Department of Environmental Protection

Sealed

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form provides general information on the scope of this application, the purpose for which this application is being submitted, and the nature of any construction or modification activities proposed as a part of this application. This section also includes information on the owner of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department on diskette, this section of the Application for Air Permit must also be submitted in hard-copy form.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility name, if any; and a brief reference to the facility's physical location. If known, also enter the ARMS or AIRS facility identification number. This information is intended to give a quick reference, on the first page of the application form, to the facility addressed in this application. Elsewhere in the form, numbered data fields are provided for entry of the facility data in computer-input format.

St. Johns River Power Park (SJRPP); Units 1 and 2

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Richard Breitmoser, P.E., Vice Pres. Eniv., Health & Safety

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: **JEA/St. Johns River Power Park**
Street Address: **21 West Church Street**
City: **Jacksonville** State: **FL** Zip Code: **32202-3139**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: **(904) 632-6245** Fax: **(904) 632-7376**

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted source.*

Signature Date 3/1/96

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility (or Title V source). An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID / Description of Emissions Unit

Unit #	ARMS ID	Emissions Unit Name/Description
1		SJRPP Unit 1
2		SJRPP Unit 2

See individual Emissions Unit sections for more detailed Emissions Unit descriptions. Multiple ARMS IDs are indicated with an asterisk (*)

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit to be renewed: _____

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

_____

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category II: All Air Construction Permit Applications Subject to Processing Under Rule 62-210.300(2)(b),F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): _____

_____

[ ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g.; to address one or more newly constructed or modified emissions units.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units.

This Application for Air Permit is submitted to obtain:

[X] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: _____

PA 81-13(PPSA); PSD-FL-010

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): _____

_____

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one:

[ ] Attached - Amount: $ _____ [x] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations: **See Attachment 1; Air permit fee not applicable pursuant to PPSA modification request.**
2. Projected or Actual Date of Commencement of Construction (DD-MON-YYYY):
3. Projected Date of Completion of Construction (DD-MON-YYYY):

Professional Engineer Certification

1. Professional Engineer Name: **Kennard F. Kosky**
   Registration Number: **14996**

2. Professional Engineer Mailing Address:
   Organization/Firm: **KBN Eng. and Applied Sciences, Inc.**
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653-1500**

3. Professional Engineer Telephone Numbers:
   Telephone: **(352) 336-5600** Fax: **(352) 336-6603**

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance (a) that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; or (b) for any application for a Title V source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application; and

(3) For any application for an air construction permit for one or more proposed new or modified emissions units, the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

Signature (seal) Date: 2/27/96

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact:

   Richard Breitmoser, Vice Pres. Env., Safety & Health

2. Application Contact Mailing Address:

   Organization/Firm: **JEA/St. Johns River Power Park**
   Street Address: **21 West Church Street**
   City: **Jacksonville** State: **FL** Zip Code: **32202-3139**

3. Application Contact Telephone Numbers:

   Telephone: **(904) 632-6248** Fax: **(904) 632-7376**

Application Comment

This application is for the co-firing of petroleum coke, up to 20 percent, with coal in Units 1 and 2. The proposed emission limits for sulfur dioxide will not result in a significant net increase in emissions and therefore, the requested co-firing will not be a major modification under the department's rules in 62-212. Emissions of other pollutants will also not increase significantly from actual levels.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Name, Location, and Type

1. Facility Owner or Operator: **Jacksonville Electric Authority**

2. Facility Name: **St. Johns River Power Park**

3. Facility Identification Number: [X] Unknown

4. Facility Location Information:
   Facility Street Address: **11201 New Berlin Road**
   City: **Jacksonville** County: **Duval** Zip Code: **32226**

5. Facility UTM Coordinates:
   Zone: **17** East (km): **446.9** North (km): **3366.3**

6. Facility Latitude/Longitude:
   Latitude (DD/MM/SS): / / Longitude: (DD/MM/SS): / /

7. Governmental Facility Code:	8. Facility Status Code:	9. Relocatable Facility?	10. Facility Major Group SIC Code:
4	**A**	[ ] Yes [X] No	**49**

11. Facility Comment:
Facility is authorized to operate under Power Plant Site Certification PA-81-13.

Facility Contact

1. Name and Title of Facility Contact:
   Jay Worley, Dir. of Environmental and Safety

2. Facility Contact Mailing Address:
   Organization/Firm: **St. Johns River Power Park**
   Street Address: **11201 New Berlin Road**
   City: **Jacksonville** State: **FL** Zip Code: **32226**

