Zn	18
Sulfur, S	1.22
Nitrogen, N	1.61

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES  
Original Copy Watermarked For Your Protection



**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1918 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 7, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-1111  
FAX: (502) 826-0111

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #09251  
P.O. #002363

Kind of sample Coal  
reported to us

4.00% A.D.L. Provided by Client

Sample taken at -----

Corrected analysis

Sample taken by -----

Date sampled July 20, 1995

Date received August 22, 1995

Analysis report no. 63-90704

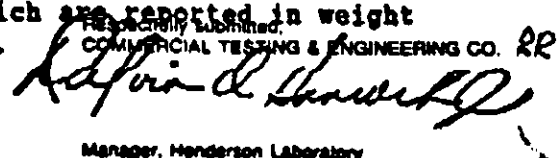
Parameter	Results
Beryllium, Be	2.1
Chromium, Cr	15
Lead, Pb	7
Mercury, Hg	0.11
Nickel, Ni	12
Vanadium, V	35
Zinc, Zn	17
Sulfur, S	1.26
Nitrogen, N	1.61

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully Submitted,  
  
 Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE  
P.O. BOX 752, HENDERSON, KY 4  
TELEPHONE: (502) 827  
FAX: (502) 826

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0929J  
P.O. #002363

Kind of sample Coal  
reported to us

7.74% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Burn Date ~~August 8, 1995~~ August 8, 1995

Date received August 22, 1995

Analysis report no. 63-90705

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.3
Chromium, Cr	8
Lead, Pb	3
Mercury, Hg	0.04
Nickel, Ni	<1
Vanadium, V	18
Zinc, Zn	12
Sulfur, S	0.77
Nitrogen, N	1.59

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Refina D. Henderson*  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-11  
FAX: (502) 826-07

▶ ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0930K  
P.O. #002363

7.74% A.D.L. Provided by Client

Kind of sample Coal  
reported to us

Sample taken at -----

Sample taken by -----

BURN Date ~~analyzed~~ August 8, 1995

Date received August 22, 1995

Analysis report no. 63-90706

Parameter	Results
Beryllium, Be	0.3
Chromium, Cr	8
Lead, Pb	5
Mercury, Hg	0.03
Nickel, Ni	1
Vanadium, V	17
Zinc, Zn	10
Sulfur, S	0.72
Nitrogen, N	1.58

Procedure: The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

Results: Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
*[Signature]*  
COMMERCIAL TESTING & ENGINEERING CO.  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1818 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE  
P.O. BOX 752, HENDERSON, KY 4  
TELEPHONE: (502) 827-  
FAX: (502) 826-

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

60 Mesh Split  
Sample #0931L  
P.O. #002363

Kind of sample Coal  
reported to us

7.74% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

BURN Date ~~sampled~~ August 8, 1995

Date received August 22, 1995

Analysis report no. 63-90707

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.3
Chromium, Cr	8
Lead, Pb	3
Mercury, Hg	0.04
Nickel, Ni	1
Vanadium, V	18
Zinc, Zn	11
Sulfur, S	0.72
Nitrogen, N	1.55

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Delvin A. Henderson*  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-8300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE  
P.O. BOX 752, HENDERSON, KY 40  
TELEPHONE: (502) 827-1  
FAX: (502) 828-4

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0939M  
P.O. #008306

Kind of sample Coal  
reported to us

6.92% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 14, 1995

Date received August 25, 1995

Analysis report no. 6J-90988

Parameter	Results
Beryllium, Be	0.7
Chromium, Cr	7
Lead, Pb	3
Mercury, Hg	0.06
Nickel, Ni	57
Vanadium, V	380
Zinc, Zn	13
Sulfur, S	1.34
Nitrogen, N	1.52

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDY RIVER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

Original Copy Watermarked For Your Protection



**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1819 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-11  
FAX: (502) 828-07

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0940N  
P.O. #008306

Kind of sample Coal  
reported to us

4.74% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 14, 1995

Date received August 25, 1995

Analysis report no. 63-90989

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.2
Chromium, Cr	7
Lead, Pb	4
Mercury, Hg	0.03
Nickel, Ni	73
Vanadium, V	500
Zinc, Zn	13
Sulfur, S	1.44
Nitrogen, N	1.55

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-11  
FAX: (502) 826-07

▶ ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #09410  
P.O. #008306

Kind of sample Coal  
reported to us

7.51% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 14, 1995

Date received August 25, 1995

Analysis report no. 63-90990

Parameter	Results
Beryllium, Be	1.0
Chromium, Cr	8
Lead, Pb	4
Mercury, Hg	0.06
Nickel, Ni	50
Vanadium, V	350
Zinc, Zn	14
Sulfur, S	1.31
Nitrogen, N	1.53

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO

Manager, Henderson Laboratory





**COMMERCIAL TESTING & ENGINEERING CO.**  
 GENERAL OFFICES: 1219 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
 P.O. BOX 752, HENDERSON, KY 424  
 TELEPHONE: (502) 827-11  
 FAX: (502) 826-07

ST. JOHNS RIVER POWER PARK  
 11201 NEW BERLIN RD  
 JACKSONVILLE FL 32226

Sample identification by  
 SJRPP

Sample #0943P  
 P.O. #008306

Kind of sample Coal  
 reported to us

4.71% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 15, 1995

Date received August 25, 1995

Analysis report no. 63-90991

Parameter	Results
Beryllium, Be	1.1
Chromium, Cr	6
Lead, Pb	3
Mercury, Hg	0.04
Nickel, Ni	77
Vanadium, V	500
Zinc, Zn	11
Sulfur, S	1.48
Nitrogen, N	1.53

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
 Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
 COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1918 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-11  
FAX: (502) 826-07

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0944Q  
P.O. #008306

Kind of sample Coal  
reported to us

6.91% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 15, 1995

Date received August 25, 1995

Analysis report no. 63-90992

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.0
Chromium, Cr	7
Lead, Pb	3
Mercury, Hg	0.05
Nickel, Ni	58
Vanadium, V	380
Zinc, Zn	12
Sulfur, S	1.32
Nitrogen, N	1.51

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES  
Original Copy Watermarked For Your Protection



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1819 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-11  
FAX: (502) 826-07

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0945R  
P.O. #008306

Kind of sample Coal  
reported to us

7.56% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 15, 1995

Date received August 25, 1995

Analysis report no. 63-90993

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.2
Chromium, Cr	8
Lead, Pb	3
Mercury, Hg	0.05
Nickel, Ni	54
Vanadium, V	360
Zinc, Zn	15
Sulfur, S	1.33
Nitrogen, N	1.53

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES  
Original Copy Watermarked For Your Protection



**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE  
P.O. BOX 752, HENDERSON, KY 42  
TELEPHONE: (502) 827-1  
FAX: (502) 826-0

▶ **ST. JOHNS RIVER POWER PARK**  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #09475  
P.O. #008306

Kind of sample Coal  
reported to us

7.15% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 16, 1995

Date received August 25, 1995

Analysis report no. 63-90994

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.0
Chromium, Cr	7
Lead, Pb	4
Mercury, Hg	0.07
Nickel, Ni	60
Vanadium, V	390
Zinc, Zn	14
Sulfur, S	1.40
Nitrogen, N	1.53

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory



**COMMERCIAL TESTING & ENGINEERING CO.**  
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 4242  
TELEPHONE: (502) 827-112  
FAX: (502) 828-071

▶ **ST. JOHNS RIVER POWER PARK**  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0948T  
P.O. #008306

7.15% A.D.L. Provided by Client

Kind of sample Coal  
reported to us

Sample taken at -----

Sample taken by -----

Date sampled August 16, 1995

Date received August 25, 1995

Analysis report no. 63-90995

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.2
Chromium, Cr	7
Lead, Pb	3
Mercury, Hg	0.03
Nickel, Ni	61
Vanadium, V	390
Zinc, Zn	13
Sulfur, S	1.40
Nitrogen, N	1.53

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1918 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-1111  
FAX: (502) 828-07

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0949U  
P.O. #008306

Kind of sample Coal  
reported to us

7.15% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 16, 1995

Date received August 25, 1995

Analysis report no. 63-90996

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.9
Chromium, Cr	7
Lead, Pb	<2
Mercury, Hg	0.05
Nickel, Ni	58
Vanadium, V	380
Zinc, Zn	13
Sulfur, S	1.32
Nitrogen, N	1.45

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Delia R. Henderson*  
Manager, Henderson Laboratory


**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1888

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

 PLEASE ADDRESS ALL CORRESPONDENCE TO:  
 P.O. BOX 752, HENDERSON, KY 424  
 TELEPHONE: (502) 827-1111  
 FAX: (502) 826-0711

 ▶ ST. JOHNS RIVER POWER PARK  
 11201 NEW BERLIN RD  
 JACKSONVILLE FL 32226

 Sample identification by  
 SJRPP

 Sample #0952V  
 P.O. #008306

 Kind of sample Coal  
 reported to us

7.23% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 17, 1995

Date received August 25, 1995

Analysis report no. 63-90997

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.0
Chromium, Cr	7
Lead, Pb	<2
Mercury, Hg	0.04
Nickel, Ni	54
Vanadium, V	360
Zinc, Zn	13
Sulfur, S	1.33
Nitrogen, N	1.34

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
 Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

 Respectfully submitted,  
 COMMERCIAL TESTING & ENGINEERING CO.

  
 Manager, Henderson Laboratory

 OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
 TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES  
 Original Copy Watermarked For Your Protection


**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

 PLEASE ADDRESS ALL CORRESPONDENCE TO  
 P.O. BOX 752, HENDERSON, KY 424  
 TELEPHONE: (502) 827-11  
 FAX: (502) 826-07

 ▶ ST. JOHNS RIVER POWER PARK  
 11201 NEW BERLIN RD  
 JACKSONVILLE FL 32226

 Sample identification by  
 SJRPP

 Sample #0953W  
 P.O. #008306

 Kind of sample Coal  
 reported to us

3.44% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 17, 1995

Date received August 25, 1995

Analysis report no. 63-90998

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.7
Chromium, Cr	11
Lead, Pb	9
Mercury, Hg	0.07
Nickel, Ni	65
Vanadium, V	430
Zinc, Zn	16
Sulfur, S	1.94
Nitrogen, N	1.56

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
 Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

 Respectfully submitted,  
 COMMERCIAL TESTING & ENGINEERING CO.

  
 Manager, Henderson Laboratory

 OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
 TIDEWATER AND GREAT LAKES PORTS, AND RIVER LOADING FACILITIES

Original Copy Watermarked For Your Protection





**COMMERCIAL TESTING & ENGINEERING CO.**  
 GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARO, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
 P.O. BOX 752, HENDERSON, KY 42424  
 TELEPHONE: (502) 827-1111  
 FAX: (502) 828-0717

ST. JOHNS RIVER POWER PARK  
 11201 NEW BERLIN RD  
 JACKSONVILLE FL 32226

Sample identification by  
 SJRPP

Sample #0954X  
 P.O. #008306

Kind of sample reported to us Coal

4.19% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 17, 1995

Date received August 25, 1995

Analysis report no. 63-90999

Parameter	Results
Beryllium, Be	2.0
Chromium, Cr	24
Lead, Pb	11
Mercury, Hg	0.04
Nickel, Ni	58
Vanadium, V	330
Zinc, Zn	25
Sulfur, S	1.49
Nitrogen, N	1.43

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
 Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
 COMMERCIAL TESTING & ENGINEERING CO.

*Richard L. Henderson*  
 Manager, Henderson Laboratory



**COMMERCIAL TESTING & ENGINEERING CO.**  
 GENERAL OFFICES: 1818 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

SINCE 1928

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
 P.O. BOX 752, HENDERSON, KY 424  
 TELEPHONE: (502) 827-1  
 FAX: (502) 828-07

ST. JOHNS RIVER POWER PARK  
 11201 NEW BERLIN RD  
 JACKSONVILLE FL 32226

Sample identification by  
 SJRPP

Sample #0956Y  
 P.O. #008306

Kind of sample Coal  
 reported to us

5.24% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 18, 1995

Date received August 25, 1995

Analysis report no. 63-91000

Parameter	Results
Beryllium, Be	2.0
Chromium, Cr	18
Lead, Pb	11
Mercury, Hg	0.07
Nickel, Ni	71
Vanadium, V	460
Zinc, Zn	23
Sulfur, S	1.77
Nitrogen, N	1.50

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
 Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
 COMMERCIAL TESTING & ENGINEERING CO.

*Refina D. Henderson*  
 Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Since 1908

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-1111  
FAX: (502) 826-0707

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #09572  
P.O. #008306

Kind of sample Coal  
reported to us

4.17% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 18, 1995

Date received August 25, 1995

Analysis report no. 63-91001

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	2.1
Chromium, Cr	17
Lead, Pb	10
Mercury, Hg	0.08
Nickel, Ni	65
Vanadium, V	380
Zinc, Zn	20
Sulfur, S	1.72
Nitrogen, N	1.51

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Debra A. Henderson*  
Manager, Henderson Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1819 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE  
P.O. BOX 752, HENDERSON, KY 4  
TELEPHONE: (502) 827-  
FAX: (502) 829-4

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0958Z1  
P.O. #008306

Kind of sample Coal  
reported to us

4.72% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 18, 1995

Date received August 25, 1995

Analysis report no. 63-91002

Parameter	Results
Beryllium, Be	2.0
Chromium, Cr	15
Lead, Pb	11
Mercury, Hg	0.08
Nickel, Ni	68
Vanadium, V	420
Zinc, Zn	21
Sulfur, S	1.86
Nitrogen, N	1.46

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO

Manager, Henderson Laboratory

OVER 40 BRANCH LABORATORIES STRATEGICALLY LOCATED IN PRINCIPAL COAL MINING AREAS,  
TIDEWATER AND GREAT LAKES PORTS AND RAIL LOADING FACILITIES

Original Copy Meticulously Preserved



**COMMERCIAL TESTING & ENGINEERING CO.**  
 GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
 P.O. BOX 752, HENDERSON, KY 42420  
 TELEPHONE: (502) 627-1111  
 FAX: (502) 626-0771

ST. JOHNS RIVER POWER PARK  
 11201 NEW BERLIN RD  
 JACKSONVILLE FL 32226

Sample identification by  
 SJRPP

Sample #0960  
 P.O. #008306

Kind of sample Coal  
 reported to us

5.50% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 19, 1995

Date received August 25, 1995

Analysis report no. 63-91003

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	1.8
Chromium, Cr	15
Lead, Pb	11
Mercury, Hg	0.09
Nickel, Ni	68
Vanadium, V	420
Zinc, Zn	22
Sulfur, S	1.89
Nitrogen, N	1.49

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).

Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
 COMMERCIAL TESTING & ENGINEERING CO.

*Delvin D. Henderson*  
 Manager, Henderson Laboratory



**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300

Member of the SGS Group (Societe Generale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-1111  
FAX: (502) 826-07

ST. JOHNS RIVER POWER PARK  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0951  
Composite C  
P.O. #008306

Kind of sample Coal  
reported to us

5.27% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 14,15,16,17,18,19, 1995

Date received August 25, 1995

Analysis report no. 63-91005

Parameter	Results
Beryllium, Be	1.3
Chromium, Cr	12
Lead, Pb	7
Mercury, Hg	0.05
Nickel, Ni	62
Vanadium, V	400
Zinc, Zn	18
Sulfur, S	1.62
Nitrogen, N	1.50

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory



**COMMERCIAL TESTING & ENGINEERING CO.**

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60146 • (312) 953-9300

SINCE 1909

Member of the SGS Group (Società Generale di Sorveglianza)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO  
P.O. BOX 752, HENDERSON, KY 424  
TELEPHONE: (502) 827-11  
FAX: (502) 826-07

▶ **ST. JOHNS RIVER POWER PARK**  
11201 NEW BERLIN RD  
JACKSONVILLE FL 32226

Sample identification by  
SJRPP

Sample #0938  
Composite B  
P.O. #008306

Kind of sample Coal  
reported to us

7.65% A.D.L. Provided by Client

Sample taken at -----

Sample taken by -----

Date sampled August 9,10,11,12,13, 1995

Date received August 25, 1995

Analysis report no. 63-91004

<u>Parameter</u>	<u>Results</u>
Beryllium, Be	0.5
Chromium, Cr	8
Lead, Pb	3
Mercury, Hg	0.05
Nickel, Ni	33
Vanadium, V	220
Zinc, Zn	12
Sulfur, S	1.05
Nitrogen, N	1.42

**Procedure:** The samples were prepared according to ASTM, Part 5.05, Method D 3683. The samples were analyzed for trace elements by Inductively Coupled Plasma Emission Spectroscopy.

Mercury per ASTM, Part 5.05, Method D 3684, Double Gold Amalgamation Cold Vapor Atomic Absorption.

Sulfur per ASTM, Part 5.05, Method D 4239 (method C).  
Nitrogen per ASTM, Part 5.05, Method D 5373-93.

**Results:** Results are reported as micrograms per gram (ug/g), except for Nitrogen and Sulfur, which are reported in weight percent (Wt.%), all on a dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

# ATTACHMENT D



## ST. JOHNS RIVER POWER PARK

15140137

## COAL ANALYSIS REPORT

SUPPLIER: EXXON SAMPLE TAKEN AT EXXON BY EXXON  
ANALYZED BY EXXON

DATE SMP	TONS	AS RECEIVED				#SO2/MBTU	DRY			-A&M FREE- BTU
		%MOIST	%ASH	%SULFUR	BTU		%ASH	%SULFUR	BTU	
CONTRACTUAL		9.20	9.60	0.70	11810					
07/01/95 V513	45540.00	10.60	7.66	0.69	11831	1.16	8.57	0.77	13234	14474
07/16/95 V514	60025.00	10.78	7.38	0.62	11843	1.05	8.27	0.69	13274	14471
07/29/95 V515	59789.00	11.05	7.18	0.63	11823	1.06	8.07	0.71	13292	14459
WEIGHTED AVG	165354.00	10.83	7.38	0.64	11832	1.08	8.28	0.72	13269	14467

09/14/95  
14:59:46

ST. JOHNS RIVER POWER PARK

COAL ANALYSIS REPORT

SUPPLIER: ASHLAND SAMPLE TAKEN AT ASHLAND BY ASHLAND  
ANALYZED BY ASHLAND

DATE SMP	TONS	AS RECEIVED				#SO2/MBTU	DRY			-AGM FREE- BTU
		%MOIST	%ASH	%SULFUR	BTU		%ASH	%SULFUR	BTU	
CONTRACTUAL		6.00	11.00	0.85	12000					
08/01/95 7173	9522.00	5.69	13.33	0.88	12074	1.46	14.13	0.93	12802	14910
08/07/95 7174	9526.10	6.53	13.33	0.95	11947	1.59	14.26	1.02	12782	14908
08/11/95 7175	9720.80	5.80	13.63	1.00	12084	1.65	14.47	1.06	12828	14998
08/16/95 7176	9518.65	5.86	13.06	0.81	12129	1.33	13.87	0.86	12884	14959
08/22/95 7177	9376.50	5.83	13.93	0.81	11986	1.35	14.79	0.86	12728	14938
08/25/95 7178	9347.65	5.25	13.34	0.89	12161	1.46	14.08	0.94	12835	14938
WEIGHTED AVG	57011.70	5.83	13.44	0.89	12063	1.47	14.27	0.95	12810	14942

Oxbow-SJRPP SITE OFFICE :# 3/ 1  
7-14-95 : 2:43PM :  
SENT BY:



Hampton Roads Testing Laboratories, Inc.  
611 Howland Drive, Hampton, Virginia 23061-1300  
Tel (804) 826-9310 Fax (804) 827-1388

Laboratory Report No. 312916 Date of Report July 14, 1995

**CERTIFICATE OF ANALYSIS**

**Sample of:** PETROLEUM COKE - LOT 1

**Mark:** Representing a 71 car sample of PET COKE,  
car top sampled at the Yorktown Refinery  
and at Lee Hall, Virginia

**From:** Louisiana Carbon/Amoco

**Date Sampled:** July 13, 1995

**Sampled By:** Hampton Roads Testing Labs., Inc.

**PROXIMATE ANALYSIS  
As Received Dry Basis**

Moisture	5.40	
Volatile Matter	14.28	15.09
Fixed Carbon	79.94	84.91
Ash	0.38	0.40
Total (100%)	100.00	100.00
Sulphur	3.15	3.33
B.T.U./Lb.	14777	15621
Calories/Gram	8209	8678
MOISTURE/ASH FREE B.T.U.	15684	

Hampton Roads Testing Laboratories, Inc.

By

*Tom James*  
\_\_\_\_\_  
Analyst

JUL-14-1995 15:05 FROM HAMPTON ROADS TESTING TO LACARBON-LARSON P.02



Laboratory Report No. 312917 Date of Report July 14, 1995

**CERTIFICATE OF ANALYSIS**

Sample of: **PETROLEUM COKE - LOT 2**

Mark: **Representing a 48 car sample of PET COKE, car top sampled at the Yorktown Refinery**

From: **Louisiana Carbon/Amoco**

Date Sampled: **July 12, 1995**

Sampled By: **Hampton Roads Testing Labs., Inc.**

**PROXIMATE ANALYSIS  
 As Received Dry Basis**

Moisture	5.45	
Volatile Matter	14.31	15.13
Fixed Carbon	79.89	84.50
Ash	0.35	0.37
Total (100%)	100.00	100.00
Sulphur	3.04	3.22
B.T.U./Lb.	14811	15665
Calories/Gram	8228	8703

**MOISTURE/ASH FREE B.T.U. 15723**

Hampton Roads Testing Laboratories, Inc.

By

*[Signature]*  
 Chemist

JUL-14-1995 15:05 FROM HAMPTON ROADS TESTING TO LACARBON-LARSON P.03

Oxbow-SJRPP SITE OFFICE

7-14-95 ; 2:44PM ;

SENT BY:

SENT BY: 7-14-95 : 2:42PM : Oxbow-SURP: OFFICE : # 2/ 4



Hampton Roads Testing Laboratories, Inc.  
611 Howard Drive, Hampton, Virginia 23661-1300  
Tel (804) 626-6310 Fax (804) 627-8368

Laboratory Report No. 312918 Date of Report July 14, 1995

**CERTIFICATE OF ANALYSIS**

**Sample of: PETROLEUM COKE - DOMESTIC SHIPMENT**

**Mark:** Calculated composite representing 119 cars of PET COKE for shipment to Jacksonville Electric, car top sampled at the Yorktown Refinery and at Lee Hall, Virginia

**From:** Louisiana Carbon/Amoco

**Date Sampled:** July 12 and 13, 1995

**Sampled By:** Hampton Roads Testing Labs., Inc.

**PROXIMATE ANALYSIS  
As Received Dry Basis**

Moisture	5.42	
Volatile Matter	14.29	15.11
Fixed Carbon	79.92	84.50
Ash	0.37	0.39
Total (100%)	100.00	100.00
Sulphur	3.11	3.29
B. F. U. /Lb.	14791	15639
Calories/Gram	8217	8688
<b>MOISTURE/ASH FREE B. F. U.</b>		<b>15700</b>

TOTAL P.04

Hampton Roads Testing Laboratories, Inc.

By *[Signature]*  
Chemist

JUL-14-1995 15:05 FROM HAMPTON ROADS TESTING TO LACARBON-LORSON P. 04

## **ATTACHMENT E**

# ATTACHMENT E-1

St. Johns Unit 1

Daily Summary

FROM 07/18/95 00:00 TO 07/19/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-18-95 00:00	13.45	12.68	0.451	1.024	0.294
07-18-95 01:00	13.07	12.41	0.438	1.020	0.292
07-18-95 02:00	12.70	11.88	0.444	1.021	0.289
07-18-95 03:00	12.64	11.87	0.451	1.013	0.284
07-18-95 04:00	12.68	11.90	0.454	1.015	0.284
07-18-95 05:00	12.67	11.94	0.454	1.014	0.283
07-18-95 06:00	13.08	12.27	0.504	1.020	0.270
07-18-95 07:00	13.23	12.47	0.529	1.005	0.271
07-18-95 08:00	13.27	12.45	0.523	0.996	0.269
07-18-95 09:00	13.23	12.43	0.519	0.992	0.270
07-18-95 10:00	13.31	12.44	0.520	0.991	0.270
07-18-95 11:00	13.27	12.45	0.524	1.000	0.273
07-18-95 12:00	13.33	12.45	0.525	1.007	0.274
07-18-95 13:00	13.31	12.47	0.522	1.016	0.277
07-18-95 14:00	13.33	12.45	0.514	1.021	0.279
07-18-95 15:00	13.03	12.26	0.465	1.030	0.282
07-18-95 16:00	13.17	12.31	0.500	1.057	0.289
07-18-95 17:00	13.26	12.40	0.490	1.072	0.296
07-18-95 18:00	13.37	12.49	0.480	1.072	0.293
07-18-95 19:00	13.28	12.49	0.472	1.063	0.290
07-18-95 20:00	13.33	12.49	0.477	1.059	0.289
07-18-95 21:00	13.24	12.50	0.457	1.061	0.293
07-18-95 22:00	13.25	12.43	0.459	1.059	0.294
07-18-95 23:00	13.13	12.40	0.482	1.055	0.291

---

\*FINAL AVERAGE (s) 13.15 12.35 0.486 1.029 0.283  
 \*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS



## St. Johns Unit 1

## Daily Summary

FROM 07/19/95 00:00 TO 07/20/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-19-95 00:00	13.16	12.28	0.488	1.048	0.297
07-19-95 01:00	13.18	12.39	0.490	1.043	0.290
07-19-95 02:00	13.30	12.46	0.490	1.039	0.286
07-19-95 03:00	13.30	12.54	0.486	1.040	0.286
07-19-95 04:00	13.29	12.49	0.505	1.041	0.285
07-19-95 05:00	13.25	12.51	0.507	1.043	0.286
07-19-95 06:00	13.31	12.54	0.506	1.042	0.284
07-19-95 07:00	13.22	12.54	0.500	1.040	0.285
07-19-95 08:00	13.31	12.52	0.502	1.040	0.287
07-19-95 09:00	13.28	12.52	0.505	1.050	0.290
07-19-95 10:00	13.31	12.54	0.507	1.047	0.289
07-19-95 11:00	13.23	12.45	0.516	1.034	0.284
07-19-95 12:00	13.30	12.47	0.512	1.025	0.281
07-19-95 13:00	13.24	12.44	0.515	1.014	0.278
07-19-95 14:00	13.30	12.41	0.517	1.011	0.277
07-19-95 15:00	13.27	12.48	0.510	1.011	0.275
07-19-95 16:00	13.29	12.45	0.515	1.007	0.272
07-19-95 17:00	13.28	12.50	0.501	1.010	0.275
07-19-95 18:00	13.36	12.50	0.501	1.009	0.276
07-19-95 19:00	13.31	12.54	0.507	1.005	0.272
07-19-95 20:00	13.37	12.54	0.498	1.006	0.273
07-19-95 21:00	13.32	12.53	0.495	1.008	0.276
07-19-95 22:00	13.41	12.55	0.489	1.009	0.277
07-19-95 23:00	13.31	12.53	0.486	1.005	0.277

---

\*FINAL AVERAGE (s) 13.29 12.49 0.502 1.026 0.282

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 07/20/95 00:00 TO 07/21/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-20-95 00:00	13.39	12.44	0.485	1.002	0.286
07-20-95 01:00	13.29	12.54	0.478	1.007	0.282
07-20-95 02:00	13.39	12.55	0.460	1.004	0.277
07-20-95 03:00	13.29	12.52	0.459	1.002	0.274
07-20-95 04:00	13.34	12.51	0.443	0.994	0.272
07-20-95 05:00	13.33	12.49	0.399	1.003	0.275
07-20-95 06:00	13.36	12.43	0.444	0.999	0.273
07-20-95 07:00	13.30	12.50	0.447	1.008	0.272
07-20-95 08:00	13.37	12.53	0.446	1.021	0.275
07-20-95 09:00	13.33	12.49	0.448	1.029	0.280
07-20-95 10:00	13.42	12.50	0.458	1.037	0.284
07-20-95 11:00	13.38	12.54	0.466	1.043	0.281
07-20-95 12:00	13.37	**	**	1.045	**
07-20-95 13:00	13.31	12.29	0.488	1.049	0.280
07-20-95 14:00	13.38	12.40	0.505	1.050	0.288
07-20-95 15:00	13.33	12.44	0.504	1.050	0.284
07-20-95 16:00	13.35	12.49	0.502	1.051	0.285
07-20-95 17:00	13.29	12.44	0.498	1.051	0.287
07-20-95 18:00	13.39	12.42	0.496	1.050	0.289
07-20-95 19:00	13.35	12.48	0.494	1.048	0.289
07-20-95 20:00	13.34	12.42	0.489	1.048	0.289
07-20-95 21:00	13.31	12.44	0.496	1.047	0.289
07-20-95 22:00	13.37	12.47	0.501	1.049	0.288
07-20-95 23:00	13.26	12.44	0.496	1.046	0.286

---

\*FINAL AVERAGE (s) 13.34 12.47 0.474 1.031 0.282

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/08/95 00:00 TO 08/09/95 00:00