3. Facility Contact Telephone Numbers:
   Telephone: **(904) 751-7729** Fax: **(904) 751-7719**

Facility Regulatory Classifications

1. Small Business Stationary Source?	[ ] Yes [x] No [ ] Unknown
2. Title V Source?	[x] Yes [ ] No
3. Synthetic Non-Title V Source?	[ ] Yes, [x] No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	[x] Yes [ ] No
5. Synthetic Minor Source of Pollutants Other than HAPs?	[ ] Yes [x] No
6. Major Source of HAPs?	[ ] Yes [ ] No [x] Possible
7. Synthetic Minor Source of HAPs?	[ ] Yes [x] No
8. One or More Emissions Units Subject to NSPS?	[x] Yes [ ] No
9. One or More Emissions Units Subject to NESHAP?	[ ] Yes [x] No
10. Title V Source by EPA Designation?	[ ] Yes [x] No
11. Facility Regulatory Classifications Comment: **HAP emissions are not expected to change as a result of co-firing petroleum coke and coal. The emission units are subject to NSPS codified under 40 CFR Part 60 Subpart Da. Facility information is not affected by co-firing petroleum coke and coal.**	

B. FACILITY REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of federal, state, and local regulations applicable to the facility as a whole. (Regulations applicable to individual emissions units within the facility are addressed in Subsection III-B of the form.)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

Not Applicable - Facility wide regulations not affected by co-firing petroleum coke and coal.

C. FACILITY POLLUTANT INFORMATION

This subsection of the Application for Air Permit form allows for the reporting of potential and estimated emissions of selected pollutants on a facility-wide basis. It must be completed for each pollutant for which the applicant proposes to establish a facility-wide emissions cap and for each pollutant for which emissions are not reported at the emissions-unit level.

Facility Pollutant Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

Facility Pollutant Information Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

Facility Pollutant Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

Facility Pollutant Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

D. FACILITY SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the facility as a whole. (Supplemental information related to individual emissions units within the facility is provided in Subsection III-I of the form.) Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location:
   [ ] Attached, Document ID: _____
   [X] Not Applicable [ ] Waiver Requested

2. Facility Plot Plan:
   [ ] Attached, Document ID: _____
   [X] Not Applicable [ ] Waiver Requested

3. Process Flow Diagram(s):
   [ ] Attached, Document ID(s): _____
   [X] Not Applicable [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

5. Fugitive Emissions Identification:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

6. Supplemental Information for Construction Permit Application:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

7. List of Insignificant Activities:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

8. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID: _____
   [ ] Equipment/Activities Onsite but Not Required to be Individually Listed
   [X] Not Applicable

9. Alternative Methods of Operation:
   [X] Attached, Document ID: **Attachment 1**
   [ ] Not Applicable

10. Alternative Modes of Operation (Emissions Trading):
   [ ] Attached, Document ID: _____
   [X] Not Applicable

11. Enhanced Monitoring Plan:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

12. Risk Management Plan Verification:

   [ ] Plan Submitted to Implementing Agency - Verification Attached
   Attached, Document ID: _____

   [ ] Plan to be Submitted to Implementing Agency by Required Date

   [X] Not Applicable

13. Compliance Report and Plan
   [ ] Attached, Document ID: _____
   [X] Not Applicable

14. Compliance Statement (Hard-copy Required)
   [ ] Attached, Document ID: _____
   [X] Not Applicable

Emissions Unit Information Section 1 of 2

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit..

Type of Emissions Unit Addressed in This Section

Check one:

[X] This Emissions Unit information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section:

   SJRPP Unit 1

2. ARMS Identification Number: [ ] No Corresponding ID [ ] Unknown

3. Emissions Unit Status Code:	4. Acid Rain Unit?	5. Emissions Unit Major Group SIC Code:
A	[X] Yes [ ] No	49

6. Initial Startup Date (DD-MON-YYYY): 15 Dec 1986

7. Long-term Reserve Shutdown Date (DD-MON-YYYY):

8. Package Unit:
   Manufacturer: Model Number:

9. Generator Nameplate Rating: 680 MW

10. Incinerator Information:

    Dwell Temperature: °F
    Dwell Time: seconds
    Incinerator Afterburner Temperature: °F

11. Emissions Unit Comment:

    Generator Nameplate Rating: 679.6 MW. Generator nameplate rating is maximum. Initial start-up date is initial synchronization (generator) date.

Emissions Unit Control Equipment Information

A.

1. Description:

Electrostatic precipitator

2. Control Device or Method Code: **10**

B.

1. Description:

Flue Gas Desulfurization System. Wet Limestone Scrubbing

2. Control Device or Method Code: **67**

C.