Date/ Time	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_MM #/M
-08-95 00:00	13.38	12.27	**	1.041	0.306
08-08-95 01:00	13.30	12.38	**	1.023	0.296
08-08-95 02:00	13.41	12.39	**	1.020	0.291
08-08-95 03:00	13.31	**	**	1.017	**
08-08-95 04:00	13.31	12.10	0.546	1.011	0.415
08-08-95 05:00	13.25	12.29	0.537	1.003	0.278
08-08-95 06:00	13.32	12.32	0.533	1.000	0.274
08-08-95 07:00	13.28	12.34	0.538	0.997	0.274
08-08-95 08:00	13.36	12.40	0.552	0.986	0.272
08-08-95 09:00	13.32	12.38	0.562	0.975	0.268
08-08-95 10:00	13.39	12.37	0.574	0.975	0.266
08-08-95 11:00	13.37	12.37	0.568	0.969	0.264
08-08-95 12:00	13.38	12.36	0.567	0.953	0.258
08-08-95 13:00	13.33	12.21	0.566	0.948	0.254
08-08-95 14:00	13.35	12.38	0.535	0.938	0.250
08-08-95 15:00	13.29	12.38	0.553	0.938	0.248
08-08-95 16:00	13.38	12.39	0.562	0.942	0.249
08-08-95 17:00	13.35	12.41	0.562	0.951	0.251
08-08-95 18:00	13.47	12.44	0.557	0.954	0.248
08-08-95 19:00	13.33	12.39	0.550	0.950	0.249
08-08-95 20:00	13.39	12.39	0.536	0.941	0.247
08-08-95 21:00	13.30	12.39	0.531	0.942	0.249
08-08-95 22:00	13.43	12.46	0.546	0.944	0.250
08-08-95 23:00	13.26	12.37	0.514	0.943	0.249

---

\*FINAL AVERAGE (s) 13.34      12.36      0.549      0.973      0.270  
 \*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/09/95 00:00 TO 08/10/95 00:00

Date/ Time	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_MM #/M
-09-95 00:00	13.34	12.28	**	0.938	0.258
08-09-95 01:00	13.27	13.43	**	0.939	0.298
08-09-95 02:00	13.37	12.31	**	0.953	0.253
08-09-95 03:00	13.26	12.36	**	0.956	0.255
08-09-95 04:00	13.29	12.31	0.541	0.962	0.261
08-09-95 05:00	13.25	12.33	0.545	0.960	0.255
08-09-95 06:00	13.34	12.34	0.555	0.965	0.255
08-09-95 07:00	13.31	12.37	0.589	0.979	0.258
08-09-95 08:00	13.36	12.38	0.579	0.994	0.263
08-09-95 09:00	13.25	12.34	0.583	1.020	0.270
08-09-95 10:00	13.32	12.34	0.578	1.032	0.274
08-09-95 11:00	13.30	12.41	0.563	1.047	0.279
08-09-95 12:00	13.12	12.42	0.575	1.072	0.280
08-09-95 13:00	13.00	12.42	0.569	1.085	0.296
08-09-95 14:00	13.09	12.34	0.611	1.078	0.298
08-09-95 15:00	13.17	12.46	0.595	1.083	0.306
08-09-95 16:00	13.26	12.56	0.568	1.124	0.310
08-09-95 17:00	13.39	12.67	0.482	1.152	0.316
08-09-95 18:00	13.42	12.65	0.484	1.136	0.313
08-09-95 19:00	13.31	12.65	0.491	1.135	0.311
08-09-95 20:00	13.30	12.62	0.491	1.140	0.311
08-09-95 21:00	13.24	12.58	0.493	1.139	0.312
08-09-95 22:00	13.29	12.58	0.482	1.157	0.318
08-09-95 23:00	13.25	12.56	0.474	1.171	0.323

---

\*FINAL AVERAGE (s) 13.27 12.49 0.542 1.051 0.286

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

## St. Johns Unit 1

## Daily Summary

FROM 08/10/95 00:00 TO 08/11/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-10-95 00:00	13.30	12.48	0.490	1.188	0.337
08-10-95 01:00	13.22	12.55	0.478	1.263	0.348
08-10-95 02:00	13.32	12.55	0.470	1.235	0.349
08-10-95 03:00	13.18	12.49	0.489	1.230	0.350
08-10-95 04:00	13.11	12.37	0.497	1.275	0.359
08-10-95 05:00	13.15	12.49	0.516	1.287	0.355
08-10-95 06:00	13.21	12.53	0.502	1.284	0.352
08-10-95 07:00	13.23	12.54	0.489	1.291	0.356
08-10-95 08:00	13.33	12.62	0.498	1.313	0.362
08-10-95 09:00	13.23	12.59	0.497	1.328	0.367
08-10-95 10:00	13.16	12.52	0.512	1.333	0.368
08-10-95 11:00	13.01	12.40	0.564	1.294	0.354
08-10-95 12:00	13.08	12.41	0.582	1.300	0.355
08-10-95 13:00	13.02	12.30	0.505	1.359	0.379
08-10-95 14:00	13.07	12.35	0.501	1.375	0.391
08-10-95 15:00	13.05	12.44	0.491	1.361	0.385
08-10-95 16:00	13.21	12.49	0.546	1.371	0.378
08-10-95 17:00	13.27	12.49	0.535	1.398	0.394
08-10-95 18:00	13.29	**	**	1.394	**
08-10-95 19:00	13.22	12.54	0.508	1.405	0.387
08-10-95 20:00	13.34	12.57	0.490	1.407	0.379
08-10-95 21:00	13.29	12.60	0.461	1.406	0.378
08-10-95 22:00	13.38	12.66	0.464	1.419	0.380
08-10-95 23:00	13.13	12.55	0.458	1.468	0.393

---

\*FINAL AVERAGE (s) 13.20 12.50 0.502 1.333 0.368

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/11/95 00:00 TO 08/12/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-11-95 00:00	13.29	12.24	0.468	1.480	0.504
08-11-95 01:00	13.20	12.59	0.484	1.497	0.406
08-11-95 02:00	13.29	12.59	0.501	1.488	0.407
08-11-95 03:00	13.29	12.65	0.509	1.516	0.414
08-11-95 04:00	13.38	12.66	0.517	1.558	0.429
08-11-95 05:00	13.31	12.67	0.527	1.597	0.441
08-11-95 06:00	13.36	12.65	0.523	1.621	0.450
08-11-95 07:00	13.31	12.64	0.508	1.646	0.462
08-11-95 08:00	13.37	12.66	0.499	1.670	0.466
08-11-95 09:00	13.34	12.67	0.500	1.684	0.466
08-11-95 10:00	13.44	12.71	0.493	1.710	0.474
08-11-95 11:00	13.34	12.67	0.484	1.705	0.473
08-11-95 12:00	13.27	12.56	0.491	1.672	0.467
08-11-95 13:00	13.03	12.40	0.562	1.582	0.441
08-11-95 14:00	13.14	12.46	0.549	1.579	0.437
08-11-95 15:00	13.20	12.55	0.508	1.682	0.465
08-11-95 16:00	13.35	12.62	0.497	1.699	0.475
08-11-95 17:00	13.33	12.64	0.496	1.705	0.480
08-11-95 18:00	13.46	12.72	0.494	1.704	0.480
08-11-95 19:00	13.39	12.73	0.496	1.694	0.473
08-11-95 20:00	13.45	12.76	0.495	1.689	0.464
08-11-95 21:00	13.36	12.75	0.490	1.692	0.464
08-11-95 22:00	13.36	12.70	0.476	1.697	0.464
08-11-95 23:00	13.30	12.67	0.478	1.693	0.464

---

\*FINAL AVERAGE (s) 13.32 12.62 0.502 1.636 0.457

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

## St. Johns Unit 1

## Daily Summary

FROM 08/12/95 00:00 TO 08/13/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-12-95 00:00	13.40	12.63	0.482	1.700	0.478
08-12-95 01:00	13.20	12.64	0.480	1.699	0.477
08-12-95 02:00	13.26	12.57	0.485	1.707	0.479
08-12-95 03:00	13.21	12.56	0.484	1.713	0.485
08-12-95 04:00	13.23	12.53	0.484	1.722	0.492
08-12-95 05:00	13.14	12.50	0.485	1.722	0.494
08-12-95 06:00	13.25	12.57	0.495	1.723	0.494
08-12-95 07:00	13.23	12.64	0.498	1.711	0.495
08-12-95 08:00	13.35	12.72	0.509	1.712	0.482
08-12-95 09:00	13.31	12.71	0.507	1.715	0.482
08-12-95 10:00	13.39	12.68	0.498	1.722	0.485
08-12-95 11:00	13.35	12.68	0.498	1.727	0.489
08-12-95 12:00	13.43	12.68	0.501	1.721	0.489
08-12-95 13:00	13.31	12.67	0.503	1.717	0.488
08-12-95 14:00	13.39	12.67	0.509	1.710	0.485
08-12-95 15:00	13.27	12.60	0.508	1.716	0.486
08-12-95 16:00	13.28	12.56	0.507	1.712	0.484
08-12-95 17:00	13.22	12.54	0.514	1.708	0.483
08-12-95 18:00	13.34	12.59	0.492	1.703	0.482
08-12-95 19:00	13.26	12.64	0.486	1.703	0.478
08-12-95 20:00	13.33	12.63	0.488	1.691	0.473
08-12-95 21:00	13.24	12.63	0.479	1.686	0.479
08-12-95 22:00	13.28	12.59	0.472	1.687	0.487
08-12-95 23:00	13.25	12.64	0.483	1.694	0.492

---

\*FINAL AVERAGE (s) 13.29 12.62 0.494 1.709 0.485

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

## St. Johns Unit 1

## Daily Summary

FROM 08/13/95 00:00 TO 08/14/95 00:00

Date/ Time	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_MM #/M
-13-95 00:00	13.33	12.49	0.483	1.702	0.502
08-13-95 01:00	13.22	12.63	0.488	1.714	0.497
08-13-95 02:00	13.35	12.64	0.493	1.715	0.479
08-13-95 03:00	13.33	12.72	0.495	1.714	0.475
08-13-95 04:00	13.37	12.68	0.489	1.706	0.473
08-13-95 05:00	13.25	12.62	0.492	1.693	0.473
08-13-95 06:00	13.30	12.61	0.483	1.686	0.478
08-13-95 07:00	13.25	12.63	0.480	1.687	0.480
08-13-95 08:00	13.42	12.72	0.475	1.686	0.482
08-13-95 09:00	13.38	12.73	0.462	1.696	0.486
08-13-95 10:00	13.51	12.74	0.448	1.715	0.493
08-13-95 11:00	13.49	12.78	0.451	1.733	0.496
08-13-95 12:00	13.54	12.76	0.478	1.743	0.496
08-13-95 13:00	13.47	12.80	0.471	1.751	0.492
08-13-95 14:00	13.50	12.70	0.461	1.752	0.489
08-13-95 15:00	13.41	12.68	0.447	1.752	0.495
08-13-95 16:00	13.49	12.66	0.439	1.759	0.499
08-13-95 17:00	13.45	12.71	0.446	1.765	0.502
08-13-95 18:00	13.51	12.72	0.447	1.759	0.491
08-13-95 19:00	13.46	12.77	0.443	1.755	0.467
08-13-95 20:00	13.54	12.77	0.444	1.752	0.459
08-13-95 21:00	13.46	12.81	0.432	1.750	0.458
08-13-95 22:00	13.50	12.75	0.434	1.741	0.455
08-13-95 23:00	13.43	12.80	0.430	1.743	0.456

---

\*FINAL AVERAGE (s) 13.41 12.70 0.463 1.728 0.482  
 \*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS



## St. Johns Unit 1

## Daily Summary

FROM 08/14/95 00:00 TO 08/15/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-14-95 00:00	13.50	12.72	**	1.749	0.466
08-14-95 01:00	13.29	14.22	**	1.751	0.458
08-14-95 02:00	13.42	12.58	0.499	1.743	0.481
08-14-95 03:00	13.37	12.69	0.487	1.742	0.475
08-14-95 04:00	13.44	12.67	0.498	1.740	0.476
08-14-95 05:00	13.40	12.73	0.496	1.744	0.478
08-14-95 06:00	13.46	12.74	0.500	1.755	0.484
08-14-95 07:00	13.36	12.72	0.496	1.762	0.489
08-14-95 08:00	13.47	12.73	0.502	1.767	0.492
08-14-95 09:00	13.41	12.75	0.477	1.778	0.498
08-14-95 10:00	13.49	12.74	0.479	1.787	0.504
08-14-95 11:00	13.44	12.75	0.471	1.784	0.506
08-14-95 12:00	13.55	12.76	0.469	1.775	0.502
08-14-95 13:00	13.50	12.78	0.467	1.764	0.493
08-14-95 14:00	13.57	12.77	0.467	1.762	0.479
08-14-95 15:00	13.40	12.66	0.490	1.764	0.467
08-14-95 16:00	13.43	12.60	0.499	1.761	0.458
08-14-95 17:00	13.40	12.62	0.517	1.758	0.461
08-14-95 18:00	13.54	12.68	0.525	1.757	0.463
08-14-95 19:00	13.44	12.72	0.525	1.753	0.456
08-14-95 20:00	13.47	12.67	0.517	1.744	0.462
08-14-95 21:00	13.37	12.66	0.509	1.736	0.464
08-14-95 22:00	13.46	12.66	0.550	1.741	0.466
08-14-95 23:00	13.32	12.61	0.516	1.747	0.467

---

\*FINAL AVERAGE (s) 13.44 12.76 0.498 1.757 0.477

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/15/95 00:00 TO 08/16/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-15-95 00:00	13.33	12.26	**	1.740	0.572
08-15-95 01:00	13.29	14.15	**	1.722	0.454
08-15-95 02:00	13.43	12.55	0.491	1.720	0.463
08-15-95 03:00	13.41	12.67	0.482	1.731	0.457
08-15-95 04:00	13.44	12.65	0.503	1.743	0.458
08-15-95 05:00	13.36	12.67	0.505	1.741	0.457
08-15-95 06:00	13.42	12.65	0.495	1.739	0.455
08-15-95 07:00	13.30	12.61	0.510	1.728	0.458
08-15-95 08:00	13.39	12.65	0.512	1.726	0.482
08-15-95 09:00	13.34	12.70	0.497	1.729	0.485
08-15-95 10:00	13.29	12.57	0.491	1.732	0.489
08-15-95 11:00	13.27	12.56	0.528	1.726	0.481
08-15-95 12:00	13.36	12.58	0.530	1.728	0.472
08-15-95 13:00	13.31	12.51	0.343	1.725	0.466
08-15-95 14:00	13.40	12.35	0.535	1.723	0.463
08-15-95 15:00	13.38	12.49	0.519	1.727	0.471
08-15-95 16:00	13.44	12.64	0.536	1.730	0.468
08-15-95 17:00	13.34	12.67	0.516	1.733	0.466
08-15-95 18:00	13.43	12.63	0.509	1.730	0.466
08-15-95 19:00	13.34	12.70	0.518	1.727	0.468
08-15-95 20:00	13.42	12.67	0.515	1.730	0.464
08-15-95 21:00	13.34	12.68	0.512	1.730	0.463
08-15-95 22:00	13.40	12.61	0.520	1.734	0.464
08-15-95 23:00	13.32	12.66	0.493	1.728	0.462

---

\*FINAL AVERAGE (s) 13.36 12.66 0.503 1.730 0.471

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/16/95 00:00 TO 08/17/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-16-95 00:00	13.43	12.60	0.501	1.728	0.469
08-16-95 01:00	13.31	12.71	0.510	1.716	0.463
08-16-95 02:00	13.41	12.69	0.524	1.715	0.459
08-16-95 03:00	13.27	12.65	0.519	1.719	0.461
08-16-95 04:00	13.37	12.63	0.525	1.715	0.461
08-16-95 05:00	13.31	12.67	0.528	1.723	0.467
08-16-95 06:00	13.39	12.68	0.526	1.722	0.463
08-16-95 07:00	13.33	12.58	0.524	1.720	0.484
08-16-95 08:00	13.37	12.62	0.535	1.717	0.484
08-16-95 09:00	13.38	11.63	0.518	1.718	0.502
08-16-95 10:00	13.46	12.32	0.529	1.717	0.503
08-16-95 11:00	13.39	12.71	0.561	1.722	0.479
08-16-95 12:00	13.46	12.74	0.543	1.732	0.483
08-16-95 13:00	13.40	12.68	0.575	1.726	0.482
08-16-95 14:00	13.38	12.62	0.579	1.718	0.479
08-16-95 15:00	13.25	12.47	0.598	1.710	0.477
08-16-95 16:00	13.33	12.57	0.595	1.715	0.479
08-16-95 17:00	13.31	12.62	0.555	1.720	0.480
08-16-95 18:00	13.40	12.61	0.555	1.730	0.481
08-16-95 19:00	13.35	12.69	0.538	1.732	0.476
08-16-95 20:00	13.45	12.70	0.517	1.725	0.478
08-16-95 21:00	13.36	12.69	0.499	1.714	0.476
08-16-95 22:00	13.48	12.71	0.499	1.714	0.476
08-16-95 23:00	13.33	12.67	0.497	1.711	0.476

---

\*FINAL AVERAGE(s) 13.37 12.59 0.535 1.720 0.477

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/17/95 00:00 TO 08/18/95 00:00

Date/ Time	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_MM #/M
-17-95 00:00	13.43	12.63	**	1.717	0.485
08-17-95 01:00	13.24	13.92	**	1.718	0.464
08-17-95 02:00	13.35	12.54	0.575	1.702	0.479
08-17-95 03:00	13.27	12.62	0.560	1.707	0.479
08-17-95 04:00	13.28	12.55	0.517	1.716	0.476
08-17-95 05:00	13.20	12.56	0.547	1.733	0.474
08-17-95 06:00	13.41	12.70	0.544	1.727	0.485
08-17-95 07:00	13.30	12.68	0.534	1.732	0.483
08-17-95 08:00	13.22	12.55	0.537	1.759	0.489
08-17-95 09:00	13.18	12.53	0.525	1.790	0.500
08-17-95 10:00	13.19	12.47	0.560	1.859	0.525
08-17-95 11:00	13.27	12.57	0.572	1.969	0.538
08-17-95 12:00	13.42	12.62	0.573	2.086	0.560
08-17-95 13:00	13.37	12.66	0.558	2.140	0.552
08-17-95 14:00	13.45	12.56	0.538	2.156	0.560
08-17-95 15:00	13.39	12.63	0.547	2.167	0.561
08-17-95 16:00	13.51	12.56	0.559	2.187	0.576
08-17-95 17:00	13.38	12.61	0.588	2.196	0.574
08-17-95 18:00	13.44	12.60	0.598	2.166	0.565
08-17-95 19:00	13.33	12.61	0.601	2.112	0.547
08-17-95 20:00	13.42	12.51	0.602	2.067	0.543
08-17-95 21:00	13.30	12.59	0.597	2.039	0.533
08-17-95 22:00	13.24	12.49	0.551	2.029	0.524
08-17-95 23:00	13.26	12.58	0.520	2.029	0.526

---

\*FINAL AVERAGE (s) 13.33 12.64 0.559 1.938 0.521  
 \*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

## St. Johns Unit 1

## Daily Summary

FROM 08/18/95 00:00 TO 08/19/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-18-95 00:00	13.32	12.46	0.516	2.039	0.536
08-18-95 01:00	13.22	12.57	0.519	2.061	0.538
08-18-95 02:00	13.44	12.63	0.522	2.101	0.561
08-18-95 03:00	13.27	12.63	0.547	2.128	0.549
08-18-95 04:00	13.41	12.67	0.531	2.165	0.564
08-18-95 05:00	13.34	12.69	0.527	2.190	0.575
08-18-95 06:00	13.38	12.67	0.518	2.209	0.584
08-18-95 07:00	13.29	12.59	0.513	2.220	0.585
08-18-95 08:00	13.35	12.63	**	2.235	0.587
08-18-95 09:00	13.29	**	**	2.248	**
08-18-95 10:00	13.35	12.46	0.459	2.259	0.577
08-18-95 11:00	13.32	12.47	0.463	2.269	0.589
08-18-95 12:00	13.41	12.52	0.468	2.272	0.596
08-18-95 13:00	13.36	12.46	0.487	2.272	0.562
08-18-95 14:00	13.43	12.56	0.494	2.277	0.550
08-18-95 15:00	13.35	12.60	0.489	2.276	0.555
08-18-95 16:00	13.45	12.59	0.488	2.267	0.546
08-18-95 17:00	13.38	12.63	0.489	2.268	0.544
08-18-95 18:00	13.47	12.64	0.490	2.282	0.560
08-18-95 19:00	13.36	12.63	0.491	2.305	0.561
08-18-95 20:00	13.44	12.62	0.489	2.332	0.565
08-18-95 21:00	13.19	12.51	0.495	2.368	0.579
08-18-95 22:00	13.35	12.56	0.475	2.405	0.579
08-18-95 23:00	13.20	12.51	0.485	2.418	0.575

---

\*FINAL AVERAGE (s) 13.35 12.58 0.498 2.244 0.566

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

St. Johns Unit 1

Daily Summary

FROM 08/19/95 00:00 TO 08/20/95 00:00

Date/ Time	linCO2_C %	loutCO2_C %	loutNOX_MM #/M	linSO2_MM #/M	loutSO2_MM #/M
-19-95 00:00	13.00	12.31	0.501	2.428	0.581
08-19-95 01:00	13.00	12.33	0.512	2.443	0.582
08-19-95 02:00	13.18	12.39	0.505	2.453	0.572
08-19-95 03:00	13.08	12.35	0.493	2.455	0.563
08-19-95 04:00	13.20	12.41	0.483	2.462	0.563
08-19-95 05:00	13.10	12.41	0.481	2.472	0.563
08-19-95 06:00	13.16	12.38	0.490	2.481	0.560
08-19-95 07:00	13.12	12.45	0.496	2.494	0.560
08-19-95 08:00	13.11	12.41	0.490	2.504	0.566
08-19-95 09:00	13.03	12.37	0.467	2.504	0.559
08-19-95 10:00	13.09	12.32	0.505	2.499	0.560
08-19-95 11:00	13.01	12.31	0.489	2.507	0.557
08-19-95 12:00	13.38	12.61	0.435	2.519	0.560
08-19-95 13:00	13.47	12.77	0.431	2.518	0.580
08-19-95 14:00	13.57	12.78	0.436	2.489	0.564
08-19-95 15:00	13.52	12.80	0.435	2.457	0.558
08-19-95 16:00	13.59	12.80	0.437	2.406	0.531
08-19-95 17:00	13.49	12.86	0.451	2.332	0.504
08-19-95 18:00	13.49	12.81	0.458	2.253	0.489
08-19-95 19:00	13.45	12.85	0.454	2.180	0.498
08-19-95 20:00	13.48	12.74	0.464	2.115	0.520
08-19-95 21:00	13.38	12.75	0.456	2.052	0.509
08-19-95 22:00	13.47	12.74	0.455	2.010	0.493
08-19-95 23:00	13.38	12.81	0.452	1.986	0.494

---

\*FINAL AVERAGE (s) 13.28 12.57 0.470 2.376 0.545

\*FINAL AVERAGE -- Summation of AVERAGING PERIODS excluding INVALID PERIODS

Company: St. Johns Unit 1  
Source : Unit 1

7-18-95

Location:  
Channel : 10 Opacity Units: %

00:00	5.5	5.5	5.9	5.3	6.6	5.7	5.5	6.0	5.5	11.72C	Avg:	5.7	9
01:00	15.9SC	5.8	6.1	5.8	6.1	5.2	5.8	6.5	5.2	5.3	Avg:	5.8	9
02:00	5.6	5.3	5.7	5.8	5.4	6.2	6.1	6.1	5.3	5.0	Avg:	5.6	10
03:00	5.5	5.2	5.2	4.9	5.3	5.3	5.0	5.1	5.4	5.0	Avg:	5.2	10
04:00	5.3	4.9	5.2	5.8	5.6	5.7	5.3	5.4	5.8	4.8	Avg:	5.3	10
05:00	5.8	5.6	5.0	5.3	5.3	5.6	5.4	5.0	5.2	5.3	Avg:	5.4	10
06:00	5.3	5.5	5.3	5.9	5.5	5.7	7.3	5.7	6.2	5.8	Avg:	5.8	10
07:00	5.6	6.0	5.1	5.1	5.3	5.8	5.8	5.6	5.5	5.9	Avg:	5.6	10
08:00	5.5	5.7	5.5	5.8	5.8	5.2	5.6	5.4	5.5	5.6	Avg:	5.6	10
09:00	5.4	5.5	5.4	5.1	5.4	5.3	5.2	5.6	5.3	5.5	Avg:	5.4	10
10:00	5.7	5.9	5.3	5.6	5.6	5.4	5.4	5.4	5.5	5.4	Avg:	5.5	10
11:00	5.2	5.2	5.8	5.4	5.6	5.4	5.5	5.5	5.4	5.4	Avg:	5.4	10
12:00	5.4	5.7	5.7	5.5	6.3	5.9	5.8	5.6	5.7	5.9	Avg:	5.8	10
13:00	5.7	5.3	5.5	5.9	5.7	6.0	6.2	6.1	5.6	5.7	Avg:	5.8	10
14:00	5.9	5.7	5.7	6.2	5.9	5.9	6.1	5.6	5.8	6.4	Avg:	5.9	10
15:00	6.3	5.7	6.0	5.8	6.2	6.1	6.2	6.1	6.3	6.6	Avg:	6.1	10
16:00	6.4	6.7	6.4	6.4	6.7	6.3	6.1	6.7	6.3	6.2	Avg:	6.4	10
17:00	6.3	6.1	6.1	6.7	6.4	6.6	6.2	6.3	6.0	6.1	Avg:	6.3	10
18:00	5.7	6.2	6.1	5.9	6.0	6.1	6.1	6.3	6.0	5.9	Avg:	6.0	10
19:00	6.0	6.1	6.1	5.9	6.6	6.1	6.0	6.0	5.9	5.9	Avg:	6.1	10
20:00	5.8	5.7	6.1	5.9	6.2	6.1	5.6	5.7	5.5	5.8	Avg:	5.8	10
21:00	5.9	6.0	5.6	5.8	5.9	5.6	5.5	6.0	5.2	5.5	Avg:	5.7	10
22:00	5.7	5.5	6.4	6.4	5.9	5.7	5.7	5.8	5.7	5.7	Avg:	5.8	10
23:00	6.0	5.4	5.4	5.5	5.5	5.9	6.0	5.7	5.9	5.9	Avg:	5.7	10

Daily Average: 5.7 Count: 238

Company: St. Johns Unit 1  
Source : Unit 1

Location:  
Channel : 10pacity Units: %

~~2/19-95~~  
2/19-95

00:00	6.1	5.7	5.7	5.8	6.0	6.2	5.7	6.6	6.0	10.7ZC	Avg:	6.0	9
01:00	16.7SC	5.8	5.8	6.8	5.7	5.5	5.8	5.6	5.7	5.5	Avg:	5.8	9
02:00	5.7	5.8	5.7	5.9	5.7	5.7	5.6	5.5	5.6	5.9	Avg:	5.7	10
03:00	5.4	5.5	5.6	6.3	5.8	5.4	6.1	5.7	5.6	5.7	Avg:	5.7	10
04:00	5.7	6.4	5.7	5.8	5.7	6.0	6.1	5.7	5.7	5.7	Avg:	5.8	10
05:00	6.2	5.5	5.7	5.9	5.5	5.5	5.8	5.8	5.5	5.8	Avg:	5.7	10
06:00	5.3	5.5	5.4	5.8	5.5	5.5	5.5	5.7	5.5	5.3	Avg:	5.5	10
07:00	5.4	5.8	5.8	6.2	6.0	5.4	5.9	5.9	5.6	5.5	Avg:	5.7	10
08:00	5.7	5.6	5.7	5.7	5.8	5.5	5.7	5.7	5.3	5.6	Avg:	5.6	10
09:00	5.4	6.2	5.4	5.0	5.5	5.9	6.3	5.3	5.0	5.3	Avg:	5.5	10
10:00	5.2	5.0	5.1	5.2	5.4	5.0	4.9	5.6	5.5	5.7	Avg:	5.3	10
11:00	5.8	5.8	6.1	5.7	5.5	5.7	5.6	5.6	5.5	5.9	Avg:	5.7	10
12:00	5.5	5.6	5.6	5.6	5.5	5.4	5.3	5.2	5.3	5.2	Avg:	5.4	10
13:00	5.3	5.7	5.6	5.3	5.5	5.4	5.5	5.4	5.4	5.5	Avg:	5.4	10
14:00	5.8	5.5	5.3	5.4	5.7	5.8	5.7	5.5	5.6	5.5	Avg:	5.6	10
15:00	5.5	5.6	5.5	5.6	5.4	5.4	5.6	5.7	5.6	5.5	Avg:	5.5	10
16:00	5.5	5.9	5.7	6.0	5.7	5.8	5.8	5.7	5.8	6.1	Avg:	5.8	10
17:00	6.3	6.3	6.0	6.1	6.2	6.3	6.0	6.1	6.1	6.1	Avg:	6.1	10
18:00	6.2	6.3	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.1	Avg:	6.1	10
19:00	6.1	5.8	6.0	6.1	5.9	5.9	6.0	6.2	5.9	5.8	Avg:	6.0	10
20:00	6.0	5.8	5.9	6.0	5.8	6.4	6.0	5.8	5.9	5.9	Avg:	5.9	10
21:00	5.9	5.8	5.6	5.7	5.8	5.6	5.6	5.8	6.3	6.0	Avg:	5.8	10
22:00	5.8	5.8	5.7	6.0	5.7	5.9	7.1	5.8	5.6	5.8	Avg:	5.9	10
23:00	5.8	5.8	5.7	5.6	5.9	5.7	5.6	5.4	5.7	5.7	Avg:	5.7	10

Daily Average: 5.7 Count: 238



Company: St. Johns Unit 1  
Source : Unit 1

7-20-95

Location:  
Channel : 10capacity Units: %

00:00	5.5	5.3	5.7	5.7	6.1	5.6	5.4	5.5	5.5	10.1ZC	Avg:	5.6	9
01:00	10.9SC	5.3	5.6	5.2	5.3	5.7	5.6	5.5	5.3	5.5	Avg:	5.4	9
02:00	5.6	5.6	5.5	5.5	5.6	5.6	5.3	5.6	5.7	5.5	Avg:	5.5	10
03:00	5.7	5.5	5.7	5.8	5.7	5.6	5.5	5.5	6.2	5.7	Avg:	5.7	10
04:00	5.9	6.1	5.7	6.5	5.7	6.3	5.9	6.2	6.3	6.1	Avg:	6.1	10
05:00	5.7	6.3	6.3	6.8	6.3	5.8	6.4	5.8	5.9	5.9	Avg:	6.1	10
06:00	5.6	6.4	5.3	5.5	5.8	6.0	6.9	6.3	6.4	7.1	Avg:	6.1	10
07:00	6.1	6.5	6.5	6.8	7.5	6.4	7.1	7.5	6.7	6.9	Avg:	6.8	10
08:00	6.1	7.1	6.4	6.4	7.2	17.0	7.0	7.0	7.3	10.8	Avg:	8.2	10
09:00	7.0	6.5	6.2	6.7	6.4	6.5	6.6	6.0	6.2	6.3	Avg:	6.4	10
10:00	5.7	6.8	6.6	6.7	6.6	6.9	6.9	6.6	7.0	6.4	Avg:	6.6	10
11:00	6.0	6.6	6.8	6.2	6.2	6.1	6.5	6.0	6.3	6.4	Avg:	6.3	10
12:00	5.9	6.3	6.5	6.5	6.3	6.1	6.6	6.6	6.2	6.4	Avg:	6.3	10
13:00	7.2	6.6	6.6	6.4	6.8	6.5	6.4	6.8	6.6	6.5	Avg:	6.6	10
14:00	6.4	6.4	6.3	6.3	6.6	6.6	6.6	6.7	7.0	6.8	Avg:	6.6	10
15:00	7.1	7.0	6.9	7.3	7.1	7.5	7.4	7.0	7.0	7.0	Avg:	7.1	10
16:00	7.1	6.8	7.3	7.5	7.4	7.2	7.3	7.1	6.8	6.9	Avg:	7.1	10
17:00	7.0	7.1	7.2	7.4	7.2	7.1	7.2	7.1	7.8	7.0	Avg:	7.2	10
18:00	7.0	7.3	6.8	7.1	7.0	6.9	7.2	7.3	7.0	6.8	Avg:	7.1	10
19:00	7.0	7.0	6.6	7.4	7.3	6.7	7.1	6.7	7.0	6.8	Avg:	7.0	10
20:00	6.7	6.4	6.3	6.7	6.6	6.3	6.5	6.7	6.6	6.1	Avg:	6.5	10
21:00	6.5	6.5	6.6	6.2	6.4	6.0	6.6	6.5	5.9	6.3	Avg:	6.4	10
22:00	6.4	6.4	6.4	6.2	6.4	6.5	6.4	6.6	6.4	6.7	Avg:	6.5	10
23:00	6.6	6.8	6.7	6.8	6.3	6.7	6.8	7.0	6.4	6.2	Avg:	6.6	10

Daily Average: 6.5 Count: 238 Max: 17.0

SO<sub>2</sub>, CO<sub>2</sub>, NO<sub>x</sub> 1215-1300 CAL. DRAWING. a.r.