1. Description:

Modified Furnance and Low-NOx Burners

2. Control Device or Method Code: **24**

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **6,144** mmBtu/hr
2. Maximum Incineration Rate: lbs/hr tons/day
3. Maximum Process or Throughput Rate:
4. Maximum Production Rate:
5. Operating Capacity Comment: **The co-firing of petroleum coke and coal will not change the operating capacity of the emission unit. Maximum heat input limited by specific condition of site certification.**

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule: hours/day, days/week, weeks/yr **8,760** hours/yr

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 60 Subpart Da
40 CFR Part 72 (as applicable)
40 CFR Part 73 (as applicable)
40 CFR Part 75 (as applicable)
62-210.700(1)
62-296.405(2)(a)
62-296.405(2)(b)
62-296.405(2)(c)
62-296.800(2)(a)2
62-296.800(3)
62-296.800(4)(a)
62-296.800(4)(b)
62-296.800(4)(e)
62-297.310
62-297.330
62-297.340
62-297.345(1)
62-297.345(3)
62-297.350
62-297.400
62-297.401(1)
62-297.401(17)
62-297.401(19)
62-297.401(2)
62-297.401(3)
62-297.401(4)
62-297.401(5)
62-297.401(6)
62-297.401(7)
62-297.401(9)

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:

   Not Applicable

2. Emission Point Type Code:

   [x] 1 [ ] 2 [ ] 3 [ ] 4

3. Descriptions of Emissions Points Comprising this Emissions Unit:

   Unit 1 Stack

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code:

   [ ] D [ ] F [ ] H [ ] P
   [ ] R [x] V [ ] W

6. Stack Height:	640	ft
7. Exit Diameter:	22.3	ft
8. Exit Temperature:	160	°F
9. Actual Volumetric Flow Rate:	2,230,000	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		ft

13. Emission Point UTM Coordinates:

Zone: 17 East (km): 446.9 North (km): 3366.3

14. Emission Point Comment:

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate Information: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Coal**	
2. Source Classification Code (SCC): **1-01-001-01**	
3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **253.9**	5. Maximum Annual Rate: **2,224,200**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **4**	8. Maximum Percent Ash: **18**
9. Million Btu per SCC Unit: **24**	
10. Segment Comment: **Maximum hourly and annual rates calculated based on typical heat content of coal (i.e., 12,100 Btu/lb) and 6,144 MMBtu/hr maximum heat input. Maximum percent sulfur based on permit limit. Million BTU per SCC Unit is 24.2.**	

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Coal and Petroleum Coke (Heat Input Basis)**	
2. Source Classification Code (SCC): **1-01-001-04**	
3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **244.6**	5. Maximum Annual Rate: **2,142,700**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **4.34**	8. Maximum Percent Ash: **18**
9. Million Btu per SCC Unit: **25**	
10. Segment Comment: **Maximum hourly and annual rate based on maximum percentage of petroleum coke when co-firing (i.e., 20%). Heat content and sulfur content of petroleum coke based on typical values of 29.6 MMBtu/ton and 6% sulfur. (See Segment 1 of 2 for coal values). Maximum Percent Ash: <18. Million Btu per SCC Unit: 25.12.**	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: **95** %
3. Primary Control Device Code: **067**
4. Secondary Control Device Code:
5. Potential Emissions: **491.5** lbs/hr **2,153** tons/yr
6. Synthetically Limited? [ ] Yes [**X**] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **0.4 lb/MMBtu** Reference: **See Comment**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **6,144 MMBtu/hr x 0.20 lb petcoke/lb coal x 0.4 lb/MMBtu = 491.5 lb/hr**
11. Pollutant Potential/Estimated Emissions Comment: **Emission Factor Reference: Proposed Emission Limit for Petroleum Coke only. Potential emissions for petroleum coke only and based on assuring no increase in 'actual emissions' based on the definition in 62-212.200 (See Attachment 1).**

Emissions Unit Information Section 1 of 2

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: RULE	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.4 lb/MMBtu	
4. Equivalent Allowable Emissions: 491.5 lbs/hr	2,153 tons/yr
5. Method of Compliance: CEMS	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Proposed emission limit for petroleum coke only. See Attachment 1.	

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitations: Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment: **Proposed co-firing will not affect visible emission limits for the unit.**

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment:

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment:

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System Continuous Monitor _____ of _____

1. Parameter Code:
2. CMS Requirement: [ ] Rule [ ] Other
3. Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4. Installation Date (DD-MON-YYYY):
5. Performance Specification Test Date (DD-MON-YYYY):
6. Continuous Monitor Comment: **Proposed co-firing will not affect CEMS requirements. CEMS meet requirements of 40 CFR Part 60 Subpart Da and 40 CFR Part 75. The Part 75 monitoring has previously been submitted to the Department.**

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review persuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissons Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[x] C	[ ] E	[ ] Unknown
	SO_2	[x] C	[ ] E	[ ] Unknown
	NO_2	[ ] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lbs/hr		tons/yr
	SO_2	lbs/hr		tons/yr
	NO_2		**16,146**	tons/yr
5.	PSD Comment:			
	Proposed emission limits for SO2 and proposed conditions for other pollutants will not trigger PSD applicability for co-firing. See Attachment 1.			

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[X] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[X] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[X] Attached, Document ID: **Attachment 1**	[ ] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation [x] Attached, Document ID: **Attachment 1** [ ] Not Applicable
11.	Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID: _____ [x] Not Applicable
12.	Enhanced Monitoring Plan [ ] Attached, Document ID: _____ [x] Not Applicable
13.	Identification of Additional Applicable Requirements [ ] Attached, Document ID: _____ [x] Not Applicable
14.	Acid Rain Permit Application [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [x] Not Applicable

Emissions Unit Information Section 2 of 2

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit..

Type of Emissions Unit Addressed in This Section

Check one:

[X] This Emissions Unit information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section:

   SJRPP Unit 2

2. ARMS Identification Number: [ ] No Corresponding ID [ ] Unknown

3. Emissions Unit Status Code:	4. Acid Rain Unit?	5. Emissions Unit Major Group SIC Code:
A	[x] Yes [ ] No	49

6. Initial Startup Date (DD-MON-YYYY):
   24 Mar 1988

7. Long-term Reserve Shutdown Date (DD-MON-YYYY):

8. Package Unit:
   Manufacturer: Model Number:

9. Generator Nameplate Rating: 680 MW

10. Incinerator Information:

    Dwell Temperature: °F
    Dwell Time: seconds
    Incinerator Afterburner Temperature: °F

11. Emissions Unit Comment:

    Generator Nameplate Rating: 679.6 MW. Generator nameplate rating is maximum. Initial start-up date is initial synchronization (generator) date.

Emissions Unit Control Equipment Information

A.

1. Description:

Electrostatic precipitator

2. Control Device or Method Code: **10**

B.

1. Description:

Flue Gas Desulfurization System. Wet Limestone Scrubbing

2. Control Device or Method Code: **67**

C.

1. Description:

Modified Furnance and Low-NOx Burners

2. Control Device or Method Code: **24**

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **6,144** mmBtu/hr
2. Maximum Incineration Rate: lbs/hr tons/day
3. Maximum Process or Throughput Rate:
4. Maximum Production Rate:
5. Operating Capacity Comment: **The co-firing of petroleum coke and coal will not change the operating capacity of the emission unit. Maximum heat input limited by specific condition of site certification.**

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule: hours/day, days/week, weeks/yr **8,760** hours/yr

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 60 Subpart Da
40 CFR Part 72 (as applicable)
40 CFR Part 73 (as applicable)
40 CFR Part 75 (as applicable)
62-210.700(1)
62-296.405(2)(a)
62-296.405(2)(b)
62-296.405(2)(c)
62-296.800(2)(a)2
62-296.800(3)
62-296.800(4)(a)
62-296.800(4)(b)
62-296.800(4)(e)
62-297.310
62-297.330
62-297.340
62-297.345(1)
62-297.345(3)
62-297.350
62-297.400
62-297.401(1)
62-297.401(17)
62-297.401(19)
62-297.401(2)
62-297.401(3)
62-297.401(4)
62-297.401(5)
62-297.401(6)
62-297.401(7)
62-297.401(9)

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:

   Not Applicable

2. Emission Point Type Code:

   [x] 1 [ ] 2 [ ] 3 [ ] 4

3. Descriptions of Emissions Points Comprising this Emissions Unit:

   Unit 2 Stack

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code:

   [ ] D [ ] F [ ] H [ ] P
   [ ] R [x] V [ ] W

6. Stack Height:	640	ft
7. Exit Diameter:	22.3	ft
8. Exit Temperature:	160	°F
9. Actual Volumetric Flow Rate:	2,230,000	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		ft

13. Emission Point UTM Coordinates:

Zone: 17 East (km): 446.9 North (km): 3366.3

14. Emission Point Comment:

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate Information: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Coal**	
2. Source Classification Code (SCC): **1-01-001-01**	
3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **253.9**	5. Maximum Annual Rate: **2,224,200**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **4**	8. Maximum Percent Ash: **18**
9. Million Btu per SCC Unit:	
10. Segment Comment: **Maximum hourly and annual rates calculated based on typical heat content of coal (i.e., 12,100 Btu/lb) and 6,144 MMBtu/hr maximum heat input. Maximum percent sulfur based on permit limit. Million Btu per SCC Unit is 24.2.**	

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Coal and Petroleum Coke (Heat Input Basis)**	
2. Source Classification Code (SCC): **1-01-001-04**	
3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **244.6**	5. Maximum Annual Rate: **2,142,700**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **4.34**	8. Maximum Percent Ash: **18**
9. Million Btu per SCC Unit: **25**	
10. Segment Comment: **Maximum hourly and annual rate based on maximum percentage of petroleum coke when co-firing (i.e., 20%). Heat content and sulfur content of petroleum coke based on typical values of 29.6 MMBtu/ton and 6% sulfur. (See Segment 1 of 2 for coal values). Maximum Percent Ash: <18. Million Btu per SCC Unit: 25.12.**	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: **95** %
3. Primary Control Device Code: **067**
4. Secondary Control Device Code:
5. Potential Emissions: **491.5** lbs/hr **2,153** tons/yr
6. Synthetically Limited? [ ] Yes [**X**] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **0.4 lb/MMBtu** Reference: **See Comment**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **6,144 MMBtu/hr x 0.20 lb petcoke/lb coal x 0.4 lb/MMBtu = 491.5 lb/hr**
11. Pollutant Potential/Estimated Emissions Comment: **Emission Factor Reference: Proposed Emission Limit for Petroleum Coke only. Potential emissions for petroleum coke only and based on assuring no increase in 'actual emissions' based on the definition in 62-212.200 (See Attachment 1).**

Emissions Unit Information Section 2 **of** 2

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: RULE	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.4 lb/MMBtu	
4. Equivalent Allowable Emissions:	491.5 lbs/hr 2,153 tons/yr
5. Method of Compliance: CEMS	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Proposed emission limit for petroleum coke only. See Attachment 1.	