Company: St. Johns Unit 1  
 Source : Unit 1 7-8-95

Location:  
 Channel : 10capacity Units: %

00:00	6.5	6.9	6.7	5.6	6.8	6.7	5.0	6.9	6.8	5.2	Avg:	6.3	10
01:00	9.8ZC	17.7SC	6.8	5.7	7.1	6.6	4.6	6.5	6.5	4.7	Avg:	6.1	8
02:00	6.2	7.3	5.8	5.9	6.4	7.1	4.8	7.1	6.9	4.8	Avg:	6.2	10
03:00	6.6	6.9	6.1	5.8	7.1	6.8	5.1	7.5	6.9	5.0	Avg:	6.4	10
04:00	6.2	7.1	5.9	5.6	6.5	7.2	4.7	6.9	6.7	5.1	Avg:	6.2	10
05:00	6.5	6.9	5.6	6.2	6.8	6.7	4.6	7.0	6.7	4.8	Avg:	6.2	10
06:00	6.4	6.9	5.9	5.6	7.0	6.8	5.3	6.8	6.5	4.8	Avg:	6.2	10
07:00	6.7	6.8	5.3	6.3	6.9	6.7	5.2	6.7	6.8	4.9	Avg:	6.2	10
08:00	7.0	7.3	5.3	6.9	7.1	6.5	5.2	7.1	7.2	5.0	Avg:	6.5	10
09:00	6.7	7.1	5.1	6.6	7.0	6.4	5.1	7.2	6.8	4.9	Avg:	6.3	10
10:00	6.7	6.9	5.5	6.5	6.8	6.4	5.2	7.2	6.9	5.0	Avg:	6.3	10
11:00	7.0	7.1	5.4	6.7	7.3	7.1	5.4	7.3	6.9	4.9	Avg:	6.5	10
12:00	7.6	7.1	5.2	6.8	7.6	6.4	6.1	6.8	6.9	4.9	Avg:	6.5	10
13:00	7.6	7.5	5.2	6.6	8.0	6.2	6.1	7.0	7.4	5.1	Avg:	6.7	10
14:00	7.6	7.1	5.4	6.7	7.1	5.9	6.0	7.1	7.0	4.8	Avg:	6.5	10
15:00	7.2	7.0	5.1	6.4	6.8	6.1	5.7	7.2	7.3	5.1	Avg:	6.4	10
16:00	6.9	7.1	5.9	7.4	7.9	6.4	6.0	7.5	7.7	5.4	Avg:	6.8	10
17:00	7.6	7.5	5.7	7.2	7.9	6.8	6.4	6.1	6.4	6.7	Avg:	6.8	10
18:00	6.2	6.8	6.2	6.5	6.5	6.4	5.9	6.0	6.3	6.5	Avg:	6.3	10
19:00	6.0	5.7	5.9	6.0	5.9	6.1	5.7	5.6	6.0	6.1	Avg:	5.9	10
20:00	6.0	6.0	6.0	6.1	5.6	6.0	5.9	5.8	5.8	5.6	Avg:	5.9	10
21:00	5.5	5.8	6.0	5.6	5.2	5.1	5.2	5.5	5.5	5.5	Avg:	5.5	10
22:00	5.2	5.4	5.3	5.6	5.8	5.5	5.3	5.0	5.4	5.9	Avg:	5.5	10
23:00	5.4	5.2	5.4	5.5	5.3	5.4	5.8	5.6	5.7	5.2	Avg:	5.5	10

Daily Average: 6.2 Count: 238 Max: 8.0

NOx > 5 < 10 0007 - ~~0430~~ APP. B PART 75  
 SO2, CO2 ~~NOx~~ 0300 - 0345 OTHER

Company: St. Johns Unit 1  
Source : Unit 1 5-9-95

Location:  
Channel : 10opacity Units: %

00:00	5.2	5.7	5.2	5.2	5.7	6.0	5.5	5.4	5.4	5.8	Avg:	5.5 10
01:00	9.9ZC	16.4SC	5.5	5.7	6.1	5.6	5.7	5.8	5.5	5.5	Avg:	5.7 8
02:00	5.1	6.3	5.6	5.6	5.8	5.7	5.6	5.3	5.7	5.5	Avg:	5.6 10
03:00	5.8	5.4	5.4	5.8	5.4	5.4	5.6	5.7	5.7	6.0	Avg:	5.6 10
04:00	6.1	6.0	5.5	5.7	5.8	5.6	5.9	5.8	5.8	5.8	Avg:	5.8 10
05:00	6.0	5.4	5.9	5.7	5.8	6.5	6.1	5.5	6.1	6.1	Avg:	5.9 10
06:00	6.1	6.3	5.6	5.8	5.5	5.5	5.6	5.6	6.5	6.1	Avg:	5.9 10
07:00	5.8	5.6	5.8	5.4	5.9	5.5	5.6	5.7	5.8	6.2	Avg:	5.7 10
08:00	5.8	5.5	5.9	6.0	6.2	5.8	5.7	6.3	5.7	6.2	Avg:	5.9 10
09:00	5.8	5.8	5.9	5.5	5.9	6.5	6.2	6.3	6.0	6.3	Avg:	6.0 10
10:00	5.8	5.8	6.0	5.6	5.5	6.0	5.8	6.8	6.0	6.2	Avg:	6.0 10
11:00	6.0	6.0	6.4	5.8	5.6	6.0	6.0	5.9	6.2	6.2	Avg:	6.0 10
12:00	6.2	5.9	5.9	6.1	5.8	6.1	6.1	6.0	6.1	5.9	Avg:	6.0 10
13:00	6.0	5.9	6.1	6.3	6.3	6.3	6.5	6.3	6.4	6.4	Avg:	6.2 10
14:00	6.2	7.1	6.0	6.1	5.8	6.0	6.2	7.4	6.1	6.1	Avg:	6.3 10
15:00	6.2	6.1	5.9	7.0	6.0	6.1	6.3	5.8	6.0	6.2	Avg:	6.2 10
16:00	5.9	6.2	6.1	6.3	6.7	5.9	6.3	6.2	6.5	5.9	Avg:	6.2 10
17:00	6.5	6.0	6.7	6.3	6.2	6.6	6.9	6.3	5.9	6.2	Avg:	6.4 10
18:00	6.0	6.6	6.3	6.4	6.2	5.8	5.8	6.0	6.3	6.2	Avg:	6.2 10
19:00	6.1	6.1	5.9	5.9	5.8	6.0	6.0	6.3	5.7	6.0	Avg:	6.0 10
20:00	5.9	5.8	5.9	5.7	6.2	5.9	6.0	6.0	6.1	5.7	Avg:	5.9 10
21:00	5.9	5.6	6.1	6.3	6.0	5.7	6.0	6.2	6.0	5.9	Avg:	6.0 10
22:00	6.0	5.5	6.1	6.1	5.9	6.3	6.2	6.2	6.0	5.8	Avg:	6.0 10
23:00	6.1	6.0	5.8	6.1	5.9	6.1	5.9	5.9	6.3	6.5	Avg:	6.1 10

Daily Average: 6.0 Count: 238 Max: 7.4

NOx 5007-<sup>0415</sup>~~0415~~ APP. B - PART 75

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 1Opacity

Units: %

00:00	6.3	5.8	5.7	5.8	5.8	6.2	6.1	6.1	5.8	6.0	Avg:	6.0 10
01:00	14.5IC	11.6SC	6.3	5.8	5.6	5.9	5.4	6.0	5.8	5.9	Avg:	5.9 8
02:00	6.9	6.1	6.0	5.6	6.0	5.8	5.8	5.5	6.1	5.3	Avg:	5.9 10
03:00	6.8	5.7	5.7	5.7	5.4	5.7	5.6	5.5	5.9	5.4	Avg:	5.7 10
04:00	5.7	5.6	5.6	5.6	5.9	5.7	5.7	5.6	5.7	5.7	Avg:	5.7 10
05:00	5.6	6.2	5.6	5.9	6.0	5.9	6.0	5.4	5.3	6.2	Avg:	5.8 10
06:00	5.5	5.5	5.5	5.9	6.1	5.9	5.7	6.1	5.9	5.9	Avg:	5.8 10
07:00	5.8	6.1	6.0	5.8	5.9	5.6	5.7	5.8	5.7	5.8	Avg:	5.8 10
08:00	5.7	5.7	6.3	5.8	6.2	5.8	5.8	5.7	5.8	6.4	Avg:	5.9 10
09:00	5.7	5.7	5.8	5.9	5.5	5.9	5.8	5.8	5.5	5.9	Avg:	5.7 10
10:00	5.7	5.5	6.0	5.8	5.8	6.1	5.9	6.0	6.3	6.7	Avg:	6.0 10
11:00	6.4	6.2	6.3	5.8	6.0	6.1	6.0	6.1	6.3	6.3	Avg:	6.1 10
12:00	6.3	6.7	6.3	5.9	6.2	6.1	5.8	6.1	5.6	6.3	Avg:	6.1 10
13:00	5.9	5.7	6.1	6.2	6.2	6.1	6.0	6.2	6.0	6.8	Avg:	6.1 10
14:00	6.4	6.2	5.9	6.0	5.9	5.9	5.8	5.9	5.8	6.0	Avg:	6.0 10
15:00	5.8	5.8	6.2	6.0	6.5	6.2	6.3	6.4	6.4	6.2	Avg:	6.2 10
16:00	6.2	6.5	6.8	6.7	7.3	6.9	6.5	6.6	6.4	6.4	Avg:	6.6 10
17:00	6.8	6.7	6.5	6.9	6.5	6.7	6.9	6.8	6.7	6.6	Avg:	6.7 10
18:00	6.4	6.5	6.5	6.5	6.4	6.6	6.7	7.0	6.6	6.2	Avg:	6.5 10
19:00	6.5	6.8	6.3	6.5	6.7	6.2	6.3	6.2	7.1	6.4	Avg:	6.5 10
20:00	6.7	6.7	6.6	6.7	6.8	6.7	6.5	6.8	6.5	6.5	Avg:	6.6 10
21:00	7.1	6.7	6.7	6.8	6.2	6.3	6.6	6.7	6.2	6.2	Avg:	6.5 10
22:00	6.6	6.2	6.3	6.6	6.5	6.6	6.1	6.6	5.9	6.2	Avg:	6.4 10
23:00	6.4	5.8	6.1	6.4	6.4	7.7	6.6	6.6	6.6	6.1	Avg:	6.5 10

Daily Average: 6.1 Count: 238 Max:

7.7

SO2 1315-1330 A.E.

NOx 1615-1645 A.E.

SO2, SO2, NOx 1800-1815 A.E.

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 1Opacity

Units: %

00:00	6.4	6.2	6.0	6.7	6.2	6.3	6.5	6.3	6.6	5.9IC	Avg:	6.3	9
01:00	13.2IC	11.1SC	5.8	6.0	6.1	6.1	6.0	5.5	5.4	6.4	Avg:	5.9	8
02:00	5.9	6.8	5.8	6.1	5.8	5.8	6.1	5.3	5.6	5.5	Avg:	5.9	10
03:00	5.6	5.8	6.1	6.0	6.1	5.7	5.7	5.5	5.6	6.1	Avg:	5.8	10
04:00	5.5	5.8	5.8	6.2	6.4	5.7	5.8	5.8	5.9	6.1	Avg:	5.9	10
05:00	5.8	5.9	5.9	5.9	6.2	6.2	5.7	6.3	5.7	5.6	Avg:	5.9	10
06:00	6.4	5.8	6.3	5.8	5.8	5.8	5.9	5.8	6.1	6.1	Avg:	6.0	10
07:00	5.9	5.9	5.9	6.0	5.7	5.8	5.4	5.8	5.6	5.6	Avg:	5.8	10
08:00	6.2	5.8	5.6	6.2	5.5	5.9	5.3	5.4	5.8	5.7	Avg:	5.7	10
09:00	6.2	5.5	5.9	6.2	5.6	5.8	5.9	5.6	5.9	5.7	Avg:	5.8	10
10:00	5.9	5.7	5.3	5.6	5.2	5.6	5.6	5.3	5.7	6.3	Avg:	5.6	10
11:00	6.2	6.5	5.9	6.0	5.8	5.7	6.2	5.9	5.8	6.2	Avg:	6.0	10
12:00	6.1	6.3	5.5	5.8	5.9	6.0	5.8	5.8	5.8	6.2	Avg:	5.9	10
13:00	6.4	6.3	6.6	6.5	6.8	6.3	6.6	6.5	6.0	6.3	Avg:	6.4	10
14:00	6.4	6.0	6.3	6.0	6.3	5.9	6.2	6.5	6.0	6.3	Avg:	6.2	10
15:00	5.9	5.9	6.3	6.0	6.0	6.1	6.1	6.1	6.1	6.2	Avg:	6.1	10
16:00	5.9	6.2	6.0	6.1	6.0	6.4	6.1	6.3	6.2	6.2	Avg:	6.1	10
17:00	5.9	6.4	6.3	6.5	6.6	6.3	6.7	6.6	6.4	6.2	Avg:	6.4	10
18:00	6.2	6.2	6.3	6.5	6.5	6.5	6.5	6.4	6.1	6.4	Avg:	6.4	10
19:00	6.2	6.2	6.2	6.0	6.3	6.0	6.0	6.6	6.5	6.3	Avg:	6.2	10
20:00	6.4	6.1	6.3	5.9	6.1	6.2	6.1	6.2	6.0	6.1	Avg:	6.1	10
21:00	6.1	6.3	6.1	5.9	5.9	6.2	5.9	6.5	5.7	6.4	Avg:	6.1	10
22:00	5.8	5.7	6.3	5.8	5.7	6.0	5.7	5.6	5.7	5.5	Avg:	5.8	10
23:00	6.1	5.8	5.9	6.0	5.8	5.9	6.0	5.8	5.9	6.0	Avg:	5.9	10

Daily Average: 6.0 Count: 237 Max:

6.8

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 10capacity

Units: %

00:00	5.6	5.8	6.1	5.9	6.0	6.2	5.8	5.9	6.1	11.6IC	Avg:	5.9	9
01:00	13.2IC	12.2SC	6.6	7.0	6.2	6.1	6.2	5.9	6.2	6.3	Avg:	6.3	8
02:00	6.0	6.3	5.9	6.1	6.1	5.9	6.5	5.8	6.2	6.3	Avg:	6.1	10
03:00	5.8	6.6	5.7	6.4	6.3	5.7	6.0	5.7	5.3	5.9	Avg:	5.9	10
04:00	5.6	6.1	6.3	5.8	5.9	5.8	5.8	5.1	5.4	5.8	Avg:	5.8	10
05:00	5.5	6.0	5.8	5.6	6.0	5.3	5.8	5.4	5.4	5.9	Avg:	5.7	10
06:00	5.7	5.8	6.1	5.7	6.2	5.7	6.0	5.6	5.5	5.8	Avg:	5.8	10
07:00	5.7	5.5	5.6	6.1	5.9	5.4	5.8	6.0	5.6	5.8	Avg:	5.7	10
08:00	6.1	5.6	6.1	5.4	5.5	5.9	5.2	6.1	5.5	5.6	Avg:	5.7	10
09:00	5.9	5.6	6.9	6.1	5.5	6.0	5.5	5.6	5.8	5.3	Avg:	5.8	10
10:00	5.4	5.4	5.6	5.5	5.2	5.9	5.5	5.8	5.8	5.5	Avg:	5.6	10
11:00	7.7	5.5	5.7	5.7	5.8	5.9	5.7	5.8	5.9	5.6	Avg:	5.9	10
12:00	6.5	5.8	5.5	6.1	5.4	5.6	5.7	5.8	5.6	5.8	Avg:	5.8	10
13:00	5.8	6.0	5.5	5.7	5.6	5.9	6.4	5.9	6.8	6.9	Avg:	6.1	10
14:00	5.8	6.1	6.0	6.0	6.1	6.1	6.9	6.4	6.1	6.4	Avg:	6.2	10
15:00	6.4	6.2	6.1	6.3	6.5	6.4	6.4	6.5	6.1	6.3	Avg:	6.3	10
16:00	6.4	6.5	6.4	6.3	6.4	6.3	6.4	6.4	6.0	6.4	Avg:	6.3	10
17:00	6.1	6.1	6.6	6.1	6.3	6.4	6.7	7.1	6.3	6.4	Avg:	6.4	10
18:00	6.3	6.2	6.1	6.0	6.0	6.3	6.1	6.3	6.0	5.7	Avg:	6.1	10
19:00	6.2	5.8	6.1	6.0	6.1	6.4	6.5	6.0	6.4	6.3	Avg:	6.2	10
20:00	6.3	6.1	5.7	6.1	5.8	6.1	6.1	5.5	5.7	6.0	Avg:	6.0	10
21:00	6.3	6.2	6.0	6.2	6.1	6.0	6.7	6.4	6.1	6.6	Avg:	6.3	10
22:00	6.2	6.0	5.9	6.6	6.4	6.1	5.8	5.4	5.6	5.9	Avg:	6.0	10
23:00	5.8	5.8	5.7	5.8	6.3	5.7	6.1	6.0	5.9	6.0	Avg:	5.9	10

Daily Average: 6.0 Count: 237 Max:

7.7

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 1Opacity

Units: %

00:00	5.7	6.0	5.9	5.5	5.9	6.0	5.5	6.3	5.3	11.1IC	Avg:	5.8	9
01:00	11.8IC	10.9SC	6.1	5.9	6.3	6.8	5.8	6.6	6.6	6.1	Avg:	6.3	8
02:00	5.5	6.0	6.5	5.8	5.7	6.1	5.6	5.8	5.5	5.8	Avg:	5.8	10
03:00	6.0	5.7	5.7	6.5	6.0	6.1	5.9	6.3	6.1	6.0	Avg:	6.0	10
04:00	5.8	5.7	5.7	5.7	5.8	5.9	5.6	5.7	5.6	5.3	Avg:	5.7	10
05:00	5.7	5.5	5.3	5.8	5.5	5.6	6.3	5.9	6.1	6.0	Avg:	5.8	10
06:00	5.9	5.6	5.3	5.7	6.2	5.6	5.5	5.4	5.3	5.7	Avg:	5.6	10
07:00	6.0	5.7	6.0	6.8	6.4	6.4	6.3	6.2	6.4	6.2	Avg:	6.2	10
08:00	6.0	6.1	6.2	6.8	6.4	5.9	5.8	6.3	6.1	6.0	Avg:	6.2	10
09:00	5.9	6.0	5.9	6.1	6.3	6.0	6.2	6.0	6.3	6.0	Avg:	6.1	10
10:00	6.2	5.9	5.9	6.0	5.8	5.7	6.2	5.7	5.7	6.0	Avg:	5.9	10
11:00	5.9	6.4	5.9	5.6	5.7	6.1	6.3	5.7	6.0	6.3	Avg:	6.0	10
12:00	5.9	6.2	6.0	5.9	6.2	6.1	5.8	5.8	5.8	6.1	Avg:	6.0	10
13:00	5.9	6.7	6.0	6.1	6.6	6.0	6.3	7.1	6.4	7.7	Avg:	6.5	10
14:00	7.0	6.6	6.7	6.4	6.4	7.0	6.6	6.6	6.8	6.6	Avg:	6.7	10
15:00	7.0	6.6	7.1	6.8	6.8	6.7	6.6	6.9	6.6	6.7	Avg:	6.8	10
16:00	7.5	7.1	7.1	7.3	6.8	6.7	7.5	7.0	6.8	6.9	Avg:	7.1	10
17:00	6.9	6.8	6.8	7.1	6.5	7.0	7.3	6.5	7.0	6.6	Avg:	6.9	10
18:00	6.9	6.7	6.7	6.8	6.6	6.9	6.9	6.7	6.8	7.0	Avg:	6.8	10
19:00	7.0	6.8	6.5	6.6	6.9	6.3	6.7	6.9	6.9	6.8	Avg:	6.7	10
20:00	6.5	6.7	6.5	6.5	6.4	6.6	6.3	6.8	6.4	6.5	Avg:	6.5	10
21:00	6.7	6.3	6.6	6.0	6.5	6.3	6.3	6.5	6.3	6.5	Avg:	6.4	10
22:00	6.4	6.2	6.6	6.3	6.3	6.2	6.3	5.9	6.1	6.5	Avg:	6.3	10
23:00	6.2	5.7	5.9	5.8	6.2	6.7	6.2	5.7	6.8	6.3	Avg:	6.1	10

Daily Average: 6.3 Count: 237 Max:

7.7

NOx 6067-2400 ~~XXXXXXXXXX~~ Capp.F.-P.c  
>1090

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 10pacity

Units: %

00:00	6.7	6.5	5.5	5.6	5.8	5.5	6.4	6.3	6.1	11.6IC	Avg:	6.1	9
01:00	11.7IC	11.5SC	5.8	6.7	5.9	6.2	6.4	6.2	6.1	7.6	Avg:	6.4	8
02:00	6.3	7.2	5.9	5.9	6.5	5.8	6.3	6.0	6.1	6.6	Avg:	6.2	10
03:00	5.7	6.2	6.6	5.9	6.6	6.2	7.0	6.8	6.2	6.5	Avg:	6.4	10
04:00	6.1	5.8	6.2	6.3	6.6	5.8	5.5	6.1	5.9	6.0	Avg:	6.0	10
05:00	6.2	5.4	5.9	5.7	5.8	5.8	5.8	6.3	6.5	5.9	Avg:	5.9	10
06:00	5.9	5.8	6.1	5.3	5.8	6.2	6.0	5.9	6.2	6.4	Avg:	6.0	10
07:00	6.5	5.8	6.3	6.1	6.0	6.7	6.0	6.6	6.4	6.2	Avg:	6.3	10
08:00	5.6	6.1	5.8	6.0	5.8	6.4	6.2	5.7	5.9	5.5	Avg:	5.9	10
09:00	6.6	5.8	5.7	6.2	5.6	6.3	6.3	5.9	6.2	6.0	Avg:	6.1	10
10:00	5.7	6.0	6.0	6.2	5.9	5.9	6.3	6.0	6.2	6.0	Avg:	6.0	10
11:00	5.7	6.2	5.7	5.9	6.6	6.2	6.4	6.3	6.7	6.1	Avg:	6.2	10
12:00	6.1	5.9	6.2	6.0	6.3	6.2	6.4	6.0	5.9	6.0	Avg:	6.1	10
13:00	5.9	6.2	6.3	6.3	6.7	6.2	6.7	6.3	6.0	6.7	Avg:	6.3	10
14:00	6.3	6.3	6.2	6.0	6.0	7.5	7.1	6.3	6.3	6.6	Avg:	6.4	10
15:00	6.3	6.5	6.3	6.5	6.7	6.7	6.7	6.3	6.3	6.5	Avg:	6.5	10
16:00	5.8	8.5	7.4	7.4	8.2	7.4	7.9	7.5	7.6	8.5	Avg:	7.6	10
17:00	7.6	7.5	7.9	7.8	8.2	8.3	8.5	8.1	7.4	8.0	Avg:	7.9	10
18:00	7.7	7.8	7.6	8.4	7.8	7.0	7.5	7.5	6.7	7.7	Avg:	7.6	10
19:00	7.2	7.5	7.5	7.5	7.7	7.2	7.8	7.5	7.0	7.6	Avg:	7.4	10
20:00	6.7	7.6	7.2	7.0	7.7	7.1	7.5	7.4	6.7	7.8	Avg:	7.3	10
21:00	6.9	6.8	7.9	6.8	7.2	6.7	7.1	7.5	6.6	7.6	Avg:	7.1	10
22:00	6.2	6.3	7.3	6.3	6.4	6.3	6.3	7.2	6.3	6.9	Avg:	6.6	10
23:00	6.1	5.8	6.9	5.7	6.3	6.0	6.0	6.9	5.8	7.2	Avg:	6.3	10

Daily Average: 6.5 Count: 237 Max: 8.5

NOx 9967-0215 APP.B - APP.F



Company: St. Johns Unit 1

Location:

Source : ~~Unit 1~~

Channel : 10opacity

Units: %

00:00	6.5	6.3	7.2	6.2	7.0	6.6	6.5	6.8	6.3	11.8IC	Avg:	6.6	9
01:00	11.6IC	6.6	7.7	6.1	6.8	6.8	6.8	7.1	7.0	6.5	Avg:	6.8	9
02:00	6.8	6.3	7.0	6.5	6.7	6.6	6.9	6.6	6.0	6.2	Avg:	6.5	10
03:00	7.1	6.4	7.0	6.3	7.0	7.7	6.5	7.1	6.6	7.2	Avg:	6.9	10
04:00	7.4	6.8	7.1	6.4	6.6	7.1	6.1	6.9	6.4	6.1	Avg:	6.7	10
05:00	7.6	7.1	6.9	6.7	6.2	7.1	6.6	7.5	6.4	6.6	Avg:	6.9	10
06:00	7.6	6.7	7.1	6.8	6.5	7.5	6.5	6.7	6.6	6.5	Avg:	6.9	10
07:00	7.2	6.3	6.9	7.2	6.5	7.8	6.1	7.2	6.6	7.1	Avg:	6.9	10
08:00	7.2	6.0	7.2	7.6	6.4	7.3	6.4	7.7	6.6	6.1	Avg:	6.8	10
09:00	6.0	5.8	5.7	5.8	4.8	7.2	6.6	5.9	5.9	6.3	Avg:	6.0	10
10:00	6.0	5.7	5.6	6.2	5.8	5.8	5.6	6.0	5.6	5.7	Avg:	5.8	10
11:00	5.5	5.9	5.7	5.7	5.6	5.7	5.5	5.4	5.2	5.3	Avg:	5.5	10
12:00	5.2	5.4	5.2	5.6	6.1	5.6	5.0	5.6	5.6	5.1	Avg:	5.4	10
13:00	5.5	5.2	5.1	5.6	5.2	5.4	5.8	5.2	5.4	5.3	Avg:	5.4	10
14:00	5.1	5.4	5.5	5.9	6.0	6.1	5.9	5.7	6.3	6.2	Avg:	5.8	10
15:00	5.8	5.9	6.0	6.1	5.5	5.3	6.1	5.6	5.5	5.4	Avg:	5.7	10
16:00	5.6	6.1	5.7	5.5	5.6	5.4	5.4	5.5	5.2	5.5	Avg:	5.5	10
17:00	5.5	5.3	5.7	5.5	5.5	5.3	5.3	5.9	5.6	5.9	Avg:	5.5	10
18:00	5.8	5.6	5.8	5.5	5.4	5.9	5.3	5.6	5.7	6.0	Avg:	5.6	10
19:00	7.2	5.5	5.8	6.3	5.3	5.5	5.7	5.4	5.8	5.4	Avg:	5.8	10
20:00	5.9	7.3	6.2	7.0	5.2	5.7	5.5	5.1	5.5	5.2	Avg:	5.9	10
21:00	5.5	5.5	5.5	5.2	5.0	5.1	5.0	5.1	5.0	5.1	Avg:	5.2	10
22:00	5.0	5.3	5.5	5.2	5.5	5.4	4.8	4.9	4.8	5.0	Avg:	5.1	10
23:00	5.2	4.7	4.9	4.4	4.4	5.3	5.1	5.1	5.1	4.7	Avg:	4.9	10

Daily Average: 6.0 Count: 238 Max: 7.8

NOx > 5 LIC - APP. 8 (PRETS) 0007-0215  
 11 5945-1000 U.E.  
 SO2, CO2, NOx 1330-1430 U.E.