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	lbs/hr tons/yr
5. Method of Compliance:	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitations: Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment: **Proposed co-firing will not affect visible emission limits for the unit.**

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment:

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment:

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System Continuous Monitor _____ of _____

1. Parameter Code:
2. CMS Requirement: [ ] Rule [ ] Other
3. Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4. Installation Date (DD-MON-YYYY):
5. Performance Specification Test Date (DD-MON-YYYY):
6. Continuous Monitor Comment: **Proposed co-firing will not affect CEMS requirements. CEMS meet requirements of 40 CFR Part 60 Subpart Da and 40 CFR Part 75. The Part 75 monitoring plan has been previously submitted to the Department.**

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review persuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissons Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [x] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[X] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[X] C	[ ] E	[ ] Unknown
	SO_2	[X] C	[ ] E	[ ] Unknown
	NO_2	[ ] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lbs/hr		tons/yr
	SO_2	lbs/hr		tons/yr
	NO_2		**16,146**	tons/yr
5.	PSD Comment:			
	Proposed emission limits for SO2 and proposed conditions for other pollutants will not trigger PSD applicability for co-firing. See Attachment 1.			

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[ ] Attached, Document ID: _____	
	[x] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[ ] Attached, Document ID: _____	
	[x] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[x] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[x] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[x] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[x] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[x] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[x] Attached, Document ID: **Attachment 1**	[ ] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[x] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation

[x] Attached, Document ID: Attachment 1 [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)

[ ] Attached, Document ID: _____ [x] Not Applicable

12. Enhanced Monitoring Plan

[ ] Attached, Document ID: _____ [x] Not Applicable

13. Identification of Additional Applicable Requirements

[ ] Attached, Document ID: _____ [x] Not Applicable

14. Acid Rain Permit Application

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: _____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: _____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: _____

[x] Not Applicable

ATTACHMENT 1

ATTACHMENT 1

1.0 PROJECT DESCRIPTION

The St. Johns River Power Park (SJRPP) proposes to co-fire a mixture of up to 20 percent petroleum coke with coal in a manner that would ensure that there is not a significant net increase in actual emissions of any regulated pollutant and, therefore, the Prevention of Significant Deterioration (PSD) Rules in 62-212.400, Florida Administrative Code (F.A.C.) would not apply. This would be accomplished through a limitation on sulfur dioxide (SO_2) emissions when co-firing petroleum coke that includes both an emission limit and a percent SO_2 reduction requirement. In addition, SJRPP proposes to accept a condition for carbon monoxide (CO) that would demonstrate that an net significant emission increase would not occur.

This permit application is associated with a modification request of the site certification for the units (PA 81-13). Approval from the FDEP is being sought to use up to 20 percent (heat input basis) of petroleum coke with coal. No new facilities or equipment are required to burn petroleum coke. Minor amendments to PSD permit are required. There will be no substantial changes made in the fuel handling facilities or the emission units to accommodate co-firing of petroleum coke. A temporary hopper and conveyor will be used to load petroleum coke with coal on the reclaim conveyor prior to transporting to the crusher house. From the crusher house, the blended fuel will be conveyed to the coal storage silos. Petroleum coke can be co-fired with coal as soon as approval is obtained from FDEP and it is received in the coal yard.

2.0 TRIAL BURN TEST RESULTS

A trial test burn for co-firing petroleum coke and coal was authorized by the Florida Department of Environmental Protection (FDEP) and conducted August 8-19, 1995. A copy of the trial test burn results is attached. A summary of the trial test burn results and a statistical comparison of the baseline tests (coal only) and co-firing petroleum coke and coal are presented in Table 1. A statistical analysis was performed using Appendix C to Part 60 (of 40 CFR).

The results of the trial test burn and the statistical analysis indicate that there are no emission rate increases for particulate matter or nitrogen oxides. The emission rates of sulfur dioxide, sulfuric acid mist, and CO were lower in the baseline tests than in the tests performed while the unit was co-firing petroleum coke and coal. The remainder of this attachment discusses these pollutants.