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 10capacity

Units: %

00:00	6.2	5.3	4.7	4.8	4.4	4.8	4.8	4.8	5.1	10.1	Avg: 5.0	9
01:00	14.3	4.9	4.7	4.7	4.7	5.0	4.8	4.6	4.8	4.8	Avg: 4.8	9
02:00	5.2	5.3	4.5	4.9	4.8	4.7	4.7	4.8	4.8	4.8	Avg: 4.9	10
03:00	5.5	5.3	5.9	4.8	5.0	4.8	5.2	5.4	5.0	4.8	Avg: 5.2	10
04:00	5.2	4.7	4.9	4.5	5.4	4.7	4.4	4.9	4.5	4.6	Avg: 4.8	10
05:00	5.3	4.5	5.0	4.5	4.5	4.8	5.0	5.1	4.7	4.7	Avg: 4.8	10
06:00	5.2	4.5	4.8	4.4	4.6	4.9	4.3	4.8	4.8	4.8	Avg: 4.7	10
07:00	5.2	4.3	4.6	5.1	4.6	5.3	5.7	5.7	5.7	6.1	Avg: 5.2	10
08:00	5.7	5.5	5.1	5.4	4.8	5.5	5.4	5.5	5.6	5.8	Avg: 5.4	10
09:00	5.5	5.1	5.1	6.2	5.5	5.6	5.6	5.4	5.8	5.9	Avg: 5.6	10
10:00	5.3	5.8	5.4	5.5	5.3	5.3	5.5	5.4	5.4	5.9	Avg: 5.5	10
11:00	5.3	5.9	5.1	5.5	5.2	5.2	5.5	5.3	6.0	6.1	Avg: 5.5	10
12:00	5.4	5.5	5.3	5.4	5.4	5.0	5.5	5.2	5.5	5.7	Avg: 5.4	10
13:00	5.2	5.5	5.3	5.2	5.5	5.5	5.7	5.3	5.8	6.2	Avg: 5.5	10
14:00	6.0	5.6	5.8	5.8	6.1	5.9	5.5	5.6	5.5	6.2	Avg: 5.8	10
15:00	5.8	6.0	6.3	5.6	5.9	5.8	6.2	6.2	6.2	6.2	Avg: 6.0	10
16:00	6.2	6.1	6.3	6.4	6.4	6.2	6.2	6.3	6.1	6.3	Avg: 6.3	10
17:00	6.4	6.4	6.2	6.4	6.2	6.6	6.8	6.5	6.6	6.2	Avg: 6.4	10
18:00	6.8	6.6	6.1	6.6	5.9	6.0	6.2	6.1	6.3	6.2	Avg: 6.3	10
19:00	6.3	6.2	6.1	6.2	6.1	6.4	6.3	6.1	6.5	6.3	Avg: 6.3	10
20:00	6.0	6.1	5.7	5.8	5.7	5.8	6.3	6.1	6.3	6.0	Avg: 6.0	10
21:00	6.8	5.9	5.9	6.2	6.1	6.3	6.1	6.0	6.6	6.7	Avg: 6.3	10
22:00	6.2	6.3	5.8	6.0	6.3	5.9	5.9	5.8	6.0	6.0	Avg: 6.0	10
23:00	6.4	6.3	5.8	6.1	5.5	6.2	6.0	6.0	6.2	6.5	Avg: 6.1	10

Daily Average: 5.6 Count: 238 Max: 6.8

SO<sub>2</sub>, CO<sub>2</sub>, max 1245-1360 u2.  
1445-1515 u2.

Company: St. Johns Unit 1

Location:

Source : Unit 1

Channel : 10capacity

Units: %

00:00	5.8	6.0	5.7	5.6	5.8	6.0	6.0	5.6	6.1	11.9IC	Avg:	5.8	9
01:00	8.9IC	6.8	6.0	5.7	6.0	6.4	7.1	6.1	8.3	7.2	Avg:	6.6	9
02:00	6.1	6.3	6.1	6.0	5.7	5.8	5.5	6.1	5.9	6.4	Avg:	6.0	10
03:00	5.6	5.7	5.6	5.4	6.0	5.6	5.4	6.2	5.4	6.1	Avg:	5.7	10
04:00	5.3	5.4	5.2	5.0	5.0	5.2	5.1	4.9	6.1	5.3	Avg:	5.2	10
05:00	5.0	5.5	5.8	6.2	6.0	6.3	5.6	6.2	6.5	5.6	Avg:	5.9	10
06:00	5.9	5.8	5.7	5.8	5.3	5.9	5.5	5.5	6.1	5.3	Avg:	5.7	10
07:00	5.4	5.3	5.7	5.4	4.6	10.2	5.5	9.5	9.2	6.8	Avg:	6.8	10
08:00	7.6	8.4	8.2	5.3	8.8	8.1	5.2	8.0	8.7	6.2	Avg:	7.4	10
09:00	6.6	7.9	8.2	5.1	7.9	8.1	5.4	8.4	8.6	6.1	Avg:	7.2	10
10:00	6.2	7.6	7.3	5.0	6.9	7.3	5.0	7.0	7.0	5.5	Avg:	6.5	10
11:00	5.8	6.9	6.2	5.3	6.8	7.1	4.8	6.8	6.8	5.2	Avg:	6.2	10
12:00	6.8	5.7	5.7	5.5	5.5	5.7	6.1	5.9	5.6	5.5	Avg:	5.8	10
13:00	5.4	6.0	5.5	5.6	5.7	5.5	5.4	5.7	5.5	6.0	Avg:	5.6	10
14:00	5.8	5.5	5.9	5.6	5.7	6.0	6.0	6.4	5.8	5.8	Avg:	5.8	10
15:00	6.0	6.0	6.4	5.7	6.0	6.6	6.1	6.5	6.1	6.0	Avg:	6.1	10
16:00	6.3	6.2	6.6	6.7	6.2	6.5	6.4	6.5	6.4	6.1	Avg:	6.4	10
17:00	6.6	6.5	6.3	6.6	6.6	7.0	7.1	6.6	6.8	6.5	Avg:	6.7	10
18:00	6.7	6.9	6.5	6.9	6.6	6.7	7.1	6.7	7.2	6.9	Avg:	6.8	10
19:00	6.9	7.3	6.7	6.7	6.8	6.8	7.5	6.5	6.9	7.0	Avg:	6.9	10
20:00	6.6	6.9	6.6	6.6	7.0	6.6	7.1	6.5	6.6	6.4	Avg:	6.7	10
21:00	6.3	6.4	6.7	6.8	6.4	6.4	6.9	6.8	6.8	6.6	Avg:	6.6	10
22:00	6.3	6.2	6.8	5.9	6.6	6.3	6.8	6.9	6.3	6.1	Avg:	6.4	10
23:00	6.0	6.0	6.9	5.7	6.1	6.6	6.9	5.9	6.6	6.6	Avg:	6.3	10

Daily Average: 6.3 Count: 238 Max: 10.2

NOX 0007-0215 APP. B - 75 > 5  
1545-1600 U.E.

Company: St. Johns Unit 1  
Source : Unit 1

Location:  
Channel : 10capacity Units: %

5-13-75

00:00	5.9	6.0	6.1	5.7	5.6	6.1	5.6	5.7	6.0	15.4IC	Avg:	5.9	9
01:00	13.3IC	5.5	5.5	5.9	5.9	5.7	5.3	5.3	5.8	5.2	Avg:	5.6	9
02:00	5.4	6.3	5.8	6.1	5.5	6.0	5.6	5.4	5.3	5.5	Avg:	5.7	10
03:00	5.3	5.3	5.3	6.1	5.7	6.5	5.8	5.8	6.5	5.6	Avg:	5.8	10
04:00	5.9	5.8	5.4	5.4	5.7	6.1	5.8	5.8	5.4	5.5	Avg:	5.7	10
05:00	5.6	6.0	5.3	5.8	6.3	6.2	5.9	5.5	6.2	6.2	Avg:	5.9	10
06:00	5.7	5.6	5.5	5.6	5.9	6.0	6.3	5.6	5.9	5.5	Avg:	5.8	10
07:00	5.8	6.2	5.9	5.5	6.3	7.0	6.3	5.8	6.1	5.6	Avg:	6.0	10
08:00	5.0	5.5	6.0	5.7	6.3	5.8	5.7	5.4	5.5	5.2	Avg:	5.6	10
09:00	5.3	5.4	5.3	5.3	5.6	5.5	5.5	5.6	5.2	5.9	Avg:	5.5	10
10:00	5.9	5.5	5.4	5.5	5.7	5.4	5.7	5.7	5.3	5.5	Avg:	5.5	10
11:00	5.4	5.5	5.7	5.6	5.5	5.7	6.1	5.8	5.6	5.6	Avg:	5.7	10
12:00	5.7	5.3	5.5	5.8	5.4	5.6	5.7	5.7	5.7	5.4	Avg:	5.6	10
13:00	5.2	5.6	5.7	5.5	5.6	5.7	6.3	6.4	5.6	6.0	Avg:	5.7	10
14:00	6.1	5.7	5.8	5.7	6.1	5.8	5.7	6.2	5.9	6.1	Avg:	5.9	10
15:00	6.1	5.9	6.1	6.0	5.9	6.0	6.1	6.8	6.1	5.9	Avg:	6.1	10
16:00	6.4	6.0	6.3	6.2	6.3	6.5	6.5	6.3	6.4	6.2	Avg:	6.3	10
17:00	6.5	6.2	6.8	6.9	6.6	6.9	6.7	6.6	6.7	6.3	Avg:	6.6	10
18:00	6.7	6.5	6.4	6.4	6.4	6.9	6.8	6.6	6.4	6.1	Avg:	6.5	10
19:00	6.7	6.3	6.1	6.4	6.3	6.5	6.6	6.5	6.6	6.5	Avg:	6.5	10
20:00	6.2	6.2	6.4	6.6	6.2	6.4	6.1	6.0	6.5	6.2	Avg:	6.3	10
21:00	6.5	6.3	6.2	6.7	6.3	6.6	6.2	5.8	6.3	5.9	Avg:	6.3	10
22:00	5.8	5.7	5.8	6.3	5.5	5.8	5.5	5.8	5.7	5.8	Avg:	5.8	10
23:00	5.5	5.9	5.3	5.7	6.5	5.9	6.6	5.6	6.1	6.8	Avg:	6.0	10

Daily Average: 5.9 Count: 238 Max: 7.0

NGx 0800-0900 u.e.  
SO2, CO2 max 0915-1000 u.e.

Company: St. Johns Unit 1

Source : Unit 1 5-4-15

Location:

Channel : 10capacity

Units: %

00:00	6.2	6.2	5.7	6.3	6.1	5.9	6.1	5.7	5.7	13.0IC	Avg:	6.0	9
01:00	8.9IC	5.9	5.9	6.7	6.0	6.9	6.2	6.0	6.7	6.8	Avg:	6.3	9
02:00	6.0	5.6	6.1	5.8	6.6	5.9	6.2	6.6	6.0	6.3	Avg:	6.1	10
03:00	6.2	5.8	6.6	6.3	6.5	6.5	6.3	6.5	7.3	5.9	Avg:	6.4	10
04:00	6.3	6.0	6.1	6.8	7.6	6.9	6.2	6.0	6.5	5.9	Avg:	6.4	10
05:00	6.4	6.3	5.7	6.9	6.7	6.4	7.3	5.8	6.6	6.4	Avg:	6.5	10
06:00	5.8	6.8	5.7	7.0	6.8	6.3	6.4	7.1	6.6	6.7	Avg:	6.5	10
07:00	5.8	6.4	6.3	6.8	6.8	6.1	6.5	7.1	6.5	6.8	Avg:	6.5	10
08:00	7.3	6.8	7.0	6.4	6.5	6.5	6.3	6.5	6.7	6.5	Avg:	6.7	10
09:00	7.1	7.7	7.4	6.6	6.8	6.5	6.5	6.5	6.6	6.1	Avg:	6.8	10
10:00	6.1	6.3	6.8	6.3	6.3	6.1	6.0	6.0	5.8	5.9	Avg:	6.2	10
11:00	6.3	7.1	6.1	6.2	5.6	6.5	6.3	6.5	6.2	6.1	Avg:	6.3	10
12:00	6.0	6.0	6.0	5.8	5.6	5.6	5.8	5.9	6.3	5.9	Avg:	5.9	10
13:00	5.9	5.7	6.1	5.9	5.6	5.9	6.3	5.9	6.2	6.2	Avg:	6.0	10
14:00	6.3	7.1	6.3	5.8	5.8	5.9	5.8	5.6	5.7	5.9	Avg:	6.0	10
15:00	6.3	6.7	6.2	5.8	6.3	6.1	5.9	6.2	6.5	6.3	Avg:	6.2	10
16:00	6.0	6.3	6.1	6.2	6.1	6.3	5.6	5.7	5.8	5.6	Avg:	6.0	10
17:00	5.7	6.3	5.9	5.8	5.6	5.9	6.2	7.6	7.4	6.3	Avg:	6.3	10
18:00	6.1	6.0	5.6	5.4	5.6	5.6	5.0	6.0	5.9	5.7	Avg:	5.7	10
19:00	6.4	9.0	5.8	6.1	5.5	6.3	5.6	5.9	5.8	5.4	Avg:	6.2	10
20:00	7.2	5.4	5.1	5.1	4.8	5.3	4.7	5.1	4.9	4.7	Avg:	5.2	10
21:00	6.0	5.0	5.1	5.2	4.9	5.0	5.2	4.9	5.3	5.1	Avg:	5.2	10
22:00	5.8	5.0	4.6	5.1	5.2	4.9	5.1	4.8	4.9	5.1	Avg:	5.1	10
23:00	5.5	5.1	4.9	5.3	5.4	5.5	6.3	5.7	5.6	5.5	Avg:	5.5	10

Daily Average: 6.1 Count: 238 Max: 9.0

## **ATTACHMENT E-2**

**RELATIVE ACCURACY  
TEST REPORT  
FOR  
KVB  
AT  
S.J.R.P.P.  
UNIT 1**

November 17-19 & 21, 1994

94-489-FL



**TOTAL SOURCE ANALYSIS, INC.**

# St. John's River Power Park

## Unit 1 Outlet

### RELATIVE ACCURACY - NOx lb/mmBtu

### RATA TABLE 1

ANALYZER TYPE	NOx
MODEL NUMBER	42
MANUFACTURER	TECO
SERIAL NUMBER	42-49353-282
MEASUREMENT SPAN	1000 PPM
Fc FACTOR	1800
BOILER LOAD	650 MW

RUN USED	RUN NUMBER	RM NOx ppm	RM CO2 %	RM NOx lb/mmBtu	DATE	TIME	CEMS NOx ppm	CEMS CO2 %	CEMS NOx lb/mmBtu	DIFFERENCE lb/mmBtu
N	1	279.9	12.2	0.49	17-Nov-94	08:30-09:00	290.3	12.62	0.49	0.00
Y	2	277.9	11.9	0.50	17-Nov-94	09:20-09:50	282.9	12.27	0.50	0.00
Y	3	281.5	12.0	0.50	17-Nov-94	10:10-10:40	293.6	12.72	0.50	0.00
Y	4	289.3	12.1	0.51	17-Nov-94	11:10-11:40	298.4	12.76	0.50	0.01
Y	5	289.7	12.4	0.50	17-Nov-94	12:05-12:35	297.2	12.77	0.50	0.00
Y	6	286.2	11.9	0.52	17-Nov-94	13:25-13:55	298.3	12.74	0.50	0.02
Y	7	287.8	12.1	0.51	17-Nov-94	14:10-14:40	296.2	12.72	0.50	0.01
Y	8	283.8	12.2	0.50	17-Nov-94	15:05-15:35	302.6	12.71	0.51	-0.01
Y	9	300.7	12.4	0.52	17-Nov-94	16:05-16:35	304.9	12.72	0.52	0.00
Y	10	296.1	12.3	0.52	17-Nov-94	16:55-17:25	303.2	12.76	0.51	0.01
N	11	302.1	12.4	0.52	17-Nov-94	17:40-18:10	301.3	12.73	0.51	0.01
N	12	293.5	12.2	0.52	17-Nov-94	18:30-19:00	299.3	12.73	0.51	0.01

AVERAGE CEM VALUE	0.504
AVERAGE RM VALUE	0.509
MEAN DIFFERENCE	0.004
NUMBER OF RUNS	9
STANDARD DEVIATION	0.009
T - VALUE	2.306
CONFIDENCE COEFFICIENT	0.007
RELATIVE ACCURACY, %	2.16

Conversion Factor = 1.194 E-07

BIAS TEST	PASS
BIAS ADJUSTMENT FACTOR	1.000
NEXT TEST	ANNUAL



# St. John's River Power Park

## Unit 1 Outlet

### RELATIVE ACCURACY CO2 ANALYZER

### RATA TABLE 2

ANALYZER TYPE  
 MODEL NUMBER  
 MANUFACTURER  
 SERIAL NUMBER  
 MEASUREMENT SPAN  
 BOILER LOAD

CO2	
41H	
TECO	
41H-49357-282	
20	%
650	MW

RUN USED	RUN NUMBER	RM DATA %	DATE	TIME	CEMS DATA %	DIFFERENCE % CO2
Y	1	12.2	17-Nov-94	08:30-09:00	12.6	-0.4
Y	2	11.9	17-Nov-94	09:20-09:50	12.3	-0.4
Y	3	12.0	17-Nov-94	10:10-10:40	12.7	-0.7
N	4	12.1	17-Nov-94	11:10-11:40	12.8	-0.7
Y	5	12.4	17-Nov-94	12:05-12:35	12.8	-0.4
N	6	11.9	17-Nov-94	13:25-13:55	12.7	-0.8
N	7	12.1	17-Nov-94	14:10-14:40	12.7	-0.6
Y	8	12.2	17-Nov-94	15:05-15:35	12.7	-0.5
Y	9	12.4	17-Nov-94	16:05-16:35	12.7	-0.3
Y	10	12.3	17-Nov-94	16:55-17:25	12.8	-0.5
Y	11	12.4	17-Nov-94	17:40-18:10	12.7	-0.3
Y	12	12.2	17-Nov-94	18:30-19:00	12.7	-0.5

AVERAGE CEM VALUE  
 AVERAGE RM VALUE  
 MEAN DIFFERENCE  
 NUMBER OF RUNS  
 STANDARD DEVIATION  
 T - VALUE  
 CONFIDENCE COEFFICIENT  
 RELATIVE ACCURACY, %

12.67
12.22
-0.44
9
0.12
2.306
0.09
4.34

# St. John's River Power Park

## Unit 1 Outlet

### RELATIVE ACCURACY SO2 ANALYZER

### RATA TABLE 3

ANALYZER TYPE	SO2
MODEL NUMBER	434
MANUFACTURER	TECO
SERIAL NUMBER	43B-49122-282
MEASUREMENT SPAN	3500 PPM
BOILER LOAD	650 MW

RUN USED	RUN NUMBER	RM DATA ppm	DATE	TIME	CEMS DATA ppm	DIFFERENCE ppm
Y	1	141.5	17-Nov-94	08:30-09:00	142.0	-0.5
Y	2	136.7	17-Nov-94	09:20-09:50	139.0	-2.3
Y	3	140.0	17-Nov-94	10:10-10:40	144.0	-4.0
N	4	163.3	17-Nov-94	11:10-11:40	142.0	21.3
Y	5	140.7	17-Nov-94	12:05-12:35	150.0	-9.3
Y	6	130.7	17-Nov-94	13:25-13:55	140.0	-9.3
Y	7	142.9	17-Nov-94	14:10-14:40	142.0	0.9
Y	8	92.0	17-Nov-94	15:05-15:35	94.0	-2.0
N	9	169.2	17-Nov-94	16:05-16:35	147.0	22.2
Y	10	166.4	17-Nov-94	16:55-17:25	150.0	16.4
N	11	166.9	17-Nov-94	17:40-18:10	149.0	17.9
Y	12	163.8	17-Nov-94	18:30-19:00	150.0	13.8

AVERAGE CEM VALUE  
 AVERAGE RM VALUE  
 MEAN DIFFERENCE  
 NUMBER OF RUNS  
 STANDARD DEVIATION  
 T - VALUE  
 CONFIDENCE COEFFICIENT  
 RELATIVE ACCURACY, %

139.00
139.41
0.41
9
9.06
2.306
6.96
5.29

BIAS TEST  
 BIAS ADJUSTMENT FACTOR  
 NEXT TEST

PASS
1.000
ANNUAL

# St. John's River Power Park

## Unit 1 Outlet

### RELATIVE ACCURACY FLOW LOW LOAD

ANALYZER TYPE	FLOW
MODEL NUMBER	Ultraflow100
MANUFACTURER	USI
SERIAL NUMBER	R-08771U-0194
MEASUREMENT SPAN	144000000 scfh
BOILER LOAD	307 MW

### RATA TABLE 4

RUN USED	RUN NUMBER	RM DATA scfh	DATE	TIME	CEMS DATA scfh	DIFFERENCE scfh
Y	1	56594400	18-Nov-94	22:00-22:25	60270000	-3675600
Y	2	56820800	18-Nov-94	22:30-22:55	59766000	-2945200
N	3	56538200	18-Nov-94	23:00-23:25	60846000	-4307800
Y	4	57604000	18-Nov-94	23:30-23:55	60474000	-2870000
N	5	56676900	19-Nov-94	00:00-00:25	61140000	-4463100
Y	6	56896200	19-Nov-94	00:30-00:55	60114000	-3217800
Y	7	56930300	19-Nov-94	01:00-01:25	60264000	-3333700
Y	8	56423000	19-Nov-94	01:30-01:55	60492000	-4069000
Y	9	56467800	19-Nov-94	02:00-02:25	60576000	-4108200
Y	10	56633000	19-Nov-94	02:30-02:55	60156000	-3523000
Y	11	56740100	19-Nov-94	03:00-03:25	60090000	-3349900
N						

AVERAGE CEM VALUE	60255750
AVERAGE RM VALUE	56809575
MEAN DIFFERENCE	-3446175
NUMBER OF RUNS	9
STANDARD DEVIATION	468409
T - VALUE	2.306
CONFIDENCE COEFFICIENT	360050
RELATIVE ACCURACY, %	6.70
BIAS TEST	PASS
BIAS ADJUSTMENT FACTOR	1.000
NEXT TEST	ANNUAL

# St. John's River Power Park

## Unit 1 Outlet

### RELATIVE ACCURACY MID FLOW

ANALYZER TYPE	FLOW
MODEL NUMBER	Ultraflow100
MANUFACTURER	USI
SERIAL NUMBER	R-08771U-0194
MEASUREMENT SPAN	144000000 scfh
BOILER LOAD	450 MW

### RATA TABLE 5

RUN USED	RUN NUMBER	RM DATA scfh	DATE	TIME	CEMS DATA scfh	DIFFERENCE scfh
Y	1	72549000	19-Nov-94	05:00-05:25	76992000	-4443000
Y	2	72741000	19-Nov-94	05:30-05:55	77328000	-4587000
Y	3	72860100	19-Nov-94	06:00-06:25	77592000	-4731900
Y	4	72718600	19-Nov-94	06:30-06:55	77370000	-4651400
N	5	72188600	19-Nov-94	07:00-07:25	77436000	-5247400
Y	6	73290900	19-Nov-94	07:30-07:55	77922000	-4631100
Y	7	72769300	19-Nov-94	08:00-08:25	77202000	-4432700
Y	8	72696600	19-Nov-94	08:30-08:55	77634000	-4937400
Y	9	72631700	19-Nov-94	09:00-09:25	77226000	-4594300
Y	10	72646800	19-Nov-94	09:30-10:00	77016000	-4369200
N						
N						

AVERAGE CEM VALUE	77364667
AVERAGE RM VALUE	72767111
MEAN DIFFERENCE	-4597556
NUMBER OF RUNS	9
STANDARD DEVIATION	173530
T - VALUE	2.306
CONFIDENCE COEFFICIENT	133387
RELATIVE ACCURACY, %	6.50
BIAS TEST	PASS
BIAS ADJUSTMENT FACTOR	1.000
NEXT TEST	ANNUAL

# St. John's River Power Park

## Unit 1 Outlet

### RELATIVE ACCURACY HIGH LOAD FLOW

ANALYZER TYPE	FLOW
MODEL NUMBER	Ultraflow 100
MANUFACTURER	USI
SERIAL NUMBER	R-08771U-0194
MEASUREMENT SPAN	144000000 scfh
BOILER LOAD	650 MW

### RATA TABLE 6

RUN USED	RUN NUMBER	RM DATA scfh	DATE	TIME	CEMS DATA scfh	DIFFERENCE scfh
Y	1	90767400	17-Nov-94	08:30-09:00	95928000	-5160600
Y	2	90740100	17-Nov-94	09:20-09:50	96048000	-5307900
Y	3	91426700	17-Nov-94	10:10-10:40	95712000	-4285300
N	4	90410800	17-Nov-94	11:10-11:40	96402000	-5991200
Y	5	91297900	17-Nov-94	12:05-12:35	96144000	-4846100
N	6	106028300	17-Nov-94	13:25-13:55	96144000	9884300
Y	7	92663000	17-Nov-94	14:10-14:40	96486000	-3823000
Y	8	93143000	17-Nov-94	15:05-15:35	97848000	-4705000
Y	9	92152700	17-Nov-94	16:05-16:35	97482000	-5329300
Y	10	92531600	17-Nov-94	16:55-17:25	97920000	-5388400
Y	11	92229000	17-Nov-94	17:40-18:10	97452000	-5223000
N	12	92414600	17-Nov-94	18:30-19:00	98460000	-6045400

AVERAGE CEM VALUE	96780000
AVERAGE RM VALUE	91883489
MEAN DIFFERENCE	-4896511
NUMBER OF RUNS	9
STANDARD DEVIATION	540840
T - VALUE	2.306
CONFIDENCE COEFFICIENT	415726
RELATIVE ACCURACY, %	5.78
BIAS TEST	PASS
BIAS ADJUSTMENT FACTOR	1.000
NEXT TEST	ANNUAL

# CGA Results

CGA/Linearity Set Name: CO2SR06/95

	Low	Mid	High
Avg Ref Val:	4.900	11.120	17.040
Avg Mon Val:	4.990	11.340	17.247
Results:	1.837	1.978	1.213
APS Flag:	0	0	0
#OOC Hrs:	0		

Exit

# CGA / Linearity Test Data Entry

Calibrations on: loutCO2\_C 120 -123 Monitor/Component ID

Analyzer Range: 20.000

## CGA Set Members

06/07/95 06:18

06/07/95 09:17

06/07/95 12:17

CGA Set Name: CO2sk06/95

Legend:

CGA In Net

CGA Type Cal

Non CGA Cal

Date/Time	Low	Mid	High
-----------	-----	-----	------

06/07/95 06:18	4.99	11.35	17.21
----------------	------	-------	-------

06/07/95 09:17	4.99	11.33	17.25
----------------	------	-------	-------

06/07/95 12:17	4.99	11.34	17.22
----------------	------	-------	-------

06/08/95 00:07	0.01	-99.99	17.15
----------------	------	--------	-------

06/09/95 00:07	0.01	-99.99	17.15
----------------	------	--------	-------

06/10/95 00:07	0.01	-99.99	17.17
----------------	------	--------	-------

06/11/95 00:07	0.01	-99.99	17.17
----------------	------	--------	-------

06/12/95 00:07	0.01	-99.99	17.19
----------------	------	--------	-------

Exit

Delete

Tester

View  
Results

Save

# CGA Results

CGA/Linearity Set Name: NOXsk06/95

	Low	Mid	High
Avg Ref Val:	252.000	554.000	858.000
Avg Mon Val:	258.500	555.100	849.567
Results:	2.579	0.199	0.983
APS Flag:	0	0	0
#OOC Hrs:	0		

Exit



# CGA / Linearity Test Data Entry

Calibrations on: loutNOX\_C 130 -133 Monitor/Component ID

Analyzer Range: 1000.000

CGA Set Name: NOXsk06/95

### CGA Set Members

- 06/07/95 06:18
- 06/07/95 09:17
- 06/07/95 12:17

Legend:

- Cal in Set
- CGA Type Cal
- Non CGA Cal

Date/Time	Low	Mid	High
06/07/95 06:18	282.80	556.20	850.20
06/07/95 09:17	285.10	555.90	851.40
06/07/95 12:17	287.80	553.20	847.10
06/08/95 00:07	0.20	-999.90	849.90
06/09/95 00:07	0.20	-999.90	858.00
06/10/95 00:07	0.20	-999.90	864.40
06/11/95 00:07	0.20	-999.90	859.50
06/12/95 00:07	0.20	-999.90	691.20

Exit

Delete

Tester

View Results

Save

# CGA Results

CGA/Linearity Set Name: **SO21006/95**

	Low	Mid	High
Avg Ref Val:	75.000	164.200	257.000
Avg Mon Val:	77.167	168.367	262.433
Results:	2.889	2.538	2.114
APS Flag:	0	0	0
#OOC Hrs:	0		

Exit

# CGA / Linearity Test Data Entry

Calibrations on: loutSO2L\_C 140 - 143 Monitor/Component ID

Analyzer Range: 300.000

## CGA Set Members

06/07/95 06:18
06/07/95 09:17
06/07/95 12:17

CGA Set Name: SO2Lo06/95

Legend:

CGA Set
CGA Type Cal
Non CGA Cal

Date/Time	Low	Mid	High
06/07/95 06:18	76.40	167.90	261.40
06/07/95 09:17	77.30	168.30	262.90
06/07/95 12:17	77.80	169.30	263.00
06/08/95 00:07	1.20	-999.90	251.60
06/09/95 00:07	0.00	-999.90	249.30
06/10/95 00:07	0.00	-999.90	250.00
06/11/95 00:07	0.00	-999.90	249.40
06/12/95 00:07	-0.10	-999.90	248.00

Exit

Delete

Tester

View Results

Save

## CGA Results

CGA/Linearity Set Name: S02h106/95

	Low	Mid	High
Avg Ref Val:	862.000	1939.000	2964.000
Avg Mon Val:	868.000	1913.000	2873.667
Results:	0.696	1.341	3.048
APS Flag:	0	0	0
#OOC Hrs:	0		

Exit

# CGA / Linearity Test Data Entry

Calibrations on: 1outSO2H\_C 140-143 Monitor/Component ID

Analyzer Range: 3500.000

## CGA Set Members

06/07/95 06:18

06/07/95 09:17

06/07/95 12:17

CGA Set Name: SO2hi06/95

Legend:

Cal in Set  
CGA Type Cal  
Non CGA Cal

Date/Time Low Mid High

06/07/95 06:18	887.00	1915.00	2874.00
06/07/95 09:17	889.00	1910.00	2873.00
06/07/95 12:17	888.00	1914.00	2874.00
06/08/95 00:07	0.00	-9999.00	2982.00
06/09/95 00:07	0.00	-9999.00	2981.00
06/10/95 00:07	0.00	-9999.00	2990.00
06/11/95 00:07	0.00	-9999.00	2978.00
06/12/95 00:07	0.00	-9999.00	2972.00

Exit

Delete

Tester

View  
Results

Save

# ATTACHMENT E-3

**SJRPP UNIT 1**  
**TEST BURN**  
**PETROLEUM COKE/BITUMINOUS COAL**  
**AIR EMISSIONS TEST**

**A) STACK TEST - BASELINE RESULTS**

DATE	(3 RUN AVE.) PARTICULATE (lbs/MBN)	(3 RUN AVG.) SO <sub>3</sub> (ppm)	(3 RUN AVG.) CO (ppm)
7/18/95	0.007	6.96	10.29
7/19/95	0.003	5.19	45.16
7/20/95	0.0096	5.55	67.00
8/8/95	0.009	7.04	21.15

**B) STACK TEST - BLEND RESULTS**

DATE	(3 RUN AVG.) PARTICULATE (lbs/MBN)	(3 RUN AVG.) SO <sub>3</sub> (ppm)	(3 RUN AVG.) CO (ppm)
8/11/95	-----	7.54	312.96
8/12/95	-----	9.21	497.58
8/13/95	-----	14.03	745.64
8/14/95	0.011	-----	-----
8/15/95	0.006	-----	-----
8/16/95	0.004	-----	-----
8/17/95	0.009	-----	-----
8/18/95	-----	11.37	467.90
8/19/95	0.003	-----	-----

**ATTACHMENT F**

DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

**OCT 0 6 1995**

**SITING COORDINATION**



**CERTIFIED MAIL**



SJRO LC 95 094

June 14, 1995

Mr. Steve Pace  
RESO  
421 W. Church St.  
Jacksonville, FL 32202

RE: Site Certification No. PA 81-13  
St. Johns River Power Park (SJRPP) Unit I  
Authorization of Test Burn Using Petroleum Coke with Coal  
Request for Approval - Pollutants & Testing Methodology

Dear Mr. Pace:

The above referenced facility was authorized by your agency's March 30, 1995, letter to test burn a blend of petroleum coke with coal (Attachment A). Condition #20 requires "Prior written approval of the pollutants to be tested for and the appropriate test methods are mandatory prior to commencement of testing. The proposal shall be submitted to the Site Certification Office, the Department's BAR office and the Duval County's RESO office for approval."

Pursuant to Condition #7, stack tests shall be conducted for the pollutants particulate matter, carbon monoxide and sulfuric acid mist. The following are the EPA Reference methodologies which are contained in 40 CFR 60 that shall be conducted:

- 1) Particulate matter - EPA Method 5B
- 2) Carbon Monoxide - EPA Method 10
- 3) Sulfuric Acid Mist - EPA Method 8

Conditions #3 and #4 specifies that as-burned fuel samples shall be collected and analyzed for sulfur, nitrogen and metals. The baseline coal and pet coke/coal blend shall be sampled from the sampling building loading belt transfer to the Unit 1 to analyze the parameters in accordance with the following methods:

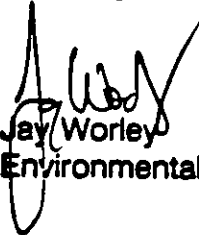
**SJRO LC 95 092**  
**Page 2**

- |    |           |                        |
|----|-----------|------------------------|
| 1) | Sulfur    | ASTM D 4239 Method "C" |
| 2) | Nitrogen  | ASTM D 5373            |
| 3) | Chromium  | ASTM D 3683            |
| 4) | Lead      | ASTM D 3683            |
| 5) | Mercury   | ASTM D 3684            |
| 6) | Nickel    | ASTM D 3683            |
| 7) | Beryllium | ASTM D 3683            |
| 8) | Vanadium  | ASTM D 3683            |
| 9) | Zinc      | ASTM D 3683            |

The testing is scheduled to commence July 11, 1995 for the baseline. Your expeditious review and response are appreciated.

Please contact me at (904) 751-7729 if you have any questions.

Sincerely,



Jay Worley  
Environmental & Safety Manager

JAW/pct

cc: R. Breitmoser

**REGULATORY & ENVIRONMENTAL  
SERVICES DEPARTMENT**  
Air Quality Division

June 22, 1995



Mr. Jay Worley  
Environmental & Safety Manager  
St. Johns River Power Park (SJRPP)  
11201 New Berlin Road  
Jacksonville, Florida 32226

**RE: Request for Approval - Pollutants & Testing Methodology  
Unit #1 Test Burn Using Petroleum Coke with Coal  
Site Certification No. PA 81-13  
SJRPP Correspondence of June 14, 1995**

Dear Mr. Worley:

This is to acknowledge receipt and review of the above captioned SJRPP correspondence, submitted June 15, 1995.

Regulatory & Environmental Services Department (RES D) agrees that the use of EPA Reference Test Methods 5B, 10, and 8 for the testing of particulate matter, carbon monoxide, and sulfuric acid mist, respectively, during the above referenced test burn, satisfies Condition No. 20 of the Site Certification.

If there are any questions concerning this matter, please contact me at (904) 630-3484.

Very truly yours,

Robert S. Pace, P.E.  
Division Chief

RSP/WLW/be

c: AQD File 1710 B  
Wayne Walker, AQD



421 West Church Street - Suite 412  
Jacksonville, Florida 32202-4111

Area Code 904/630-3484

# ATTACHMENT G

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 7-18-95

UNIT #: 1

TIME	INITIALS	2494 HEAT INPUT (MMBTU/HR)	STEAM 64 PRODUCTION (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TON/HR)							
					344 A	404 B	464 C	524 D	584 E	644 F	704 G	
0000												
0100												
0200												
0300												
0400												
0500												
0600	E.A.	4132	3.52	511	36.5	34	35.5	9.5	36.5	34	36	88.
0700	E.A.	4952	4.40	640	47	44	44	9.5	46	43.5	45	86.4
0800	E.A.	5131	4.57	657	46.5	44.5	44	9.5	45.5	40	44.5	88.
0900	E.A.	5152	4.56	658	46	44.5	44	9.5	44.5	40	45.5	86.
1000	E.A.	5161	4.58	658	46	44	44	9.5	45.5	40	45	86.
1100	E.A.	5152	4.56	658	45.5	42	43	9.5	45	40	44	86.
1200	E.A.	5146	4.57	659	46	43	44	9.5	45.5	40	45	86.
1300	E.A.	5119	4.58	659	46.5	45	43.5	9.5	44	38.5	44	88.
1400	E.A.	5176	4.57	658	46	44	43.5	9.5	44.5	38.5	45	88.
1500	E.A.	5078	4.36	632	43.5	41.5	41.5	9.5	41	30	40.5	88.
1600	E.A.	5042	4.37	636	40.5	39	38.5	38.5	39.5	9.5	39.5	79.9
1700	E.A.	5172	4.59	660	43	42.5	42	42.5	42.5	9.5	42.5	87.9
1800	MAT	5155	4.58	656	43	42.5	43	43.5	43.5	9.5	43	88.1
1900	MAT	5165	4.56	659	44	42.5	42.5	43.5	43.5	9.5	43	85.7
2000	MAT	5125	4.52	657	44	42.5	42.5	43.5	43.5	9.5	43	88.5
2100	MAT	5161	4.56	658	44	42	42.5	43	43	9.5	42.5	88.3
2200	MAT	4999	4.32	629	42.5	40	41	41.5	42.5	9.5	42.5	88.
2300	MAT	4989	4.35	630	45.5	43	43	43	44	9.5	44	88.

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 7/19/95

UNIT #: 1

TIME	INITIALS	2494 HEAT INPUT (MMBTU/HR)	STEAM 64 PRODUCTION (MMLBS/HR)	Gross MW/HR	344	404	464	524	584	644	704	
					A	B	C	D	E	F	G	
0000	mtt	4961	4.34	629	42	39.5	41	41.5	43	%s	42.5	38.1
0100	mtt	5227	4.53	658	47.5	45	45	45.5	45.5	%s	45	38.3
0200	mtt	5121	4.53	654	44	41.5	42.5	43	44	%s	44	39.0
0300	mtt	5176	4.51	654	46	43	43.5	37.5	44	%s	43.5	38.5
0400	mtt	5106	4.50	653	45	42.5	43.5	40.5	45	%s	45.5	38.5
0500	mtt	5162	4.55	657	44.5	41	41.5	41	42.5	%s	42	38.0
0600	✓	5147	4.56	659	45	42	42.5	43	44	%s	43.5	38.0
0700	✓	5142	4.55	657	44.5	42	42.5	43	44	%s	43	38.0
0800	✓	5188	4.55	658	44	41	42	43	43.5	%s	44	38.0
0900	✓	5181	4.53	657	46	43	43.5	44	44	%s	45	38.1
1000	✓	5146	4.59	659	44.5	41.5	43	44	44.5	%s	43.5	38.0
1100	✓	5206	4.57	659	45	41.5	42.5	42.5	44.5	%s	43	38.0
1200	✓	5325	4.71	675	46	42.5	43.5	43.5	45	%s	44	38.0
1300	✓	5394	4.71	676	46	43	44	44	45	%s	44.5	38.0
1400	✓	5317	4.68	673	44.5	41.5	42.5	42.5	44	%s	43	38.0
1500	✓	5293	4.74	674	42.5	40	41	41	41.5	%s	42	38.1
1600	✓	5267	4.67	667	44.5	42.5	43.5	43.5	44.5	%s	44	38.0
1700	✓	5248	4.70	677	45	42.5	43.5	44	44.5	%s	44	38.0
1800	Escp	5275	4.70	673	45	42.5	43.5	43.5	44	%s	44.5	38.0
1900	Escp	5267	4.70	674	45	42	43	43	44	%s	43.5	38.0
2000	Escp	5285	4.70	674	45.5	43	43.5	43.5	45	%s	44.5	38.0
2100	Escp	5308	4.68	675	45	42.5	43.5	44	44.5	%s	44	38.0
2200	Escp	5287	4.70	673	45.5	42.5	43	43.5	44.5	%s	44	38.0
2300	Escp	5279	4.71	675	45	43	43.5	43.5	44.5	%s	44.5	38.0



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATION - I. DATA - POWER BLOCK A**

DATE: 8-8-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PR.DUCTION (MMBLS/HR)	GROSS MW	FUEL INPUT RATE - COMBINATION (K#/hr)						
								A	B	C	D	E	F	
0000														
0100														
0200														
0300														
0400														
0500														
0600														
0700	JB	5841	88.6	1002	2390	4.58	660	85	80	80	85	82	77	95
0800	JB	5830	88.5	1002	2398	4.57	660	84	79	80	85	82	78	-
0900	JB	5849	88.5	1002	2395	4.58	660	80	73	75	85	76	72	-
1000	JB	5983	88.6	1205	2402	4.68	677	86	80	81	85	85	80	-
1100	JB	5956	88.6	1002	2394	4.69	674	87	81	82	85	85	81	-
1200	JB	5971	88.6	997	2395	4.70	670	86	79	82	85	85	80	-
1300	Ry	5947	88.6	998	2394	4.70	669	84	78	79	85	82	78	-
1400	Ry	5934	88.5	999	2394	4.69	667	84	78	80	85	82	78	-
1500	JB	5958	88.5	1002	2397	4.70	670	84	77	79	85	80	77	-
1600	Ry	5999	88.4	1001	2396	4.71	669	85	79	80	86	84	78	-
1700	JB	5950	88.5	1000	2394	4.70	669	85	79	81	85	83	78	-
1800	OK	5955	88.5	1001	2403	4.72	671	86	80	81	85	84	79	-
1900	OK	5892	88.5	1000	2400	4.60	658	86	81	82	85	84	81	-
2000	OK	5867	88.5	1002	2405	4.57	656	87	81	83	86	85	80	-
2100	OK	5849	88.6	1003	2399	4.61	659	84	78	80	84	79	77	-
2200	OK	5863	88.5	1006	2414	4.59	660	83	76	79	86	81	76	-
2300	OK	5757	88.6	998	2398	4.52	644	79	74	76	85	79	75	-

DEB Value



## ST. JOHNS RIVER POWER PARK

PETROLEUM CORE/COAL TRIAL BURN

BASELINE &amp; BLEND OPERATIONAL DATA - POWER BLOCK

DATE: 8-10-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTUHR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (PSIG)	STEAM PRODUCTION (MMMB/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) (K#/HR)							
								A	B	C	D	E	F	G	H
0000	EA	5827	88.8	996	2410	4.60	653	—	78	80	81	83	79	83	
0100	EA	5790	88.8	1002	2400	4.60	658	—	82	83	84	85	80	85	
0200	EA	5792	88.8	997	2408	4.60	658	—	81	82	83	85	80	85	
0300	EA	5790	88.8	1000	2405	4.60	656	—	80	81	83	83	79	82	
0400	EA	5087	88.5	996	2391	3.69	550	—	65	68	68	69	67	69	
0500	EA	5364	88.7	1001	2402	4.18	613	—	76	77	77	79	75	80	
0600	JB	5850	88.6	1010	2412	4.57	655	—	77	80	80	80	77	82	
0700	Ryz	5849	88.7	1001	2383	4.58	658	—	79	81	82	83	78	83	
0800	Ryz	5831	88.9	1001	2398	4.59	659	—	81	82	82	84	80	84	
0900	JB	5882	88.9	1005	2412	4.55	660	—	80	82	82	83	79	83	
1000	JB	5622	88.8	996	2379	4.40	639	—	81	82	84	84	81	81	
1100	Ryz	5809	88.6	992	2409	4.63	659	74	67	70	70	73	68	72	
1200	JB	5813	88.7	1006	2401	4.61	659	77	71	73	73	76	50	76	
1300	Ryz	5848	88.7	1004	2404	4.59	658	75	69	71	71	73	68	72	
1400	Ryz	5871	88.8	1007	2400	4.62	658	84	79	—	81	83	78	82	
1500	JB	5839	88.8	997	2414	4.59	658	84	78	—	79	81	76	80	
1600		Busy -	Problems with unit & Pulv swaps.												
1700	JB	6063	88.6	1004	2406	4.71	672	—	83	84	84	86	85	85	
1800	DB	6001	88.7	1005	2401	4.70	670	—	81	84	83	86	82	85	
1900	DB	6003	88.8	994	2385	4.69	668	—	78	82	80	85	79	84	
2000	DB	5979	88.9	993	2382	4.68	665	—	77	82	81	85	78	83	
2100	DB	6089	88.8	1001	2425	4.74	679	—	79	82	81	85	79	84	
2200	DB	5852	88.9	1011	2368	4.64	664	—	85	89	89	95	86	92	
2300	DB	5898	88.7	1005	2397	4.61	658	—	79	83	83	86	80	85	

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8-11-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBtu/hr)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (PSIG)	STEAM PRODUCTION (MMBtu/hr)	GROSS MW	FUEL INPUT RATE (TONS/HR)						
								A	B	C	D	E	F	G
0000	DB	5756	89	1000	2401	4.60	659	0/5	74	76	77	81	76	80
0100	DB	5865	88.9	1001	2409	4.58	653	0/5	78	83	81	85	80	85
0200	DB	5705	88.9	997	2397	4.50	642	0/5	75	77	76	80	74	77
0300	DB	5745	88.9	1008	2402	4.52	655	0/5	77	82	81	85	79	84
0400	DB	5784	88.8	1007	2413	4.53	652	0/5	78	83	82	86	81	85
0500	DB	5813	88.9	1004	2407	4.58	658	0/5	79	83	81	85	80	84
0600	mTT	5794	89	1007	2387	4.57	659	0/5	80	83	83	85	80	84
0700	mTT	5801	89	1004	2388	4.58	659	0/5	80	81	82	84	80	84
0800	mTT	5821	88.9	996	2385	4.61	658	0/5	79	80	83	83	79	83
0900	mTT	5787	89	1000	2384	4.59	659	0/5	79	80	81	82	78	83
1000	mTT	5803	89	1003	2381	4.59	659	0/5	80	80	81	83	79	83
1100	mTT	5955	88.8	1010	2384	4.65	669	0/5	81	83	84	86	81	86
1200	mTT	5934	88.8	1008	2383	4.68	673	0/5	81	83	82	86	81	85
1300	mTT	6019	88.7	987	2391	4.76	670	7/3	50	73	73	74	70	74
1400	mTT	5919	88.7	998	2384	4.71	669	77	71	73	50	75	71	74
1500	mTT	5993	88.8	997	2372	4.69	665	0/5	74	76	76	78	74	77
1600	mTT	5928	89	1000	2380	4.70	670	0/5	80	81	81	83	79	84
1700	mTT	5931	88.9	1003	2389	4.70	672	0/5	80	81	82	84	80	84
1800	DS	5925	89.0	1002	2383	4.70	670	0/5	80	82	81	84	79	83
1900	DS	5897	89.0	1002	2386	4.69	668	0/5	80	82	82	84	79	84
2000	DS	5893	89.0	1002	2391	4.68	669	0/5	81	82	82	84	80	84
2100	DS	5937	88.9	1003	2390	4.71	669	0/5	80	83	82	84	81	84
2200	DS	5934	89.1	1011	2382	4.68	669	0/5	81	82	82	84	80	85
2300	DS	5916	93.9	1001	2385	4.68	667	0/5	80	83	83	84	79	83

VW0

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM CORE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8.12.95 UNIT #: ONE

TIME	INITIALS	HEAT INPUT (MMBtu/hr)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMBtu/hr)	GROSS MW	FUEL INPUT RATE (TONS/hr)						
								A	B	C	D	E	F	G
0000	DS	5914	88.9	1005	2381	4.68	670	0/5	81	82	82	83	79	84
0100	DS	5942	89.2	1001	2392	4.72	668	0/5	81	82	83	84	79	84
0200	DS	5889	88.8	1005	2381	4.65	657	0/5	79	81	82	83	78	82
0300	DS	5789	88.9	1001	2389	4.55	650	0/5	79	81	81	83	78	82
0400	DS	5633	89.0	999	2401	4.43	635	0/5	75	77	78	80	75	79
0500	DS	5264	94.0	995	2381	4.09	595	0/5	75	77	77	79	74	78
0600	EAP	5445	89.1 EAP	999	2394	4.18	612	0/5	72	75	75	76	72	76
0700	EAP	5611	89.0	992	2378	4.35	632	0/5	73	76	76	78	73	77
0800	EAP	5699	89.0	1005	2376	4.51	650	0/5	78	81	80	82	78	80
0900	EAP	5100	89.1	997	2378	4.61	659	0/5	80	81	82	81	79	83
1000	EAP	5794	89.1	1007	2391	4.56	657	0/5	75	78	80	80	76	79
1100	EAP	5777	89.1	1000	2381	4.61	657	0/5	79	82	82	81	79	83
1200	EAP	5771	89.0	1000	2373	4.57	654	0/5	76	80	79	81	76	80
1300	EAP	5857	89.0	1005	2378	4.59	660	0/5	80	82	80	81	77	80
1400	EAP	5810	88.9	1000	2385	4.63	658	0/5	74	77	77	79	79	81
1500	EAP	5877	88.9	1003	2380	4.61	656	0/5	79	80	82	83	79	83
1600	EAP	5922	88.9	1002	2392	4.61	658	0/5	79	81	81	83	79	82
1700	EAP	5809	89.0	999	2387	4.60	657	0/5	79	81	81	81	78	83
1800	DB	5806	89	1000	2393	4.55	659	0/5	77	81	80	84	77	82
1900	DB	5777	89.1	1004	2402	4.60	657	0/5	78	82	81	85	80	84
2000	DB	5804	89.1	1002	2398	4.59	657	0/5	77	81	81	84	77	83
2100	DB	5832	89.0	993	2401	4.62	657	0/5	77	81	79	82	77	80
2200	DB	5780	89.0	997	2395	4.51	654	0/5	78	81	80	84	78	81
2300	DB	5790	88.9	998	2391	4.46	648	0/5	81	85	84	88	82	85

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8-13-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (PSIG)	STEAM PRODUCTION (MMBtu/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR)							
								A	B	C	D	E	F	G	
0000	DB	5746	89.1	999	2381	4.55	654	0/5	85	85	85	87	83	85	
0100	DB	5699	89.0	993	2396	4.50	654	0/5	81	81	85	88	77	80	
0200	DB	5391	88.9	1002	2396	4.45	632	0/5	81	80	85	85	80	85	
0300	DB	5791	89.0	1004	2403	4.50	650	0/5	83	82	86	88	80	85	
0400	DB	5730	88.9	998	2411	4.47	643	0/5	79	82	81	85	80	84	
0500	DB	5601	88.8	1009	2417	4.35	630	0/5	75	78	76	80	75	78	
0600	mtt	5571	88.9	999	2386	4.35	635	0/5	75	76	77	78	72	77	
0700	mtt	5441	89.0	1000	2385	4.20	619	0/5	74	75	76	77	73	77	
0800	mtt	5774	88.8	997	2400	4.60	659	0/5	81	82	82	84	80	84	
0900	mtt	5786	88.9	999	2383	4.58	659	0/5	77	80	79	81	76	81	
1000	mtt	5835	88.9	1001	2387	4.60	661	0/5	79	81	83	83	79	83	
1100	mtt	5802	89.0	999	2386	4.60	661	0/5	80	82	83	83	80	83	
1200	mtt	5854	88.9	1004	2391	4.61	661	0/5	79	81	82	83	79	84	
1300	mtt	5902	88.9	1005	2397	4.65	676	0/5	81	82	83	85	81	84	
1400	mtt	5722	88.8	1003	2383	4.70	674	0/5	80	82	82	84	80	84	
1500	mtt	5944	88.8	1001	2378	4.69	671	0/5	80	82	82	84	80	84	
1600	mtt	5930	88.9	1003	2389	4.71	672	0/5	80	82	82	84	80	85	
1700	mtt	5943	89.1	1003	2387	4.71	669	0/5	80	82	82	83	80	85	
1800	DS	5912	89.1	1001	2389	4.69	672	0/5	79	81	81	83	79	83	
1900	DS	5934	89.1	997	2393	4.70	671	0/5	79	82	82	84	79	83	
2000	DS	5910	88.9	1000	2393	4.68	671	0/5	81	82	83	85	81	85	
2100	DS	5930	89.0	998	2390	4.69	674	0/5	82	83	83	84	80	84	
2200	DS	5908	88.9	995	2397	4.71	670	0/5	79	80	81	83	79	82	
2300	DS	5915	88.9	1003	2387	4.67	671	0/5	79	81	80	83	79	84	

IWO  
VWO  
VWO  
VWO

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8-14-95 UNIT #: ONE

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MM. LB/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR)						
								A	B	C	D	E	F	G
0000	DS	5829	88.9	997	2403	4.59	658	0/5	80	82	82	84	80	84
0100	DS	5879	88.9	994	2391	4.64	658	0/5	80	82	81	83	79	83
0200	DS	5885	88.8	1002	2391	4.63	659	0/5	79	82	82	84	80	83
0300	DS	5844	88.9	997	2404	4.61	639	0/5	77	76	77	77	75	79
0400	DS	5906	88.8	1001	2389	4.67	658	0/5	79	81	81	79	78	82
0500	DS	5838	88.7	1001	2385	4.59	658	0/5	79	82	82	82	79	84
0600	DS	5828	88.9	1000	2400	4.59	657	0/5	79	82	82	81	73	84
0700	DS	5801	88.4	987	2400	4.63	655	0/5	77	80	81	80	74	79
0800	DS	5931	88.9	997	2405	4.62	657	0/5	78	80	81	81	73	84
0900	DS	5814	89.0	1007	2401	4.60	658	0/5	80	81	82	81	79	83
1000	DS	5961	88.7	1005	2390	4.63	667	0/5	83	84	85	84	83	80
1100	DS	5951	89.1	1001	2399	4.70	669	0/5	80	83	83	82	79	85
1200	DS	5923	89.1	1000	2393	4.70	667	0/5	81	83	83	81	80	85
1300	DS	5915	89.1	1005	2411	4.72	671	0/5	80	82	83	83	81	84
1400	DS	5955	89.1	1000	2398	4.71	665	0/5	81	82	82	82	80	83
1500	DS	5953	89.0	1001	2404	4.72	668	0/5	80	82	82	84	82	84
1600	DS	5957	89.0	996	2396	4.72	665	0/5	80	81	81	81	80	83
1700	DS	5959	89.0	998	2401	4.71	667	0/5	80	81	82	81	80	83
1800	EAP	5962	89.9	1000	2386	4.72	671	0/5	80	82	82	82	79	84
1900	EAP	5934	89.0	997	2387	4.71	670	0/5	80	82	82	82	79	83
2000	EAP	5950	89.0	997	2393	4.72	670	0/5	81	81	81	81	79	83
2100	EAP	5970	89.0	1007	2372	4.66	667	0/5	82	84	84	84	81	86
2200	EAP	5974	89.0	1004	2390	4.71	672	0/5	78	80	80	80	76	82
2300	EAP	5877	88.9	1001	2372	4.66	668	0/5	79	81	81	81	78	82