2.1 SULFUR DIOXIDE

A federally enforceable permit condition is proposed that prevents PSD applicability by preventing actual SO_2 emissions associated with the petroleum coke fraction of the blended fuel from exceeding past actual SO_2 emissions associated with burning coal. In this manner, there will be no prospective increase in SO_2 emissions caused by the proposed change (i.e., utilization of petroleum coke). Pursuant to EPA's June 21, 1992, WEPCO regulations (57 Federal Register 32314), increases in air emissions not caused by proposed changes must be excluded from steam electric power plants' future actual emissions in assessing PSD applicability. EPA emphasized in the preamble statement that new source review "applies only where the emissions increase is cause by the change" [57 Federal Register 32325]. The approach comports with the WEPCO regulations and corresponding state rules by eliminating the possibility that the petroleum coke portion of prospective fuel blends will exceed "past actual" SO_2 emissions associated with coal burning. Consistent with the WEPCO regulations, future increases in SO_2 emissions caused solely by enhanced electricity demand or caused by permissible variations in coal sulfur content should not count toward PSD applicability.

The emission limitation has the following components:

a. When blends of petroleum coke and coal with a sulfur content of up to or equal to 2 percent are fired in Units 1 or 2, the SO_2 emissions shall not exceed 0.56 pound per million British thermal units (lb/MMBtu) and a minimum of 75 percent reduction in the flue gas desulfurization system.

b. When co-firing petroleum coke with coals having a sulfur content between 2 and 3.63 percent, the emission limitation shall be based on the following formula:

SO_2 emission limit (lb/MMBtu) = (0.2 x C/100) + 0.4
where: C = percent of coal co-fired on a heat input basis (e.g., 80 percent)

c. When coals with a sulfur content greater than 3.63 percent are co-fired with petroleum coke, the SO_2 emissions shall not exceed the following formula:

SO_2 emission limit (lb/MMBtu) = (0.1653 x C x S - 0.4 x C + 40) x 1/100
where: C = percent of coal co-fired on a heat input basis

where: C = percent of coal co-fired on a heat input basis

d. The maximum SO_2 emission rate when firing petroleum coke and coal shall not exceed 0.688 lb/MMBtu.

e. Compliance with the SO_2 emissions limit shall be based on a 30-day rolling average for those days when petroleum coke is fired. Any use of petroleum coke during a 24-hour period shall be considered 1 day of the 30-day rolling average. The 30-day rolling average shall be calculated according to the New Source Performance Standards (NSPS) codified in 40 CFR Part 60 Subpart Da, except as noted above.

The proposed emission limits for SO_2 were developed from the two fundamental requirements of the PSD approval and the specific conditions of the site certification and to assure no net increase in annual emissions. The PSD approval and site certification require that the NSPS Subpart Da be met and that emissions do not exceed 0.76 lb/MMBtu (30-day rolling average). The emission limits proposed for co-firing are supported by the following rationale:

1. The NSPS codified in 40 CFR Part 60 Subpart Da requires, in the range of coals to be fired, either 0.6 lb/MMBtu or a 70 percent reduction in the potential SO_2 combustion concentration. For coals with a sulfur content greater than 1.2 percent, the 0.6 lb/MMBtu emission limit would govern. For coals with sulfur contents of 1.2 percent or less, the 70 percent reduction requirement would govern. This is illustrated in the attached Table 2 which presents in the sixth and seventh columns the NSPS emission limit and the percent SO_2 removals as a function of the coal sulfur content (first column). In terms of practical application, under Subpart Da: (1) when the inlet air to the scrubber has SO_2 concentrations under 2.0 lb/MMBtu, 70 percent SO_2 reduction is required; (2) when the inlet SO_2 concentration is higher than 2.0 but less than 6.0 lb/MMBtu, required SO_2 scrubbing must result in emissions of 0.6 lb/MMBtu or less; (3) at higher concentrations, 90 percent removal is required. It should be noted that the facility has a 0.76 lb SO_2/MMBtu emission limit established as BACT for coal firing. The proposed emission limit for co-firing petroleum coke and coal could not exceed this limit, since this is inherent in the proposed limit.
2. The representative actual annual SO_2 emission rate for Units 1 and 2 over the last 2 years has been 0.4 lb/MMBtu. By ensuring that the emission rate when firing

petroleum coke does not exceed 0.4 lb/MMBtu, the "representative actual annual emissions" as defined in 40 CFR 52.21(b)(33) would not exceed the past actual emissions. To achieve a 0.4 lb/MMBtu emission rate with the typical sulfur content for petroleum coke (e.g., 6 percent), a 95 percent reduction is required. This is shown on the last column of the Table 2.

3. Except for coals with a sulfur content of greater than 2 percent, the proposed percent reduction requirement and the emission limit are based on co-firing 20 percent petroleum coke with coal (on a heat input basis). This is the worst-case mixture proposed and ensures that when co-firing lower percentages of petroleum coke with coal, the resulting emission rate would be lower than could be allowed by meeting only the NSPS and the "actual" emission rate. For example, if a 10 percent mixture of petroleum coke is co-fired with a 1.2 percent sulfur coal, then the resulting emissions rate to meet NSPS and 0.4 lb/MMBtu would be 0.58 lb/MMBtu. In contrast, the proposed condition would limit the SO_2 emissions to 0.56 lb/MMBtu.