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8-15-95 UNIT #: ONE

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (PSIG)	STEAM PRODUCTION (MMLB/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR)						
								A	B	C	D	E	F	G
0000	EGAP	5680	89.1	1012	2381	4.39	640	9/3	77	79	80	80	77	83
0100	EGAP	5814	88.9	1002	2393	4.63	659	0/3	80	81	82	82	79	84
0200	EGAP	5864	89.0	1003	2391	4.60	657	0/3	78	80	80	79	77	81
0300	EGAP	5818	89.1	997	2389	4.61	657	0/3	78	80	80	80	78	82
0400	EGAP	5791	88.9	987	2399	4.57	648	0/3	77	79	78	78	75	79
0500	EGAP	5833	89.0	1013	2374	4.52	658	0/3	80	81	81	81	78	82
0600	EA	5841	88.8	1006	2408	4.57	658	0/3	78	79	80	80	78	81
0700	EA	5815	88.9	988	2401	4.60	659	0/3	79	81	80	81	77	83
0800	EA	5676	88.7	1000	2426	4.38	635	0/3	69	72	72	72	70	75
0900	EA	5904	88.6	998	2392	4.69	662	0/3	78	80	80	80	78	82
1000	EA	6025	88.7	995	2404	4.74	672	9/5	83	82	83	82	80	83
1100	EA	5983	88.7	1002	2399	4.70	667	0/3	80	82	83	81	81	82
1200	EA	5975	88.7	994	2401	4.72	667	0/3	79	83	82	82	80	84
1300	EA	5947	88.5	1008	2406	4.70	670	9/5	81	82	83	82	81	85
1400	EA	5990	88.3	998	2411	4.73	669	0/3	81	82	82	83	80	84
1500	EA	5970	88.3	999	2400	4.70	667	0/3	79	81	82	81	79	83
1600	EA	5938	88.8	1000	2412	4.73	670	0/3	79	83	84	82	81	84
1700	EA	5935	88.5	1002	2393	4.68	667	0/3	81	82	83	82	80	84
1800	MTT	6006	88.5	992	2401	4.75	672	0/3	77	79	79	79	77	82
1900	MTT	6005	88.4	998	2399	4.75	677	0/3	82	84	84	83	82	85
2000	MTT	5991	88.4	997	2391	4.71	671	0/3	81	82	84	82	80	83
2100	MTT	6012	88.6	1000	2389	4.71	673	0/3	81	83	83	81	80	84
2200	MTT	5975	88.8	1000	2393	4.73	675	0/3	80	81	81	81	79	83
2300	MTT	5898	89.0	1002	2405	4.60	660	0/3	78	79	80	79	78	81

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8/16/95 UNIT #: ONE

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (PSI)	STEAM PRODUCTION (MMLB/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR)						
								A	B	C	D	E	F	G
0000	mtt	5814	88.9	1003	2382	4.58	658	%	78	80	80	80	77	83
0100	mtt	5815	88.9	1001	2385	4.57	661	%	78	80	80	81	78	81
0200	mtt	5848	88.8	1001	2393	4.57	651	%	74	76	77	77	75	79
0300	mtt	5825	88.8	986	2393	4.62	660	%	79	81	81	83	79	83
0400	mtt	5867	88.7	995	2388	4.62	661	%	79	81	81	83	79	83
0500	mtt	5812	88.8	999	2388	4.57	654	%	75	78	78	80	76	80
0600	✓	5721	88.8	1000	2399	4.52	650	%	78	79	80	82	78	82
0700	✓	5800	88.9	1008	2400	4.58	660	%	77	78	78	81	76	81
0800	✓	BD	BD	1007	2399	4.29	621	%	75	77	78	81	76	81
0900	✓	5924	88.7	1004	2389	4.68	668	%	79	82	80	83	78	83
1000	✓	5959	88.7	1002	2395	4.70	671	%	80	82	82	84	79	84
1100	✓	5990	88.7	1005	2411	4.72	673	%	80	83	82	84	80	84
1200	✓	5956	88.6	1000	2407	4.73	671	%	82	82	83	85	80	85
1300	✓	5970	88.6	1008	2392	4.67	669	%	82	85	84	87	83	86
1400	✓	6037	88.7	987	2399	4.74	665	%	79	80	80	83	78	81
1500	✓	6007	88.6	1006	2381	4.66	660	%	82	84	85	87	82	87
1600	mtt	5174	83.5	970	2371	4.75	668	%	77	81	81	83	77	83
1700	mtt	6040	88.6	980	2373	4.75	663	%	77	82	80	82	77	81
1800	Scp	5999	88.9	1001	2413	4.75	677	%	70	83	83	85	80	85
1900	Scp	5950	89.1	992	2380	4.72	664	%	79	80	82	81	78	82
2000	Scp	5971	89.1	995	2389	4.72	671	%	80	81	81	83	79	83
2100	Scp	5922	89.1	999	2386	4.70	672	%	81	83	83	84	79	85
2200	Scp	5929	89.1	999	2371	4.72	673	%	81	82	82	83	79	84
2300	Scp	5829	89.3	1005	2393	4.59	658	%	79	80	80	82	77	83

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8-17-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBtu/hr)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMBtu/hr)	GROSS MW	FUEL INPUT RATE (TONS/hr)						
								A	B	C	D	E	F	G
0000	ECU	5827	89.3	1003	2399	4.62	658	4/5	81	82	82	84	80	84
0100	ECU	5813	89.2	1004	2389	4.62	658	0/5	80	81	80	84	79	82
0200	ECU	5897	89.1	996	2391	4.63	658	0/5	81	82	80	85	80	84
0300	ECU	5839	89.2	998	2383	4.61	657	0/5	80	81	82	83	79	83
0400	ECU	5669	88.8	1002	2383	4.46	637	0/5	77	80	79	81	75	78
0500	ECU	5123	89.0	1011	2374	3.97	560	0/5	72	75	74	76	71	75
0600	EA	5866	88.6	992	2411	4.62	658	0/5	76	78	79	80	75	80
0700	EA	5882	88.6	999	2398	4.60	658	0/5	78	79	78	82	78	82
0800	EA	5919	88.4	996	2393	4.61	655	0/5	80	82	82	84	79	83
0900	EA	5859	88.4	1003	2407	4.60	658	0/5	79	80	80	84	78	82
1000	EA	5913	88.4	1004	2401	4.60	658	0/5	79	81	81	83	79	82
1100	EA	5962	88.6	1001	2407	4.72	673	0/5	80	81	81	83	80	83
1200	EA	6000	88.6	996	2397	4.71	669	0/5	77	79	80	81	76	81
1300	EA	5968	88.7	997	2405	4.72	672	0/5	77	79	80	81	77	81
1400	EA	6013	88.6	1001	2404	4.71	670	0/5	77	79	79	81	77	81
1500	EA	5960	88.5	997	2403	4.73	670	0/5	77	79	79	80	76	81
1600	EA	6012	88.4	1001	2401	4.71	670	0/5	77	79	79	81	76	81
1700	EA	5962	88.4	1001	2409	4.73	673	0/5	77	79	77	81	76	81
1800	UM	5993	88.3	1006	2402	4.69	669	0/5	76	78	78	79	76	81
1900	UM	5997	88.3	1001	2401	4.69	672	0/5	76	76	78	78	77	80
2000	UM	5999	88.3	1002	2407	4.72	672	0/5	76	80	79	84	77	82
2100	UM	5959	88.3	1000	2406	4.72	672	0/5	77	81	80	84	78	83
2200	Ry.	5794	88.4	993	2313	4.55	657	0/5	71	72	73	76	73	76
2300	UM	5734	88.4	993	2393	4.47	638	0/5	74	78	76	81	75	78



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8/18/95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBtu/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMBtu/HR)	GROSS MW	FUEL INPUT RATE (POUNDS) KLBS/HR						
								A	B	C	D	E	G	
0000	MD	5712	88.4	1000	2401	4.39	636	0/S	78	78	76	81	75	78
0100	MD	5703	88.4	1001	2398	4.39	633	0/S	74	78	76	81	75	78
0200	MD	5755	88.6	1009	2398	4.52	651	0/S	75	77	77	81	75	81
0300	MD	5754	88.8	1001	2397	4.62	657	0/S	74	78	77	81	75	81
0400	MD	5798	88.8	1000	2399	4.61	658	0/S	74	78	77	81	75	81
0500	MD	5865	88.7	1005	2400	4.61	661	0/S	74	76	77	81	74	81
0600	A.S.	5824	88.6	1003	2398	4.57	655	0/S	75	76	78	80	73	80
0700	<del>MD</del>	5834	88.6	1000	2401	4.57	652	0/S	74	76	77	79	74	80
0800	<del>MD</del>	5860	88.7	1010	2397	4.57	654	0/S	75	76	78	79	73	80
0900	<del>MD</del>	5984	88.6	999	2401	4.67	663	0/S	77	78	79	80	75	74
1000	<del>MD</del>	5993	88.6	1006	2392	4.70	670	0/S	75	76	77	81	75	79
1100	<del>MD</del>	5954	88.7	999	2397	4.71	672	0/S	76	78	78	80	76	80
1200	<del>MD</del>	5964	88.6	998	2401	4.71	672	0/S	76	78	78	81	76	81
1300	<del>MD</del>	5924	88.7	1003	2401	4.71	670	0/S	76	78	78	80	75	80
1400	<del>MD</del>	5950	88.6	1002	2404	4.72	670	0/S	75	77	77	80	74	80
1500	<del>MD</del>	5944	88.7	999	2400	4.71	670	0/S	76	78	78	81	75	80
1600	<del>MD</del>	5965	88.6	986	2410	4.71	670	0/S	75	76	78	80	74	80
1700	<del>MD</del>	5965	88.5	1001	2402	4.71	670	0/S	75	78	78	79	75	79
1800	JB	5990	88.3	1000	2404	4.71	671	-	76	77	78	80	76	80
1900	JB	5968	88.2	1001	2405	4.71	672	-	76	77	76	80	75	79
2000	JB	5999	88.3	999	2400	4.71	672	-	76	78	78	80	75	80
2100	JB	5978	88.4	1000	2404	4.71	671	-	76	78	78	79	74	79
2200	JB	6004	88.4	1000	2397	4.70	671	-	75	77	77	78	75	79
2300	JB	5824	88.5	1006	2405	4.58	660	-	76	78	78	78	77	78

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK**

DATE: 8-17-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBtu/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMLB/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) K LBS/HR						
								A	B	C	D	E	F	G
0000	AB	5969	88.2	998	2403	4.62	658	%	74	76	76	78	74	78
0100	AB	5868	88.5	979	2408	4.61	660	%	76	75	77	76	75	76
0200	AB	5900	88.5	1003	2400	4.61	659	-	76	75	77	76	75	75
0300	AB	5918	88.5	1006	2402	4.68	672	-	76	74	77	76	75	76
0400	AB	5883	88.6	1005	2401	4.67	670	%	76	75	77	76	74	76
0500	AB	5885	88.6	1004	2402	4.67	664	-	77	75	77	77	74	76
0600	A.S.	5942	88.5	1002	2383	4.65	665	%	76	75	77	76	77	76
0700	A.S.	5991	88.5	1002	2397	4.67	667	%	76	75	77	76	75	76
0800	A.S.	5923	88.5	997	2401	4.63	662	%	76	76	77	76	75	76
0900	A.S.	5906	88.6	1001	2402	4.67	664	%	74	74	77	75	75	76
1000	A.S.	5924	88.5	1000	2387	4.64	658	%	76	74	77	77	74	75
1100	A.S.	5831	88.8	1003	2402	4.59	664	%	77	75	77	76	75	76
1200	A.S.	5890	88.9	994	2400	4.66	665	%	76	75	77	76	75	76
1300	DS	5930	89.2	1002	2386	4.70	672	o/s	77	79	79	77	77	80
1400	DS	5957	89.2	999	2393	4.74	672	o/s	76	78	79	77	76	80
1500	T.L.	5941	89.2	996	2403	4.72	671	o/s	76	78	78	77	76	80
1600	T.L.	5943	89.2	1002	2405	4.72	673	o/s	76	78	79	75	76	80
1700	T.L.	5904	89.2	1004	2404	4.70	672	o/s	77	79	79	76	78	81
1800	MM	BD	BD	990	2405	4.74	675	o/s	76	80	79	78	77	82
1900	MM	BD	BD	1000	2398	4.68	673	o/s	77	81	80	78	79	83
2000	MM	BD	BD	1006	2401	4.70	674	o/s	77	82	80	79	79	83
2100	MM	BD	BD	1003	2407	4.55	660	o/s	78	82	79	83	76	79
2200	MM	BD	BD	1005	2398	4.59	660	o/s	75	80	79	83	76	81
2300	MM	BD	BD	1004	2395	4.58	660	o/s	75	80	77	81	77	80

Unit off VWD  
Back to ABS



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7-18-95

TOWER: 1A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valves)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000						
0100						
0200						
0300						
0400						
0500						
0600						
0700	CS	<del>6.07</del> 5.96	<del>3.09</del> 2.89	4	1.33	1.25
0800	CS	<del>6.08</del> 5.97	<del>3.06</del> 2.83	3	1.335	1.25
0900	CS	<del>6.08</del> 5.95	<del>2.98</del> 2.77	3	1.335	1.25
1000	CS	<del>6.07</del> 5.95	<del>2.92</del> 2.69	3	1.34	1.25
1100	CS	<del>6.06</del> 5.94	<del>2.90</del> 2.67	3	1.335	1.25
1200	CS	<del>6.06</del> 5.93	<del>2.96</del> 2.74	3	1.33	1.25
1300	CS	<del>6.04</del> 5.92	<del>2.92</del> 2.70	3	1.34	1.25
1400	CS	<del>6.03</del> 5.92	<del>2.91</del> 2.67	3	1.34	1.25
1500	CS	<del>6.03</del> 5.93	<del>2.88</del> 2.66	4	1.34	1.25
1600	CS	<del>6.04</del> 5.93	<del>2.90</del> 2.68	4	1.34	1.20
1700	CS	<del>6.02</del> 5.92	<del>2.92</del> 2.69	5	1.345	1.25
1800	van	<del>6.04</del> 5.93	<del>2.87</del> 2.65	5	1.34	1.25
1900	van	<del>6.05</del> 5.96	<del>3.65</del> 3.44	3	1.34	1.20
2000	van	<del>6.03</del> 5.94	<del>3.32</del> 3.10	3	1.335	1.20
2100	van	<del>6.03</del> 5.93	<del>3.27</del> 3.06	4	1.335	1.25
2200	van	<del>6.04</del> 5.94	<del>3.21</del> 2.99	4	1.33	1.20
2300	van	<del>6.03</del> 5.94	<del>3.20</del> 2.98	4	1.33	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7-19-95

TOWER: 1A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	van	<del>6.07</del> 5.98	<del>3.72</del> 3.52	4	1.34	1.20
0100	van	<del>6.05</del> 5.97	<del>3.38</del> 3.16	4	1.33	1.25
0200	van	<del>6.05</del> 5.97	<del>3.33</del> 3.12	4	1.32	1.20
0300	van	<del>6.05</del> 5.97	<del>3.26</del> 3.05	4	1.33	1.20
0400	van	<del>6.06</del> 5.97	<del>3.29</del> 3.07	4	1.33	1.25
0500	van	<del>6.04</del> 5.95	<del>3.24</del> 3.01	3	1.33	1.25
0600	cs	<del>6.03</del> 5.95	<del>3.30</del> 3.08	3	1.32	1.25
0700	cs	<del>6.07</del> 5.98	<del>3.77</del> 3.57	3	1.33	1.10
0800	cs	<del>6.05</del> 5.96	<del>3.46</del> 3.24	3	1.335	1.20
0900	cs	<del>6.05</del> 5.96	<del>3.33</del> 3.12	3	1.33	1.20
1000	cs	<del>6.04</del> 5.94	<del>3.33</del> 3.11	3	1.33	1.20
1100	cs	<del>6.03</del> 5.93	<del>3.28</del> 3.08	3	1.33	1.25
1200	cs	<del>6.02</del> 5.93	<del>3.33</del> 3.13	3	1.33	1.25
1300	cs	<del>6.02</del> 5.93	<del>3.27</del> 3.06	4	1.34	1.25
1400	cs	<del>6.03</del> 5.94	<del>3.22</del> 3.00	4	1.325	1.20
1500	cs	<del>6.03</del> 5.94	<del>3.16</del> 2.94	5	1.33	1.25
1600	cs	<del>6.06</del> 5.97	<del>3.48</del> 3.27	5	1.33	1.25
1700	cs	<del>6.04</del> 5.95	<del>3.36</del> 3.14	4	1.33	1.25
1800	van	<del>6.03</del> 5.94	<del>3.27</del> 3.04	3	1.33	1.25
1900	van	<del>6.04</del> 5.92	<del>3.62</del> 3.41	3	1.33	1.25
2000	van	<del>6.05</del> 5.95	<del>3.81</del> 3.59	3	1.33	1.25
2100	van	<del>6.02</del> 5.93	<del>3.51</del> 3.27	3	1.33	1.25
2200	van	<del>6.01</del> 5.91	<del>3.40</del> 3.17	4	1.33	1.25
2300	van	<del>6.00</del> 5.90	<del>3.32</del> 3.07	4	1.33	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7-20-95

TOWER: 1A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% dose of reagent feed value)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	van	6.00 5.90	3.24 2.99	4	1.33	1.25
0100	van	6.01 5.91	3.21 2.98	5	1.33	1.25
0200	van	6.01 5.91	3.23 2.99	5	1.33	1.20
0300	van	6.04 5.94	3.58 3.36	5	1.33	1.20
0400	van	6.06 5.96	3.41 3.19	5	1.33	1.20
0500	MN	6.05 5.95	3.30 3.08	4	1.33	1.30
0600	CS	6.04 5.94	3.23 3.01	4	1.33	1.20
0700	CS	6.03 5.93	3.18 2.94	4	1.32	1.25
0800	CS	6.05 5.96	3.43 3.21	4	1.315	1.20
0900	CS	6.07 5.97	3.45 3.23	4	1.32	1.20
1000	CS	6.05 5.94	3.26 3.04	4	1.31	1.20
1100	CS	6.04 5.93	3.11 2.88	5	1.31	1.25
1200	CS	6.07 5.96	3.48 3.26	5	1.32	1.25
1300	CS	6.07 5.97	3.56 3.35	4	1.37	1.25
1400	CS	6.06 5.96	3.35 3.13	4	1.365	1.30
1500	CS	6.08 5.98	3.53 3.33	4	1.375	1.25
1600	CS	6.09 5.99	3.55 3.35	4	1.37	1.25
1700						
1800						
1900						
2000						1.027
2100						
2200						
2300						

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-8-95

TOWER: 1A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000						
0100						
0200						
0300						
0400						
0500						
0600						
0700	T.D.	5.94 / 5.75	3.71 / 3.48	3	1.33	1.30
0800	T.D.	5.86 / 5.70	3.75 / 3.51	3	1.33	1.25
0900	T.D.	5.84 / 5.71	3.79 / 3.55	5	1.33	1.20
1000	T.D.	5.89 / 5.71	3.74 / 3.56	5	1.33	1.30
1100	T.D.	5.88 / 5.73	3.75 / 3.55	5	1.33	1.30
1200	T.D.	5.89 / 5.73	3.79 / 3.58	5	1.33	1.25
1300	T.D.	6.14 / 5.77	4.14 / 3.95	5	1.33	1.30
1400	TD	5.91 / 5.76	4.29 / 4.10	5	1.33	1.20
1500	T.D.	5.92 / 5.77	4.24 / 4.07	5	1.33	1.20
1600	TD	5.92 / 5.78	4.25 / 4.05	5	1.33	1.25
1700	TD	5.93 / 5.79	3.92 / 3.70	5	1.33	1.25
1800	CS	5.90 / 5.77	3.85 / 3.63	5	1.33	1.25
1900	CS	5.90 / 5.77	3.87 / 3.64	5	1.325	1.25
2000	CS	6.42 / 5.77	3.88 / 3.65	5	1.33	1.25
2100	CS	6.41 / 5.76	3.88 / 3.66	5	1.33	1.25
2200	CS	6.37 / 5.77	3.86 / 3.65	5	1.33	1.30
2300	CS	6.33 / 5.78	3.85 / 3.63	5	1.34	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-9-95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	CS	5.93 / 5.80	3.86 / 3.63	4	1.34	1.25
0100	CS	5.91 / 5.77	3.86 / 3.63	4	1.34	1.25
0200	CS	5.90 / 5.77	3.84 / 3.60	4	1.34	1.25
0300	CS	5.88 / 5.76	3.84 / 3.59	4	1.34	1.25
0400	CS	5.95 / 5.74	3.87 / 3.62	5	1.34	1.25
0500	CS	5.93 / 5.77	3.86 / 3.61	5	1.34	1.25
0600	T.D.	6.19 / 5.77	3.87 / 3.61	5	1.34	1.30
0700	T.D.	5.62 / 5.67	2.98 / 2.50	5	1.335	1.25
0800	T.D.	5.77 / 5.67	2.73 / 2.51	5	1.34	1.20
0900	T.D.	5.35 / 5.66	5.30 / 2.53	6	1.34	1.40
1000	T.D.	5.37 / 5.67	2.58 / 2.57	6	1.335	1.30
1100	T.D.	5.0 / 5.62	2.61 / 2.62	6	1.33	1.30
1200	T.D.	5.0 / 5.70	2.66 / 2.67	6	1.33	1.30
1300	T.D.	5.71 / 5.76	2.65 / 2.65	6	1.335	1.30
1400	T.D.	5.73 / 5.71	2.92 / 2.92	7	1.33	1.30
1500	T.D.	5.78 / 5.76	3.17 / 3.17	6	1.335	1.25
1600	T.D.	5.79 / 5.74	3.50 / 3.31	5	1.33	1.25
1700	T.D.	5.76 / 5.74	3.22 / 3.24	6	1.33	1.25
1800	CS	5.79 / 5.77	3.27 / 3.27	6	1.33	1.25
1900	CS	5.81 / 5.78	3.22 / 3.23	6	1.345	1.25
2000	CS	5.81 / 5.80	3.44 / 3.46	6	1.34	1.25
2100	CS	5.84 / 5.82	3.40 / 3.42	5	1.34	1.25
2200	CS	5.84 / 5.82	3.27 / 3.27	4	1.33	1.25
2300	CS	5.83 / 5.81	3.18 / 3.19	4	1.34	1.25



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AOC5**

DATE: 8-10-95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	CS	5.83 5.81	3.11 3.11	4	1.33	1.25
0100	CS	5.83 5.81	2.70 2.69	4	1.345	1.25
0200	CS	5.81 5.78	2.61 2.60	4	1.83	1.25
0300	CS	5.79 5.78	2.63 2.61	4	1.335	1.25
0400	CS	5.81 5.79	2.65 2.64	3	1.33	1.0
0500	CS	5.78 5.77	2.62 2.61	3	1.34	1.20
0600	T.D.	5.77 5.74	2.64 2.64	5	1.34	1.25
0700	T.D.	5.75 5.75	2.62 2.63	6	1.34	1.15
0800	TD	5.75 5.75	2.63 2.64	6	1.34	1.25
0900	TD	5.74 5.76	2.65 2.64	7	1.34	1.15
1000	T.D.	5.77 5.77	2.72 2.74	7	1.34	1.05
1100	TD	5.79 5.70	2.72 2.75	7	1.34	1.25
1200	T.D.	5.81 5.80	2.80 2.82	7	1.34	1.25
1300	T.D.	5.81 5.81	2.76 2.78	7	1.335	1.30
1400	T.D.	5.81 5.81	2.75 2.76	7	1.34	1.40
1500	T.D.	5.82 5.72	2.73 2.74	7	1.33	1.35
1600	T.D.	5.81 5.81	2.72 2.73	7	1.335	1.25
1700	T.D.	5.80 5.81	2.74 2.78	7	1.34	1.30
1800	YJA	5.82 5.83	2.31 2.35	7	1.37	1.40
1900	YJA	5.82 5.84	3.44 3.47	7	1.36	1.30
2000	YJA	5.85 5.86	3.51 3.52	6	1.34	1.25
2100	RJA	5.84 5.85	3.50 3.51	5	1.335	1.25
2200	MM	5.82 5.83	3.43 3.45	5	1.335	1.28
2300	MM	5.82 5.83	3.46 3.49	5	1.33	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8/11/95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% Size of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	MM	<del>5.80</del> 5.82	<del>3.39</del> 3.41	5	1.335	1.25
0100	MM	<del>5.80</del> 4.93	<del>3.35</del> 3.38	5	1.33	1.20
0200	MM	<del>5.80</del> 5.83	<del>3.32</del> 3.34	5	1.325	1.20
0300	MM	<del>5.80</del> 5.82	<del>3.26</del> 3.28	6	1.325	1.10
0400	MM	<del>5.81</del> 5.83	<del>3.34</del> 3.37	6	1.34	1.20
0500	MM	<del>5.81</del> 5.84	<del>3.07</del> 3.08	5	1.34	1.20
0600	Vam	<del>5.78</del> 5.82	<del>3.06</del> 3.09	6	1.34	1.25
0700	Vam	<del>5.77</del> 5.81	<del>2.87</del> 2.88	6	1.355	1.25
0800	Vam	<del>5.79</del> 5.83	<del>3.10</del> 3.13	6	1.345	1.25
0900	Vam	<del>5.80</del> 5.84	<del>3.19</del> 3.23	6	1.355	1.25
1000	Vam	<del>5.80</del> 5.84	<del>3.09</del> 3.13	6	1.355	1.25
1100	Vam	<del>5.80</del> 5.84	<del>3.15</del> 3.18	6	1.36	1.25
1200	Vam	<del>5.80</del> 5.84	<del>3.17</del> 3.20	5	1.37	1.30
1300	Vam	<del>5.83</del> 5.84	<del>3.05</del> 3.05	5	1.365	1.25
1400	Vam	<del>5.81</del> 5.85	<del>3.08</del> 3.12	6	1.38	1.35
1500	Vam	<del>5.81</del> 5.86	<del>3.15</del> 3.18	5	1.38	1.35
1600	Vam	<del>5.82</del> 5.87	<del>3.12</del> 3.15	5	1.38	1.30
1700	Vam	<del>5.80</del> 5.85	<del>3.08</del> 3.10	6	1.38	1.30
1800	R. Reed	<del>5.79</del> 5.86	<del>2.96</del> 2.97	6	1.38	1.30
1900	R. Reed	<del>5.81</del> 5.87	<del>2.96</del> 2.98	6	1.37	1.31
2000	R. Reed	<del>5.81</del> 5.87	<del>3.11</del> 3.12	7	1.35	1.27
2100	R. Reed	<del>5.82</del> 5.89	<del>3.13</del> 3.14	7	1.032	1.27
2200	R. Reed	<del>5.81</del> 5.87	<del>3.04</del> 3.05	6	1.021	1.25
2300	R. Reed	<del>5.83</del> 5.89	<del>3.03</del> 3.05	6	1.033	1.26

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-12-95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of required fuel value)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0800	R. Rudy	5.81 / 5.87	3.05 / 3.06	6	1.034	1.27
0900	R. Rudy	5.82 / 5.89	3.03 / 3.05	6	1.037	1.26
0200	R. Rudy	5.81 / 5.88	3.04 / 3.05	6	1.026	1.25
0300	R. Rudy	5.81 / 5.88	3.10 / 3.12	6	1.034	1.25
0400	R. Rudy	5.81 / 5.89	3.08 / 3.10	6	1.036	1.20
0500	R. Rudy	5.83 / 5.91	3.13 / 3.15	6	1.041	1.22
0600	Wam	5.83 / 5.91	3.09 / 3.10	6	1.37	1.10
0700	Wam	5.80 / 5.88	2.69 / 2.70	6	1.37	1.15
0800	Wam	5.81 / 5.90	3.13 / 3.16	6	1.37	1.25
0900	Wam	5.83 / 5.89	3.11 / 3.12	6	1.355	1.25
1000	Wam	5.82 / 5.88	3.12 / 3.14	6	1.34	1.25
1100	Wam	5.82 / 5.88	3.12 / 3.14	6	1.37	1.25
1200	Wam	5.82 / 5.89	3.14 / 3.17	6	1.36	1.25
1300	Wam	5.80 / 5.87	3.06 / 3.07	6	1.37	1.25
1400	Wam	5.82 / 5.88	3.11 / 3.12	6	1.36	1.25
1500	Wam	5.81 / 5.87	3.07 / 3.09	6	1.37	1.30
1600	Wam	5.84 / 5.90	3.06 / 3.05	6	1.365	1.25
1700	Wam	5.86 / 5.89	2.73 / 2.72	6	1.35	1.20
1800	T.D.	5.83 / 5.89	3.11 / 3.11	6	1.35	1.30
1900	T.D.	5.84 / 5.90	3.06 / 3.07	6	1.35	1.20
2000	T.D.	5.83 / 5.87	3.22 / 3.25	6	1.35	1.25
2100	T.D.	5.81 / 5.87	3.09 / 3.12	6	1.35	1.30
2200	T.D.	5.80 / 5.85	2.77 / 2.77	5	1.35	1.30
2300	T.D.	5.77 / 5.82	2.67 / 2.68	6	1.35	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 3.13.95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	TD	5.80 / 5.81	2.62 / 2.63	7	1.34	1.20
0100	TD	5.77 / 5.82	2.63 / 2.63	7	1.345	1.20
0200	T.D.	5.76 / 5.80	2.65 / 2.62	7	1.34	1.20
0300	T.D.	5.80 / 5.84	2.64 / 2.65	8	1.345	1.25
0400	T.D.	5.77 / 5.81	2.62 / 2.65	8	1.345	1.15
0500	T.D.	5.79 / 5.83	2.60 / 2.61	8	1.34	1.20
0600	Wam	5.79 / 5.83	2.58 / 2.60	8	1.34	1.25
0700	Wam	5.79 / 5.84	2.58 / 2.59	8	1.34	1.25
0800	Wam	5.80 / 5.84	2.56 / 2.58	8	1.34	1.30
0900	Wam	5.80 / 5.83	2.57 / 2.58	8	1.32	1.25
1000	Wam	5.80 / 5.83	2.56 / 2.58	8	1.34	1.25
1100	Wam	5.81 / 5.83	2.55 / 2.57	8	1.34	1.02
1200	Wam	5.81 / 5.83	2.56 / 2.58	8	1.34	1.25
1300	Wam	5.81 / 5.84	2.54 / 2.55	8	1.34	1.30
1400	Wam	5.83 / 5.86	3.00 / 3.10	8	1.35	1.30
1500	Wam	5.80 / 5.83	2.65 / 2.65	8	1.35	1.30
1600	Wam	5.80 / 5.85	2.59 / 2.59	8	1.36	1.30
1700	Wam	5.82 / 5.85	2.55 / 2.55	8	1.355	1.30
1800	T.D.	5.78 / 5.81	2.59 / 2.58	7	1.36	1.20
1900	T.D.	5.80 / 5.84	2.89 / 2.88	9	1.35	1.20
2000	T.D.	5.82 / 5.86	3.21 / 3.22	9	1.35	1.30
2100	T.D.	5.85 / 5.88	3.17 / 3.17	9	1.35	1.20
2200	TD	5.81 / 5.87	3.13 / 3.13	7	1.35	1.25
2300	T.D.	5.84 / 5.87	3.11 / 3.10	8	1.34	1.30

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7.14.95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	5.84 / 5.87	3.15 / 3.14	7	1.34	1.20
0100	T.D.	5.83 / 5.84	3.11 / 3.12	8	1.34	1.25
0200	T.D.	5.81 / 5.84	3.17 / 3.17	8	1.34	1.15
0300	T.D.	5.82 / 5.86	3.12 / 3.12	8	1.33	1.25
0400	T.D.	5.82 / 5.84	3.10 / 3.10	7	1.34	1.25
0500	TD	5.79 / 5.82	3.13 / 3.13	8	1.34	1.25
0600	CS	5.82 / 5.85	3.08 / 3.09	8	1.33	1.25
0700	CS	5.80 / 5.84	3.09 / 3.09	8	1.33	1.25
0800	CS	5.80 / 5.83	3.16 / 3.14	8	1.33	1.25
0900	CS	5.81 / 5.84	3.09 / 3.08	8	1.33	1.25
1000	CS	5.79 / 5.82	3.14 / 3.14	8	1.33	1.25
1100	CS	5.79 / 5.80	3.12 / 3.13	8	1.33	1.25
1200	CS	5.79 / 5.81	3.16 / 3.16	8	1.34	1.25
1300	CS	5.81 / 5.83	3.42 / 3.43	8	1.34	1.25
1400	CS	5.78 / 5.81	3.17 / 3.17	8	1.35	1.25
1500	CS	5.80 / 5.82	3.13 / 3.13	8	1.35	1.30
1600	CS	5.78 / 5.81	3.52 / 3.55	8	1.34	1.30
1700	CS	5.81 / 5.83	3.45 / 3.46	8	1.35	1.30
1800	Van	5.77 / 5.80	3.14 / 3.13	8	1.35	1.40
1900	Van	5.80 / 5.82	3.45 / 3.44	8	1.36	1.30
2000	Van	5.79 / 5.82	3.47 / 3.47	8	1.36	1.30
2100	Van	5.80 / 5.82	3.48 / 3.42	8	1.355	1.30
2200	Van	5.78 / 5.80	3.16 / 3.13	8	1.35	1.30
2300	Van	5.79 / 5.81		8	1.36	1.30

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-15-95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	Van	<del>5.79</del> 5.81	<del>3.29</del> 3.27	7	1.35	1.20
0100	Van	<del>5.79</del> 5.82	<del>3.19</del> 3.19	8	1.35	1.20
0200	Van	<del>5.90</del> 5.83	<del>3.20</del> 3.19	8	1.345	1.25
0300	Van	<del>5.79</del> 5.82	<del>3.27</del> 3.26	8	1.345	1.30
0400	Van	<del>5.83</del> 5.86	<del>3.30</del> 3.30	8	1.34	1.30
0500	Van	<del>5.83</del> 5.85	<del>3.25</del> 3.24	8	1.34	1.25
0600	CS	<del>5.83</del> 5.85	<del>3.26</del> 3.26	8	1.35	1.20
0700	CS	<del>5.80</del> 5.83	<del>3.33</del> 3.33	8	1.34	1.20
0800	CS	<del>5.83</del> 5.86	<del>3.36</del> 3.36	6	1.34	1.20
0900	CS	<del>5.82</del> 5.84	<del>3.35</del> 3.34	8	1.34	1.25
1000	CS	<del>5.82</del> 5.84	<del>3.35</del> 3.34	8	1.34	1.25
1100	CS	<del>5.85</del> 5.87	<del>3.32</del> 3.32	8	1.35	1.25
1200	CS	<del>5.86</del> 5.88	<del>3.90</del> 3.92	9	1.34	1.25
1300	CS	<del>5.87</del> 5.89	<del>4.33</del> 4.37	9	1.34	1.25
1400	CS	<del>5.89</del> 5.90	<del>4.61</del> 4.65	9	1.34	1.25
1500	CS	<del>5.92</del> 5.93	<del>4.64</del> 4.69	9	1.35	1.25
1600	CS	<del>5.92</del> 5.93	<del>4.76</del> 4.83	9	1.33	1.25
1700	CS	<del>5.93</del> 5.94	<del>4.70</del> 4.76	9	1.33	1.25
1800	Van	<del>5.93</del> 5.94	<del>4.65</del> 4.71	9	1.34	1.30
1900	Van	<del>5.93</del> 5.94	<del>4.55</del> 4.61	9	1.34	1.30
2000	Van	<del>5.92</del> 5.93	<del>4.61</del> 4.66	9	1.34	1.30
2100	Van	<del>5.94</del> 5.95	<del>4.57</del> 4.64	8	1.34	1.25
2200	Van	<del>5.93</del> 5.94	<del>4.51</del> 4.57	<del>8</del>	1.34	1.30
2300	Van	<del>5.92</del> 5.94	<del>4.51</del> 4.56	8	1.33	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-16-95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of response feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	Vam	5.93 5.95	4.75 4.92	8	1.325	1.25
0100	Vam	5.93 5.94	4.69 4.78	8	1.34	1.25
0200	Vam	5.94 5.96	4.64 4.71	7	1.32	1.25
0300	Vam	5.93 5.95	4.61 4.70	7	1.325	1.25
0400	Vam	5.93 5.95	4.56 4.63	7	1.32	1.25
0500	Vam	5.93 5.95	4.43 4.49	7	1.32	1.20
0600	CS	5.93 5.95	4.43 4.50	7	1.32	1.25
0700	CS	5.94 5.95	4.40 4.47	6	1.32	1.20
0800	CS	5.94 5.95	4.46 4.53	6	1.32	1.25
0900	CS	5.95 5.96	4.53 4.59	7	1.33	1.20
1000	CS	5.95 5.96	4.52 4.58	6	1.33	1.25
1100	CS	5.95 5.96	4.59 4.67	5	1.35	1.25
1200	CS	5.95 5.96	4.74 4.81	5	1.36	1.25
1300	CS	5.95 5.96	4.49 4.56	5	1.33	1.25
1400	CS	5.94 5.94	4.31 4.37	5	1.33	1.25
1500	CS	5.94 5.95	4.22 4.27	5	1.33	1.25
1600	CS	5.94 5.94	4.18 4.22	5	1.34	1.25
1700	CS	5.93 5.94	4.51 4.56	7	1.34	1.25
1800	Vam	5.95 5.96	4.63 4.68	6	1.34	1.25
1900	Vam	5.96 5.96	4.80 4.86	6	1.33	1.25
2000	Vam	5.95 5.96	4.87 4.94	5	1.33	1.25
2100	Vam	5.94 5.95	4.86 4.93	5	1.32	1.24
2200	Vam	5.95 5.96	4.85 4.93	7	1.32	1.25
2300	Vam	5.95 5.96	4.89 4.87	7	1.3	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-17-95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	van	5.96 / 5.98	4.78 / 4.86	7	1.31	1.25
0100	van	5.97 / 5.98	4.67 / 4.74	6	1.31	1.20
0200	van	5.98 / 5.98	4.58 / 4.65	8	1.31	1.25
0300	van	5.99 / 5.99	4.49 / 4.54	8	1.31	1.25
0400	van	5.99 / 6.00	4.34 / 4.40	9	1.31	1.20
0500	van	6.00 / 6.01	4.09 / 4.15	6	1.305	1.10
0600	cs	5.98 / 5.99	4.48 / 4.53	8	1.30	1.25
0700	cs	5.99 / 6.00	4.14 / 4.21	8	1.34	1.25
0800	cs	6.01 / 6.01	4.71 / 4.78	8	1.31	1.25
0900	cs	6.01 / 6.01	4.64 / 4.70	8	1.31	1.25
1000	cs	6.01 / 6.01	4.06 / 4.11	8	1.31	1.25
1100	cs	6.02 / 6.01	4.59 / 4.58	8	1.31	1.25
1200	cs	5.99 / 5.98	4.21 / 4.20	11	1.31	1.25
1300	cs	5.98 / 5.98	3.96 / 3.92	11	1.32	1.25
1400	cs	5.99 / 5.98	3.95 / 3.93	12	1.34	1.25
1500	cs	5.99 / 5.98	4.26 / 4.24	12	1.335	1.25
1600	cs	6.00 / 5.99	4.17 / 4.15	12	1.34	1.40
1700	cs	5.97 / 5.97	3.93 / 3.89	12	1.34	1.25
1800	T.D.	5.99 / 5.99	3.91 / 3.87	12	1.32	1.25
1900	T.D.	5.97 / 5.98	3.82 / 3.77	13	1.32	1.25
2000	T.D.	5.99 / 5.98	4.01 / 3.97	13	1.32	1.30
2100	T.D.	5.97 / 5.98	3.95 / 3.90	13	1.31	1.30
2200	T.D.	6.01 / 6.02	4.20 / 4.15	13	1.30	1.30
2300	T.D.	6.0 / 6.01	4.03 / 3.98	10	1.31	1.25



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7.17.95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% dose of reagent feed value)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	<del>6.0</del> 5.99	<del>4.14</del> 4.11	10	1.31	1.25
0100	T.D.	<del>6.0</del> 6.0	<del>4.04</del> 4.0	10	1.305	1.25
0200	T.D.	<del>5.94</del> 5.98	<del>3.72</del> 3.75	10	1.31	1.25
0300	T.D.	<del>5.97</del> 5.97	<del>3.37</del> 3.42	10	1.305	1.25
0400	T.D.	<del>5.97</del> 5.98	<del>4.53</del> 4.52	11	1.30	1.30
0500	T.D.	<del>5.94</del> 5.94	<del>4.0</del> 3.94	11	1.30	1.35
0600	LJA	<del>5.97</del> 5.96	<del>3.95</del> 3.89	12	1.29	1.30
0700	LJA	<del>5.96</del> 5.96	<del>4.12</del> 4.08	12	1.29	1.25
0800	LJA	<del>5.97</del> 5.97	<del>4.20</del> 4.15	13	1.29	1.28
0900	LJA	<del>5.96</del> 5.96	<del>3.97</del> 3.90	13	1.28	1.25
1000	LJA	<del>5.98</del> 5.97	<del>4.24</del> 4.26	14	1.28	1.30
1100	LJA	<del>5.99</del> 5.99	<del>4.35</del> 4.32	14	1.28	1.28
1200	LJA	<del>5.98</del> 5.97	<del>4.18</del> 4.16	14	1.295	1.35
1300	LJA	<del>5.95</del> 5.94	<del>4.03</del> 3.97	15	1.29	1.30
1400	LJA	<del>6.00</del> 5.99	<del>4.32</del> 4.28	16	1.29	1.40
1500	LJA	<del>5.98</del> 5.97	<del>4.37</del> 4.33	16	1.29	1.40
1600	LJA	<del>5.96</del> 5.94	<del>3.73</del> 3.68	17	1.29	1.35
1700	LJA	<del>5.98</del> 5.97	<del>4.32</del> 4.28	17	1.30	1.50
1800	T.D.	<del>5.99</del> 5.98	<del>3.65</del> 3.58	17	1.30	1.45
1900	T.D.	<del>5.96</del> 5.94	<del>3.58</del> 3.49	17	1.28	1.45
2000	T.D.	<del>5.97</del> 5.94	<del>3.88</del> 3.79	17	1.28	1.40
2100	T.D.	<del>5.94</del> 5.97	<del>3.98</del> 3.90	17	1.27	1.40
2200	T.D.	<del>5.97</del> 5.96	<del>3.56</del> 3.51	17	1.27	1.40
2300	T.D.	<del>5.99</del> 5.98	<del>3.91</del> 3.85	17	1.27	1.45

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 3.19.95

TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	5.97 / 5.97	3.94 / 3.78	17	1.27	1.40
0100	T.D.	5.99 / 5.98	3.92 / 3.82	18	1.27	1.45
0200	T.D.	5.97 / 5.96	3.84 / 3.81	18	1.26	1.45
0300	T.D.	5.94 / 5.95	3.86 / 3.81	19	1.265	1.40
0400	TD	5.97 / 5.95	3.91 / 3.85	20	1.265	1.4
0500	T.D.	5.96 / 5.94	3.91 / 3.90	20	1.27	1.4
0600	JNA	5.98 / 5.97	3.92 / 3.86	22	1.265	1.45
0700	JNA	6.00 / 5.98	4.59 / 4.55	22	1.26	1.45
0800	JNA	6.00 / 5.99	4.64 / 4.67	22	1.27	1.45
0900	JNA	6.01 / 6.00	3.65 / 3.58	22	1.265	1.50
1000	JNA	6.02 / 6.01	4.73 / 4.69	21	1.27	1.50
1100	JNA	6.00 / 5.99	3.59 / 3.51	21	1.27	1.45
1200	JNA	6.00 / 5.98	4.63 / 4.59	21	1.27	1.50
1300	JNA	6.01 / 5.99	3.91 / 3.85	21	1.27	1.47
1400	JNA	5.96 / 5.94	3.52 / 2.44	21	1.27	1.45
1500	JNA	5.99 / 5.97	4.61 / 4.56	21	1.29	1.40
1600	JNA	5.98 / 5.96	3.50 / 3.42	21	1.325	1.45
1700	JNA	6.05 / 6.03	4.80 / 4.76	19	1.30	1.45
1800	T.D.	6.07 / 6.08	4.74 / 4.68	12	1.29	1.35
1900	T.D.	6.07 / 6.07	3.87 / 3.81	12	1.29	1.35
2000	T.D.	6.12 / 6.10	4.25 / 4.20	9	1.29	1.25
2100	T.D.	6.11 / 6.09	3.61 / 3.55	6	1.29	1.30
2200	TD.	6.10 / 6.07	4.62 / 3.79	6	1.29	1.25
2300		6.07 / 6.07	3.99 / 3.96	6	1.29	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7-18-95

TOWER: 1B

TIME	INITIALS	ABSORBER pB	QUENCHER pB	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000						
0100						
0200						
0300						
0400						
0500						
0600						
0700	cs	<del>5.86</del> 5.96	<del>3.41</del> 3.30	5	1.33	1.15
0800	cs	<del>5.86</del> 5.95	<del>3.45</del> 3.33	5	1.335	1.20
0900	cs	<del>5.88</del> 5.96	<del>3.44</del> 3.33	4	1.32	1.20
1000	cs	<del>5.84</del> 5.92	<del>3.44</del> 3.33	4	1.34	1.20
1100	cs	<del>5.87</del> 5.94	<del>3.40</del> 3.31	4	1.33	1.20
1200	cs	<del>5.86</del> 5.94	<del>3.40</del> 3.30	4	1.33	1.20
1300	cs	<del>5.84</del> 5.92	<del>3.37</del> 3.27	4	1.33	1.20
1400	cs	<del>5.83</del> 5.91	<del>3.40</del> 3.27	4	1.34	1.20
1500	cs	<del>5.82</del> 5.90	<del>3.44</del> 3.33	5	1.33	1.15
1600	cs	<del>5.85</del> 5.93	<del>3.40</del> 3.30	4	1.33	1.20
1700	cs	<del>5.84</del> 5.91	<del>3.39</del> 3.30	4	1.33	1.25
1800	van	<del>5.83</del> 5.91	<del>3.42</del> 3.31	4	1.34	1.25
1900	van	<del>5.79</del> 5.87	<del>3.37</del> 3.27	4	1.33	1.20
2000	van	<del>5.78</del> 5.85	<del>3.42</del> 3.30	4	1.33	1.20
2100	van	<del>5.78</del> 5.87	<del>3.41</del> 3.30	4	1.33	1.25
2200	van	<del>5.78</del> 5.87	<del>3.36</del> 3.27	4	1.33	1.20
2300	van	<del>5.78</del> 5.86	<del>3.44</del> 3.33	4	1.33	1.10

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7-19-95

TOWER: 1B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of response feed value)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	va	5.79 5.88	3.43 3.31	4	1.34	1.10
0100	va	5.77 5.86	3.41 3.31	4	1.33	1.25
0200	va	5.77 5.85	3.38 3.29	4	1.32	1.20
0300	va	5.77 5.84	3.41 3.30	4	1.32	1.20
0400	va	5.76 5.84	3.44 3.31	4	1.33	1.20
0500	va	5.76 5.85	3.41 3.31	4	1.32	1.20
0600	es	5.76 5.84	3.44 3.31	4	1.32	1.15
0700	es	5.76 5.84	3.44 3.32	5	1.32	1.10
0800	es	5.75 5.84	3.41 3.31	4	1.32	1.10
0900	es	5.75 5.82	3.49 3.36	4	1.32	1.15
1000	es	5.75 5.82	3.41 3.31	4	1.32	1.20
1100	es	5.77 5.83	3.37 3.27	4	1.32	1.20
1200	es	5.77 5.84	3.34 3.26	4	1.32	1.25
1300	es	5.76 5.83	3.35 3.25	4	1.32	1.25
1400	es	5.74 5.80	3.41 3.29	4	1.335	1.25
1500	es	5.75 5.83	3.38 3.27	4	1.32	1.20
1600	es	5.74 5.81	3.60 3.45	5	1.32	1.25
1700	es	5.77 5.84	3.47 3.37	4	1.32	1.25
1800	va	5.76 5.84	3.49 3.36	4	1.33	1.25
1900	va	5.72 5.83	3.37 3.26	4	1.33	1.25
2000	va	5.67 5.82	3.61 3.46	4	1.33	1.25
2100	van	5.72 5.81	3.59 3.46	4	1.33	1.20
2200	van	5.72 5.82	3.30 3.23	4	1.33	1.25
2300	van	5.73 5.82	3.16 3.10	4	1.33	1.25

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 7-20-95

TOWER: 1B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0800	Van	5.73 5.82	3.08 3.02	5	1.33	1.20
0900	Van	5.72 5.81	3.10 3.03	5	1.33	1.20
0930	Van	5.74 5.82	3.05 3.00	5	1.33	1.25
0930	Van	5.75 5.82	3.04 2.99	5	1.33	1.20
0940	Van	5.77 5.85	3.05 3.00	5	1.33	1.20
0950	MN	5.77 5.84	3.06 3.01	5	1.33	1.25
0960	es	5.75 5.84	3.03 2.97	5	1.33	1.20
0700	es	5.77 5.85	3.02 2.96	5	1.32	1.25
0800	es	5.76 5.84	3.02 2.97	5	1.315	1.25
0900	es	5.76 5.84	3.01 2.96	4	1.32	1.10
1000	es	5.75 5.82	2.95 2.91	4	1.30	1.25
1100	es	5.74 5.81	2.91 2.88	4	1.31	1.20
1200	es	5.75 5.82	3.37 3.25	4	1.32	1.25
1300	es	5.76 5.83	3.21 3.12	4	1.37	1.25
1400	es	5.78 5.86	3.41 3.31	4	1.365	1.25
1500	es	5.75 5.83	3.13 3.07	4	1.375	1.25
1600	es	5.74 5.82	3.04 2.98	4	1.37	1.25
1700						
1800						
1900						
2000						
2100						
2200						
2300						

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8.8.95

TOWER: 1B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed rate)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000						
0100						
0200						
0300						
0400						
0500						
0600						
0700	T.D.	5.71 / 5.96	4.54 / 3.04	3	1.33	1.20
0800	T.D.	5.67 / 5.93	4.49 / 3.04	3	1.33	1.20
0900	T.D.	5.70 / 5.92	4.48 / 3.01	5	1.33	1.20
1000	T.D.	5.68 / 5.93	4.49 / 3.03	5	1.33	1.15
1100	T.D.	5.74 / 5.95	4.59 / 3.07	5	1.33	1.25
1200	T.D.	5.74 / 5.95	4.55 / 3.07	5	1.33	1.20
1300	T.D.	5.75 / 5.94	4.62 / 3.13	5	1.33	1.20
1400	TD	5.74 / 5.95	4.60 / 3.11	5	1.33	1.20
1500	T.D.	5.77 / 5.95	4.63 / 3.13	5	1.33	1.20
1600	TD	5.74 / 5.95	4.62 / 3.14	5	1.33	1.25
1700	T.D.	5.75 / 5.94	4.69 / 3.19	5	1.33	1.20
1800	cs	5.73 / 5.94	4.64 / 3.15	5	1.33	1.25
1900	cs	5.74 / 5.95	4.64 / 3.15	5	1.325	1.20
2000	cs	5.74 / 5.95	4.61 / 3.13	5	1.33	1.20
2100	cs	5.78 / 5.95	4.65 / 3.17	5	1.33	1.20
2200	cs	5.73 / 5.99	4.63 / 3.15	5	1.33	1.20
2300	cs	5.79 / 5.97	4.75 / 3.26	5	1.34	1.20

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-9-95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% size of ramp-up feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	CS	5.81 / 5.98	4.78 / 3.28	4	1.34	1.10
0100	CS	5.82 / 5.99	4.78 / 3.29	4	1.34	1.10
0200	CS	5.80 / 5.98	4.71 / 3.22	4	1.34	1.10
0300	CS	5.79 / 5.98	4.64 / 3.15	4	1.34	1.20
0400	CS	5.78 / 5.98	4.64 / 3.16	4	1.34	1.20
0500	CS	5.83 / 6.01	5.21 / 3.66	4	1.34	1.20
0600	T.D.	5.31 / 5.99	5.06 / 3.51	3	1.335	1.20
0700	T.D.	5.31 / 5.78	3.36 / 3.42	3	1.34	1.20
0800	T.D.	5.26 / 5.77	3.27 / 3.33	3	1.34	1.10
0900	T.D.	5.92 / 5.77	3.14 / 3.24	3	1.34	1.20
1000	T.D.	5.92 / 5.97	3.10 / 3.20	4	1.33	1.25
1100	T.D.	5.97 / 5.77	3.02 / 3.13	4	1.33	1.25
1200	T.D.	5.92 / 5.77	2.98 / 3.09	4	1.33	1.20
1300	T.D.	5.77 / 5.77	2.53 / 3.04	4	1.33	1.25
1400	T.D.	5.81 / 5.79	2.94 / 3.07	6	1.33	1.15
1500	T.D.	5.31 / 5.78	3.0 / 3.12	5	1.335	1.15
1600	T.D.	5.80 / 5.78	2.98 / 3.09	5	1.33	1.10
1700	T.D.	5.31 / 5.79	2.95 / 3.06	5	1.33	1.10
1800	CS	5.82 / 5.76	2.95 / 3.05	5	1.33	1.10
1900	CS	5.77 / 5.78	2.89 / 3.02	5	1.34	1.10
2000	CS	5.84 / 5.84	3.27 / 3.28	6	1.34	1.10
2100	CS	5.90 / 5.85	3.37 / 3.42	5	1.33	1.10
2200	CS	5.82 / 5.84	3.07 / 3.16	5	1.33	1.10
2300	CS	5.88 / 5.84	3.12 / 3.21	4	1.33	1.10

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-10-95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% Rate of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	CS	5.83 / 5.82	2.97 / 3.08	4	1.33	1.10
0100	CS	5.84 / 5.83	2.95 / 3.05	4	1.34	1.10
0200	CS	5.80 / 5.80	2.93 / 3.04	4	1.34	1.10
0300	CS	5.82 / 5.82	2.89 / 3.02	4	1.335	1.15
0400	CS	5.81 / 5.82	2.87 / 3.00	3	1.33	1.10
0500	CS	5.80 / 5.81	2.80 / 2.95	3	1.33	1.05
0600	T.D.	5.79 / 5.81	2.77 / 2.91	5	1.33	1.10
0700	TD	5.72 / 5.80	2.75 / 2.82	5	1.33	1.10
0800	T.D.	5.74 / 5.79	2.82 / 2.86	6	1.33	1.10
0900	T.D.	5.77 / 5.81	2.86 / 2.90	7	1.335	1.10
1000	T.D.	5.77 / 5.82	2.82 / 2.93	7	1.32	1.05
1100	TD	5.80 / 5.81	2.91 / 2.97	5	1.33	1.10
1200	T.D.	5.80 / 5.81	2.95 / 3.01	5	1.33	1.10
1300	T.D.	5.77 / 5.79	2.91 / 2.95	4	1.35	1.15
1400	T.D.	5.76 / 5.79	2.90 / 2.93	4	1.34	1.10
1500	T.D.	5.80 / 5.80	2.93 / 2.95	6	1.34	1.20
1600	TD	5.77 / 5.79	2.92 / 2.95	6	1.33	1.10
1700	T.D.	5.75 / 5.80	2.96 / 2.97	6	1.34	1.05
1800	LJA	5.82 / 5.82	3.14 / 3.14	7	1.33	1.20
1900	LJA	5.79 / 5.81	3.13 / 3.11	8	1.33	1.20
2000	LJA	5.82 / 5.84	3.20 / 3.17	8	1.32	1.20
2100	LJA	5.81 / 5.84	3.20 / 3.19	7	1.335	1.20
2200	MM	5.81 / 5.84	3.18 / 3.15	7	1.325	1.18
2300	MM	5.80 / 5.84	3.27 / 3.23	7	1.325	1.15



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8/11/95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% dose of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0800	MM	5.86/5.85	3.24/3.23	6	1.325	1.09
0900	MM	5.81/5.84	3.20/3.18	6	1.325	1.10
0200	MM	5.81/5.85	3.12/3.10	6	1.325	1.11
0300	MM	5.75/5.84	3.15/3.13	7	1.325	1.02
0400	MM	5.83/5.82	3.19/3.14	7	1.33	1.05
0500	MM	5.83/5.85	3.11/3.10	6	1.335	1.01
0600	van	5.83 5.84	3.10 3.09	6	1.345	1.10
0700	van	5.80 5.83	3.04 3.04	6	1.34	1.10
0800	van	5.79 5.84	3.03 3.03	6	1.34	1.08
0900	van	5.80 5.83	3.04 3.04	6	1.35	1.10
1000	van	5.84 5.86	3.08 3.07	6	1.35	1.05
1100	van	5.81 5.84	3.04 3.04	6	1.36	1.15
1200	van	5.83 5.84	3.07 3.05	5	1.37	1.15
1300	van	5.85 5.86	3.19 3.17	6	1.37	1.20
1400	van	5.83 5.87	3.24 3.21	6	1.37	1.20
1500	van	5.85 5.86	3.28 3.24	5	1.37	1.25
1600	van	5.83 5.84	3.21 3.18	5	1.375	1.25
1700	van	5.81 5.84	3.00 3.00	6	1.375	1.15
1800	R. Roach	5.81 5.84	2.98 2.96	6	1.023	1.25
1900	R. Roach	5.80 5.84	2.99 2.99	6	1.022	1.20
2000	R. Roach	5.81 5.86	3.85 3.75	6	1.022	1.20
2100	R. Roach	5.88 5.91	4.15 4.01	6	1.026	1.15
2200	R. Roach	5.91 5.94	4.43 4.24	5	1.024	1.15
2300	R. Roach	5.92 5.97	4.54 4.35	5	1.025	1.15