4. The effect of the proposed SO_2 emission limitation is shown on Table 2 (second and third columns). As shown, for coals with sulfur content less than 1.2 percent, the 75 percent reduction requirement would produce emission rates less than 0.56 lb/MMBtu while meeting the NSPS reduction requirement of 70 percent and the "actual" emission rate of 0.4 lb/MMBtu for petroleum coke. For coals with a sulfur content of 1.2 to 2 percent, the proposed emission limit of 0.56 lb/MMBtu would meet the NSPS limit of 0.6 lb/MMBtu for coal and 0.4 lb/MMBtu for petroleum coke.

5. The equation for an SO_2 emission limit for coals above 2 percent sulfur content would allow some flexibility for petroleum coke/coal mixtures. This formula would be applicable for sulfur contents from 2.0 to 3.63 percent, since coals in this range would be required to meet the 0.6 lb/MMBtu limit in Subpart Da. The proposed equations for SO_2 emission limitations for coal above 2 percent sulfur content would allow some flexibility for petroleum coke/coal mixtures (see Table 3 for derivation of equations). The equation in Paragraph b above will achieve compliance with the governing Subpart Da limit of 0.6 lb/MMBtu and 0.4 lb/MMBtu for petroleum coke. The equation in Paragraph c above accounts for the governing Subpart Da requirement of 90 percent SO_2 reduction and 0.4 lb/MMBtu for petroleum coke. The maximum SO_2 emission rate associated with firing only coal, regardless of coal sulfur

content, cannot exceed 0.76 lb/MMBtu as required by PSD and Power Plant Siting Act (PPSA) approval. Therefore, mixtures of petroleum coke and coal can never exceed 0.688 lb/MMBtu.

6. SJRPP Units 1 and 2 feature an inlet continuous emission monitoring system to monitor inlet SO_2 levels prior to the flue gas desulfurization system as required by Subpart Da and an outlet continuous emission monitoring system which records SO_2 emissions as required by Subpart Da and 40 CFR Part 75. These SO_2 data are quality assured pursuant to Subpart Da and Part 75 requirements. The percent reduction requirements and the SO_2 emissions limitations for coals blended with petroleum coke that have a sulfur content less than 3.63 percent shall be ensured by operating in accordance with the data from the inlet and outlet continuous emissions monitoring system. The sulfur content of the coal shall be ensured by utilizing the "as received" coal analytical data or onsite sampling and analysis.

   The proposed emission limitation meets the letter and intent of the WEPCO regulations. Also, this condition comports with EPA's "federal enforceability" guidance because it is enforceable both as a matter of law and as a practical matter; simply put, this condition obviates the possibility of an increase in actual emissions attributable to petroleum coke. Moreover, this proposal comports with good environmental policy. As shown in Figures 1 and 2, under the proposed permit condition, co-firing petroleum coke will be subject to lower emissions limitations than the limitations applicable when utilizing only coal. These graphs compare the emission limits and reduction percentages currently applicable to coal firing and proposed for petroleum coke co-firing. With the proposed permit condition, co-firing petroleum coke will not require PSD analysis pursuant to Rules 62-212.400 and 62.212.200(2)(d), F.A.C.

2.2 SULFURIC ACID MIST

The trial test values for sulfuric acid mist were a direct result of an associated increase in SO_2 emissions. Table 4 presents a comparison of the SO_2 and SO_3 emissions between the baseline tests and the co-firing test. The ratios of the blend to baseline test results are 1.78 and 1.70 for SO_2 and SO_3 emissions, respectively. This indicates that the SO_3 increase was in the relatively same proportion for both SO_3 and SO_2 (actually slightly greater for SO_2). In addition, the amount

of SO_2 removal for both the baseline test and blend test was almost identical at about 73 percent. The proposed SO_2 emission limit, if implemented during the test burn, would have ensured lower SO_2 emissions and concomitantly lower SO_3 emissions that would ensure no significant increase in the emission rates for both pollutants. Overall reduction in SO_2 emissions would have likely been 20 to 30 percent higher. For these reasons, no condition for sulfuric acid mist should be required.

2.3 CARBON MONOXIDE

The CO emissions during the baseline tests were lower than those observed during the blend tests. Since there was no attempt to control CO emissions during the co-firing tests, the combustion conditions were not "fine tuned" to optimize combustion of the petroleum coke and coal blend. Many factors, such as the grindability of the petroleum coke/coal blend and combustion controls (e.g., oxygen concentrations, NO_x control systems, load, etc.) can significantly influence CO concentrations. Data from other petroleum coke/coal co-firing test burns indicate no changes in CO emission rates. In addition, a review of the last several months of CO data from the SJRPP indicates CO values in the range reported for the co-firing test burn. For these reasons, SJRPP proposes to optimize combustion of co-firing petroleum coke and coal to ensure no net increase in emissions. A condition is proposed that has been issued in other Department permits approving co-firing of petroleum coke and coal:

(a) The applicant shall maintain and submit to the Department on an annual basis for a period of 5 years from the date the unit is co-fired with petroleum coke, information demonstrating that the co-firing did not result in significant emission increases of CO. The CO emissions shall be based on test results using EPA Method 10.