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8.12.95

TOWER: B

TIME	INITIALS	ABSORBER pB	QUENCHER pB	INJECTION RATE (% Rate of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	R. Rody	5.95 <del>5.98</del>	4.51 4.30	5	1.023	1.20
0100	R. Rody	5.93 <del>5.97</del>	3.63 3.56	5	1.023	1.20
0200	R. Rody	5.97 <del>5.98</del>	3.40 3.35	5	1.020	1.20
0300	R. Rody	5.92 <del>5.96</del>	3.13 3.12	5	1.020	1.10
0400	R. Rody	5.88 <del>5.95</del>	2.91 2.92	5	1.018	1.10
0500	R. Rody	5.87 <del>5.95</del>	2.78 2.81	5	1.016	1.0
0600	Wam	5.90 <del>5.97</del>	2.73 2.77	5	1.36	1.15
0700	Wam	5.89 <del>5.94</del>	2.69 2.73	6	1.36	1.10
0800	Wam	5.89 <del>5.94</del>	2.70 2.74	6	1.36	1.10
0900	Wam	5.89 <del>5.94</del>	2.69 2.73	6	1.35	1.20
1000	Wam	5.90 <del>5.93</del>	2.75 2.77	6	1.35	1.15
1100	Wam	5.89 <del>5.92</del>	2.71 2.75	6	1.35	1.10
1200	Wam	5.87 <del>5.91</del>	2.74 2.77	6	1.36	1.15
1300	Wam	5.82 <del>5.90</del>	2.69 2.69	6	1.36	1.20
1400	Wam	5.87 <del>5.90</del>	2.74 2.77	6	1.36	1.15
1500	Wam	5.87 <del>5.89</del>	2.75 2.78	6	1.37	1.20
1600	Wam	5.89 <del>5.90</del>	2.73 2.77	6	1.36	1.20
1700	Wam	5.84 <del>5.90</del>	3.05 3.05	6	1.36	1.20
1800	T.D.	5.82 <del>5.87</del>	2.71 2.73	6	1.34	1.15
1900	T.D.	5.81 <del>5.87</del>	2.67 2.71	6	1.345	1.15
2000	T.D.	5.85 <del>5.89</del>	2.70 2.73	7	1.35	1.20
2100	T.D.	5.83 <del>5.87</del>	2.72 2.74	7	1.35	1.15
2200	T.D.	5.82 <del>5.85</del>	2.73 2.77	7	1.34	1.10
2300	TD	5.83 <del>5.86</del>	2.75 2.78	7	1.34	1.10

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-12-95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	TD	5.82 / 5.37	2.71 / 2.74	7	1.34	1.10
0100	TD	5.79 / 5.34	2.68 / 2.73	7	1.33	1.05
0200	TD	5.82 / 5.19	2.45 / 3.40	8	1.33	1.25
0300	TD	5.84 / 5.92	3.62 / 3.59	8	1.33	1.10
0400	T.D.	5.33 / 5.93	3.33 / 3.72	8	1.33	1.05
0500	T.D.	5.91 / 5.34	3.64 / 3.51	6	1.33	1
0600	van	5.90 / 5.93	3.12 / 3.10	6	1.33	1.05
0700	van	5.84 / 5.93	2.75 / 2.80	6	1.33	1.05
0800	van	5.86 / 5.91	2.68 / 2.73	6	1.32	1.15
0900	van	5.82 / 5.89	2.64 / 2.70	7	1.32	1.10
1000	van	5.85 / 5.90	2.65 / 2.70	7	1.32	1.15
1100	van	5.84 / 5.89	2.63 / 2.69	8	1.33	1.15
1200	van	5.86 / 5.91	2.59 / 2.64	8	1.34	1.15
1300	van	5.85 / 5.88	2.60 / 2.66	8	1.335	1.15
1400	van	5.89 / 5.88	2.62 / 2.68	8	1.34	1.25
1500	van	5.84 / 5.86	2.64 / 2.68	8	1.35	1.25
1600	van	5.85 / 5.89	2.63 / 2.68	8	1.34	1.15
1700	van	5.80 / 5.85	2.62 / 2.67	8	1.35	1.20
1800	T.D.	5.72 / 5.84	2.60 / 2.64	8	1.34	1.10
1900	T.D.	5.79 / 5.87	3.12 / 3.11	9	1.345	1.15
2000	T.D.	5.76 / 5.92	3.73 / 3.67	9	1.35	1.15
2100	T.D.	5.90 / 5.9	3.32 / 3.71	9	1.35	1.20
2200	T.D.	5.91 / 5.94	3.76 / 3.74	8	1.345	1.15
2300	T.D.	6.29 / 5.97	3.81 / 3.74	8	1.34	1.15

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 2.14.95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% Rate of reagent feed value)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	6.21 / 6.0	3.73 / 3.73	7	1.34	1.10
0100	T.D.	5.97 / 5.99	3.77 / 3.64	7	1.345	1.10
0200	T.D.	6.01 / 5.99	3.15 / 3.13	7	1.34	1.10
0300	T.D.	5.93 / 5.97	2.72 / 2.75	7	1.33	1.15
0400	T.D.	5.88 / 5.94	2.62 / 2.67	7	1.335	1.15
0500	T.D.	5.85 / 5.92	2.55 / 2.60	7	1.33	1.10
0600	CS	5.76 / 5.91	2.47 / 2.53	7	1.33	1.15
0700	CS	5.75 / 5.90	2.45 / 2.52	7	1.33	1.15
0800	CS	5.77 / 5.92	2.40 / 2.48	7	1.33	1.15
0900	CS	5.72 / 5.87	2.31 / 2.42	8	1.32	1.20
1000	CS	5.78 / 5.88	2.30 / 2.40	8	1.33	1.20
1100	CS	5.77 / 5.88	2.31 / 2.40	8	1.34	1.20
1200	CS	5.79 / 5.88	2.30 / 2.40	8	1.34	1.20
1300	CS	5.74 / 5.86	2.27 / 2.38	8	1.33	1.20
1400	CS	5.80 / 5.90	3.31 / 3.28	8	1.34	1.20
1500	CS	5.81 / 5.89	3.23 / 3.20	8	1.35	1.15
1600	CS	5.91 / 5.92	3.73 / 3.65	8	1.34	1.25
1700	CS	5.83 / 5.90	3.70 / 3.63	8	1.35	1.20
1800	Van	5.91 / 5.90	3.66 / 3.57	8	1.345	1.25
1900	Van	5.82 / 5.90	3.55 / 3.47	8	1.35	1.25
2000	Van	5.80 / 5.89	3.51 / 3.45	8	1.35	1.25
2100	Van	5.80 / 5.87	3.48 / 3.42	8	1.35	1.30
2200	Van	5.80 / 5.88	3.45 / 3.39	8	1.35	1.25
2300	Van	5.82 / 5.87	3.44 / 3.40	8	1.35	1.20

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-15-95

TOWER: B

TIME	INITIALS	ABSORBER pB	QUENCHER pB	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	van	<del>5.81</del> 5.88	<del>3.40</del> 3.42	7	1.35	1.0 <del>0</del>
0100	van	<del>5.80</del> 5.86	<del>3.44</del> 3.39	8	1.35	1.25
0200	van	<del>5.84</del> 5.89	<del>3.45</del> 3.49	8	1.35	1.20
0300	van	<del>5.86</del> 5.93	<del>3.45</del> 3.40	8	1.35	1.20
0400	van	<del>5.89</del> 5.92	<del>3.48</del> 3.43	8	1.34	1.15
0500	van	<del>5.85</del> 5.88	<del>3.49</del> 3.43	8	1.34	1.10
0600	cs	<del>5.85</del> 5.88	<del>3.50</del> 3.44	8	1.33	1.10
0700	cs	<del>5.89</del> 5.90	<del>3.50</del> 3.45	8	1.33	1.10
0800	cs	<del>5.86</del> 5.88	<del>3.52</del> 3.46	6	1.34	1.10
0900	cs	<del>5.87</del> 5.89	<del>3.05</del> 3.06	8	1.34	1.20
1000	cs	<del>5.92</del> 5.87	<del>3.02</del> 3.01	8	1.34	1.15
1100	cs	<del>5.97</del> 5.86	<del>2.96</del> 2.99	8	1.34	1.15
1200	cs	<del>5.88</del> 5.87	<del>2.94</del> 3.00	9	1.34	1.15
1300	cs	<del>5.85</del> 5.86	<del>3.01</del> 3.06	8	1.33	1.15
1400	cs	<del>5.85</del> 5.86	<del>3.02</del> 3.08	8	1.33	1.20
1500	cs	<del>5.82</del> 5.82	<del>3.02</del> 3.07	8	1.34	1.15
1600	cs	<del>5.86</del> 5.84	<del>3.04</del> 3.08	9	1.33	1.20
1700	cs	<del>5.85</del> 5.84	<del>3.00</del> 3.12	9	1.34	1.20
1800	van	<del>5.81</del> 5.87	<del>3.24</del> 3.25	9	1.325	1.20
1900	van	<del>5.77</del> 5.84	<del>2.69</del> 2.76	9	1.33	1.20
2000	van	<del>5.88</del> 5.94	<del>3.05</del> 3.09	9	1.33	1.2 <del>0</del>
2100	van	<del>5.89</del> 5.86	<del>3.32</del> 3.31	9	1.325	1.15
2200	van	<del>5.96</del> 5.85	<del>3.32</del> 3.32	9	1.33	1.15
2300	van	<del>5.88</del> 5.86	<del>3.37</del> 3.36	9	1.33	1.15

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-16-95

TOWER: 8

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of response feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	van	<del>5.96</del> 5.87	<del>3.30</del> 3.30	9	1.33	1.20
0100	van	<del>5.83</del> 5.84	<del>3.29</del> 3.29	8	1.325	1.15
0200	van	<del>5.82</del> 5.84	<del>3.41</del> 3.39	9	1.31	1.20
0300	van	<del>5.84</del> 5.84	<del>3.33</del> 3.34	10	1.32	1.15
0400	van	<del>5.90</del> 5.88	<del>3.49</del> 3.46	10	1.32	1.15
0500	van	<del>5.72</del> 5.86	<del>2.84</del> 2.90	10	1.32	1.10
0600	cl	<del>5.82</del> 5.87	<del>3.37</del> 3.35	10	1.32	1.15
0700	cl	<del>5.82</del> 5.86	<del>3.51</del> 3.47	9	1.32	1.10
0800	cl	<del>5.84</del> 5.87	<del>3.50</del> 3.46	9	1.32	1.15
0900	cl	<del>5.83</del> 5.86	<del>3.50</del> 3.47	8	1.33	1.15
1000	cl	<del>5.84</del> 5.85	<del>3.50</del> 3.46	6	1.33	1.15
1100	cl	<del>5.77</del> 5.83	<del>3.48</del> 3.45	6	1.34	1.15
1200	cl	<del>5.78</del> 5.83	<del>3.49</del> 3.46	6	1.34	1.15
1300	cl	<del>5.78</del> 5.81	<del>3.37</del> 3.36	6	1.33	1.15
1400	cl	<del>5.78</del> 5.80	<del>3.41</del> 3.39	6	1.33	1.15
1500	cl	<del>5.85</del> 5.83	<del>3.48</del> 3.46	6	1.33	1.15
1600	cl	<del>5.79</del> 5.79	<del>3.36</del> 3.34	5	1.34	1.15
1700	cl	<del>5.80</del> 5.81	<del>3.39</del> 3.37	6	1.34	1.15
1800	van	<del>5.73</del> 5.78	<del>3.34</del> 3.34	7	1.34	1.20
1900	van	<del>5.80</del> 5.81	<del>3.73</del> 3.66	8	1.34	1.10
2000	van	<del>5.82</del> 5.83	<del>3.69</del> 3.65	8	1.33	1.15
2100	van	<del>5.84</del> 5.83	<del>3.46</del> 3.43	8	1.32	1.15
2200	van	<del>5.86</del> 5.84	<del>3.52</del> 3.49	9	1.32	1.20
2300	van	<del>5.84</del> 5.84	<del>3.47</del> 3.43	10	1.31	1.10

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8-17-95

TOWER: K

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of response fuel valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	van	5.85 5.84	3.48 3.44	14	1.31	1.15
0100	van	5.91 5.89	3.64 3.58	14	1.31	1.15
0200	van	5.93 5.87	3.57 3.53	10	1.31	1.10
0300	van	5.86 5.89	3.62 3.58	14	1.31	1.10
0400	van	5.90 5.91	3.65 3.59	11	1.31	1.00
0500	van	5.90 5.92	3.73 3.67	7	1.305	1.00
0600	CS	5.88 5.90	3.59 3.55	9	1.30	1.15
0700	CS	5.89 5.89	3.70 3.63	9	1.33	1.10
0800	CS	5.96 5.90	3.73 3.67	8	1.31	1.10
0900	CS	5.92 5.89	3.68 3.63	7	1.31	1.10
1000	CS	5.93 5.89	3.65 3.59	7	1.31	1.10
1100	CS	5.84 5.87	3.47 3.45	7	1.31	1.10
1200	CS	5.84 5.86	3.46 3.44	10	1.31	1.15
1300	CS	5.82 5.87	3.40 3.38	14	1.32	1.20
1400	CS	5.88 5.88	3.96 3.88	14	1.34	1.15
1500	CS	5.89 5.90	4.05 3.96	14	1.33	1.15
1600	CS	5.89 5.89	4.12 4.00	14	1.34	1.15
1700	CS	5.91 5.91	4.15 4.03	14	1.34	1.20
1800	T.D.	5.90 5.93	4.19 4.07	14	1.33	1.15
1900	T.D.	5.89 5.92	4.24 4.13	14	1.31	1.20
2000	T.D.	5.92 5.94	4.12 4.01	14	1.32	1.20
2100	T.D.	5.92 5.94	3.94 3.87	13	1.31	1.20
2200	T.D.	5.90 5.93	3.91 3.83	13	1.31	1.20
2300	T.D.	5.93 5.90	3.90 3.81	11	1.31	1.10

**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 8.18.95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	5.95 / 5.95	3.96 / 3.25	12	1.31	1.10
0100	T.D.	5.94 / 5.94	3.87 / 3.79	13	1.305	1.10
0200	T.D.	5.93 / 5.97	3.79 / 3.71	13	1.31	1.15
0300	T.D.	5.91 / 5.97	3.92 / 3.84	12	1.30	1.10
0400	T.D.	5.94 / 5.97	3.77 / 3.71	12	1.30	1.10
0500	T.D.	5.94 / 5.96	3.87 / 3.86	12	1.30	1.10
0600	RJA	5.94 / 5.95	3.78 / 3.71	12	1.29	1.10
0700	LJA	5.93 / 5.94	3.33 / 3.32	12	1.295	1.20
0800	LJA	5.97 / 5.96	3.80 / 3.72	12	1.29	1.20
0900	RJA	5.96 / 5.97	3.76 / 3.79	12	1.28	1.26
1000	LJA	5.91 / 5.94	3.78 / 3.72	14	1.28	1.20
1100	RJA	5.94 / 5.95	3.79 / 3.72	14	1.028	1.20
1200	RJA	5.94 / 5.96	3.84 / 3.76	14	1.295	1.20
1300	YJA	5.90 / 5.93	3.90 / 3.81	16	1.295	1.25
1400	YJA	5.95 / 5.94	3.92 / 3.84	16	1.29	1.25
1500	RJA	5.95 / 5.95	3.96 / 3.87	16	1.29	1.25
1600	RJA	5.96 / 5.96	4.04 / 3.94	17	1.29	1.25
1700	LJA	5.98 / 5.98	4.13 / 4.02	17	1.30	1.25
1800	T.D.	5.94 / 5.96	4.07 / 3.95	17	1.30	1.20
1900	T.D.	6.0 / 5.97	4.12 / 4.02	17	1.28	1.25
2000	T.D.	6.01 / 5.97	4.03 / 4.02	17	1.28	1.25
2100	T.D.	5.97 / 5.97	4.26 / 4.13	17	1.27	1.20
2200	T.D.	5.92 / 5.9	3.14 / 3.14	17	1.27	1.25
2300	T.D.	5.97 / 5.95	3.96 / 3.86	17	1.27	1.25



**ST. JOHNS RIVER POWER PARK**  
**PETROLEUM COKE/COAL TRIAL BURN**  
**BASELINE & BLEND OPERATIONAL DATA - AQCS**

DATE: 3.19.95

TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of range/ feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	5.97 / 5.96	4.08 / 3.94	17	1.27	1.20
0100	T.D.	6.05 / 5.99	4.16 / 4.03	18	1.27	1.25
0200	T.D.	6.0 / 5.98	3.99 / 3.88	17	1.26	1.25
0300	T.D.	5.98 / 5.99	4.05 / 3.94	19	1.265	1.20
0400	TD	5.98 / 5.97	4.12 / 4.0	19	1.27	1.25
0500	T.D.	5.99 / 5.99	4.22 / 4.08	19	1.27	1.25
0600	LJA	5.97 / 5.96	4.26 / 4.12	21	1.27	1.25
0700	LJA	5.96 / 5.96	3.33 / 3.31	21	1.26	1.25
0800	LJA	5.98 / 5.95	4.10 / 3.99	21	1.27	1.28
0900	LJA	6.02 / 5.97	4.26 / 4.14	21	1.27	1.25
1000	LJA	6.01 / 5.98	4.33 / 4.20	20	1.27	1.25
1100	DJA	5.98 / 5.99	4.35 / 4.22	20	1.275	1.25
1200	DJM	5.98 / 5.98	4.42 / 4.28	20	1.27	1.25
1300	DJA	5.96 / 5.96	4.34 / 4.21	20	1.27	1.25
1400	LJA	5.97 / 5.95	4.39 / 4.25	20	1.27	1.25
1500	LJA	5.96 / 5.94	4.33 / 4.19	20	1.29	1.20
1600	LJA	5.96 / 5.94	4.38 / 4.24	20	1.32	1.25
1700	LJA	5.97 / 5.96	4.45 / 4.31	20	1.30	1.25
1800	T.D.	6.06 / 6.00	4.45 / 4.39	21	1.29	1.20
1900	TD	6.00 / 6.02	4.69 / 4.50	21	1.29	1.20
2000	TD	6.07 / 6.06	3.51 / 3.49	9	1.29	1.10
2100	T.D.	6.05 / 6.06	3.10 / 3.13	7	1.29	1.10
2200	T.D.	6.08 / 6.07	4.13 / 4.04	7	1.29	1.10
2300	TD.	6.07 / 6.08	4.27 / 4.16	7	1.29	1.10

# ATTACHMENT H

SJRO LC 95 053

March 17, 1995



Mr. C.H. Fancy, P.E.  
Chief, Bureau of Air Regulation  
Florida Dept. of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: St. Johns River Power Park Unit #1  
Request to Fire a Blend of Petroleum Coke and Bituminous Coal  
Public Notice of Intent to Issue an Amendment

Dear Mr. Fancy:

A request to conduct tests for pollutant emissions while firing a blend of petroleum coke and bituminous coal at the above referenced facility was submitted to your agency on 12-20-94 with supplemental material submitted on 02-07-95. Your agency prepared a draft letter authorization and the "Public Notice Intent to Issue" which was received in our office 02-16-95.

A copy of the "Notice of Intent to Issue an Amendment" which was published in the Florida Times Union Friday, February 24, 1995 to commence the 14 day public comment period was submitted to your attention February 27, 1995. Pursuant to your request please find enclosed the "Affidavit of Publication" from the newspaper that published the notice, Florida Times Union.

Sincerely,

Jay Worley  
Environmental & Safety Manager

JAW/pct

xc: H. Oven, FDEP  
E. Frey, FDEP  
S. Pace, RESD  
R. Breitmoser, JEA

**FLORIDA PUBLISHING COMPANY**  
 Publisher  
 JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }  
 COUNTY OF DUVAL }

Before the undersigned authority personally appeared \_\_\_\_\_

Cappy MacPherson who on oath says that he is

Classified Adv Inside Sales REP of The Florida Times-Union,

a daily newspaper published at Jacksonville in Duval County, Florida; that the

attached copy of advertisement, being a \_\_\_\_\_ Legal Notice

in the matter of Notice of Intent to Issue an Amendment

in the \_\_\_\_\_ Court,

was published in THE FLORIDA TIMES-UNION in the issues of \_\_\_\_\_

February 24, 1995

Affiant further says that the said The Florida Times-Union is a newspaper published at Jacksonville, in said Duval County, Florida, and that the said newspaper has heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me  
 this 28 day of

February A.D. 19 95

*[Signature]*  
 Notary Public,  
 State of Florida at Large.

*[Signature]*  
 Cappy MacPherson

My Commission # 0022156 DTPRES  
 AUG 1, 1996  
 DA 444 BOKLED THRU TRY TRY INSURANCE, INC.

The applicant, St. Johns River Power Part. I, New Santa Road, Jacksonville, Florida 32224, advised a request on December 28, 1994, and submittal material on February 7, 1995, to the Department's Siting Coordination Section for authorization to conduct pollutant emissions tests on SJRPP's Unit #1 boiler which fires a blend of petroleum coke and coal. The performance tests pollutant emissions will be conducted at three conditions (firing 100% coal only) and three blends of petroleum coke and coal. Petroleum coke will be blended at a maximum of 25 percent weight, with coal during the first performance tests. SJRPP's Unit #1 was certified under Certification, No. PA 81-13, and Federal Permit No. PSD-FL-616, and is not currently permitted to fire petroleum coke in accordance with the referenced Site Certification and permit.

Screening for a modification and a determination of Prevention of Significant and/or Interference Area (NSA) requirements shall be in accordance with Chapter 40, Florida Statutes (F.S.); Florida Administrative Code (F.A.C.) Chapters 60-40 through 60-57 and 60-4; and, Title 49 of the Code of Federal Regulations (CFR); Parts 51, 60, 61 and 62 (July 1, 1990 version).

It, after the performance test results are evaluated by the Department's Site Certification Section an affected person (i.e., Duval County's Regulatory and Environmental Services Department, U.S. EPA, National Park Service, Department's Bureau of Air Regulation, and etc.) and it is determined that actual pollutant emissions (baseline of 100% coal vs. a blend of petroleum coke and coal) did not increase, the Department may issue a modification to the Site Certification, No. PA 81-13, and a amendment to the Federal Permit, No. PSD-FL-616(A), authorizing continuous utilization/firing of blend of petroleum coke and coal in the SJRPP Unit #1. However, if there is an actual emission increase in pollutant emissions, SJRPP will not be permitted to fire a blend of petroleum coke and coal in the emissions unit without further PSD and/or NSA evaluation by the Department's Site Certification Section and involved agencies/parties. The next permit project will occur at the applicant's facility located in Jacksonville, Duval County, Florida.

The Department has jurisdiction under Paragraph 40.33(4)(1), F.S. The project is not exempt from Site Certification procedures. The Department has determined that a Site Certification modification or amendment to the Federal Permit is required to make the proposed activity lawful. If SJRPP wishes to modify the Conditions of Certification and amend/modify the Federal Permit to a new use involving a blend of petroleum coke and coal in SJRPP's Unit #1 on a permanent basis, subsequent proceedings will be announced providing an opportunity for any affected person to object in the following manner:

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set out below and must be filed (received) in the Office of General Counsel of the Department at 2000 West Orange Road, Tallahassee, Florida 32309-9000, within fourteen (14) days of publication of this notice. The filer shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such party may have to request an administrative hearing (hearing) under Section 120.57 F.S.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Site Certification File Number or the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts alleged to be true;
- (e) A statement of facts which petitioner or petitioners request or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner or petitioners believe require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief requested by petitioner or petitioners, including the action petitioner or petitioners seek with respect to the Department's action or proposed action.

Department of Environmental Protection  
 Bureau of Air Regulation  
 111 South Meacham Drive  
 Tallahassee, Florida 32309  
 Duval County Regulatory and  
 Environmental Services Department  
 21 West Church Street, Suite 201  
 Jacksonville, Florida 32204

# ATTACHMENT I

**CERTIFIED MAIL**



**SJRO LC 95 137**

**August 21, 1995**

**Mr. Steve Pace  
RESO  
421 West Church Street  
Jacksonville, Florida 32202**

**RE: Site Certification No. PA 81-13  
St. Johns River Power Park (SJRPP) Unit 1  
Notification of Petroleum Coke/Coal Test Run Completion**

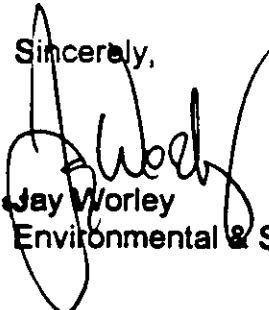
**Dear Mr. Pace:**

**The above referenced facility was authorized by the Florida Department of Environmental Protection's March 30, 1995 letter to test burn a blend of petroleum coke with coal. Condition #18 require that "The Duval County's R&ESD office shall be notified, in writing on the date of the last test run completion".**

**The petroleum coke/coal blend test burn was completed on August 19, 1995. Stack testing was conducted throughout the test burn and completed on this date.**

**Please contact me at (904) 751-7729 if you have any questions.**

**Sincerely,**

  
**Jay Worley  
Environmental & Safety Manager**

**JW/sj**

**xc: C. Fancy, FDEP  
H. Oven, FDEP  
R. Breitmoser, JEA  
S. Serrian**

# ATTACHMENT J

**REGULATORY & ENVIRONMENTAL  
SERVICES DEPARTMENT**  
Air Quality Division

June 22, 1995



Mr. Jay Worley  
Environmental & Safety Manager  
St. Johns River Power Park (SJRPP)  
11201 New Berlin Road  
Jacksonville, Florida 32226

**RE: Request for Approval - Pollutants & Testing Methodology  
Unit #1 Test Burn Using Petroleum Coke with Coal  
Site Certification No. PA 81-13  
SJRPP Correspondence of June 14, 1995**

Dear Mr. Worley:

This is to acknowledge receipt and review of the above captioned SJRPP correspondence, submitted June 15, 1995.

Regulatory & Environmental Services Department (RES D) agrees that the use of EPA Reference Test Methods 5B, 10, and 8 for the testing of particulate matter, carbon monoxide, and sulfuric acid mist, respectively, during the above referenced test burn, satisfies Condition No. 20 of the Site Certification.

If there are any questions concerning this matter, please contact me at (904) 630-3484.

Very truly yours,

Robert S. Pace, P.E.  
Division Chief

RSP/WLW/be

c: AQD File 1710 B  
Wayne Walker, AQD



421 West Church Street - Suite 412  
Jacksonville, Florida 32202-4111

Area Code 904/630-3484



**CERTIFIED MAIL**



SJRO LC 95 094

June 14, 1995

Mr. Steve Pace  
RESO  
421 W. Church St.  
Jacksonville, FL 32202

RE: Site Certification No. PA 81-13  
St. Johns River Power Park (SJRPP) Unit 1  
Authorization of Test Burn Using Petroleum Coke with Coal  
Request for Approval - Pollutants & Testing Methodology

Dear Mr. Pace:

The above referenced facility was authorized by your agency's March 30, 1995, letter to test burn a blend of petroleum coke with coal (Attachment A). Condition #20 requires "Prior written approval of the pollutants to be tested for and the appropriate test methods are mandatory prior to commencement of testing. The proposal shall be submitted to the Site Certification Office, the Department's BAR office and the Duval County's RESD office for approval."

Pursuant to Condition #7, stack tests shall be conducted for the pollutants particulate matter, carbon monoxide and sulfuric acid mist. The following are the EPA Reference methodologies which are contained in 40 CFR 60 that shall be conducted:

- |    |                    |   |               |
|----|--------------------|---|---------------|
| 1) | Particulate matter | - | EPA Method 5B |
| 2) | Carbon Monoxide    | - | EPA Method 10 |
| 3) | Sulfuric Acid Mist | - | EPA Method 8  |

Conditions #3 and #4 specifies that as-burned fuel samples shall be collected and analyzed for sulfur, nitrogen and metals. The baseline coal and pet coke/coal blend shall be sampled from the sampling building loading belt transfer to the Unit 1 to analyze the parameters in accordance with the following methods:

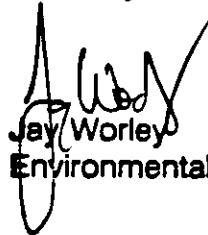
SJRO LC 95 092  
Page 2

- |    |           |                        |
|----|-----------|------------------------|
| 1) | Sulfur    | ASTM D 4239 Method "C" |
| 2) | Nitrogen  | ASTM D 5373            |
| 3) | Chromium  | ASTM D 3683            |
| 4) | Lead      | ASTM D 3683            |
| 5) | Mercury   | ASTM D 3684            |
| 6) | Nickel    | ASTM D 3683            |
| 7) | Beryllium | ASTM D 3683            |
| 8) | Vanadium  | ASTM D 3683            |
| 9) | Zinc      | ASTM D 3683            |

The testing is scheduled to commence July 11, 1995 for the baseline. Your expeditious review and response are appreciated.

Please contact me at (904) 751-7729 if you have any questions.

Sincerely,



Jay Worley  
Environmental & Safety Manager

JAW/pct

cc: R. Breitmoser