Table 1. Statistical Analysis of Petroleum Coke Trial Burn, St. John's River Power Park

Test Case	Date	PM (lb/hr)	SO3 (ppm)	CO (ppm)	NOx out (lb/MMBtu)	SO2 in (lb/MMBtu)	SO2 out (lb/MMBtu)
Baseline	07/18/95	44.14	6.96	10.29	0.468	1.029	0.283
Baseline	07/19/95	21.50	5.19	45.16	0.502	1.026	0.282
Baseline	07/20/95	64.92	5.55	67.00	0.474	1.031	0.282
Baseline	08/08/95	61.85	7.04	21.15	0.549	0.973	0.270
	Average	48.1	6.19	35.9	0.498	1.015	0.279
	Std. Dev.	20.0	0.95	25.3	0.0369	0.0279	0.0062
	Sample Var	398.4	0.91	642.1	0.0014	0.0008	0.0000
	n	4	4	4	4	4	4
Blend	08/11/95		7.54	312.96	0.502	1.636	0.457
Blend	08/12/95		9.21	497.58	0.494	1.709	0.485
Blend	08/13/95		14.03	745.64	0.463	1.728	0.482
Blend	08/14/95	80.76			0.498	1.757	0.477
Blend	08/15/95	42.95			0.503	1.730	0.471
Blend	08/16/95	28.98			0.535	1.720	0.477
Blend	08/17/95	63.28			0.559	1.938	0.521
Blend	08/18/95		11.37	467.90	0.498	2.244	0.566
Blend	08/19/95	23.47			0.470	2.376	0.545
	Average	47.9	10.54	506.0	0.502	1.871	0.498
	Std. Dev.	24.0	2.81	179.1	0.030	0.264	0.037
	Sample Var	573.9	7.88	32071.4	0.001	0.070	0.001
	n	5	4	4	9	9	9
Degrees of Freedom		7	6	6	11	11	11
	t prime at 95%	1.895	1.943	1.943	1.796	1.796	1.796
	Sp	22.33	2.10	127.89	0.032	0.225	0.032
	t calc	-0.0143188	2.937	5.198	0.220	6.322	11.406
	Result	OK	Sig Diff	Sig Diff	OK	Sig Diff	Sig Diff

Table 2. Combined Emissions Limit and Scrubber Efficiency for Co-firing Petroleum Coke and Coal at St. Johns River Power Park

Coal Sulfur Content	Combined Emission Limit (lb/mmBtu)	Combined Scrubber Efficiency	Uncontrolled Emissions		Coal SO2 NSPS Limit (lb/mmBtu)	Coal SO2 Removal	Pet Coke SO2 Removal
			Coal SO2 (lb/mmBtu)	Pet Coke SO2 (lb/mmBtu)			
0.80%	0.40	75.01%	1.32	8.11	0.40	70.00%	95.07%
0.90%	0.44	75.01%	1.49	8.11	0.45	70.00%	95.07%
1.00%	0.48	75.01%	1.65	8.11	0.50	70.00%	95.07%
1.10%	0.52	75.01%	1.82	8.11	0.55	70.00%	95.07%
1.20%	0.56	75.01%	1.98	8.11	0.60	70.00%	95.07%
1.30%	0.56	76.67%	2.15	8.11	0.60	72.08%	95.07%
1.40%	0.56	78.27%	2.31	8.11	0.60	74.07%	95.07%
1.50%	0.56	79.65%	2.48	8.11	0.60	75.80%	95.07%
1.60%	0.56	80.86%	2.64	8.11	0.60	77.31%	95.07%
1.70%	0.56	81.93%	2.81	8.11	0.60	78.65%	95.07%
1.80%	0.56	82.88%	2.98	8.11	0.60	79.83%	95.07%
1.90%	0.56	83.73%	3.14	8.11	0.60	80.89%	95.07%
2.00%	0.56	84.49%	3.31	8.11	0.60	81.85%	95.07%
2.10%	0.56	85.18%	3.47	8.11	0.60	82.71%	95.07%
2.20%	0.56	85.81%	3.64	8.11	0.60	83.50%	95.07%
2.30%	0.56	86.39%	3.80	8.11	0.60	84.22%	95.07%
2.40%	0.56	86.91%	3.97	8.11	0.60	84.88%	95.07%
2.50%	0.56	87.40%	4.13	8.11	0.60	85.48%	95.07%
2.60%	0.56	87.84%	4.30	8.11	0.60	86.04%	95.07%
2.70%	0.56	88.26%	4.46	8.11	0.60	86.56%	95.07%
2.80%	0.56	88.64%	4.63	8.11	0.60	87.04%	95.07%
2.90%	0.56	89.00%	4.79	8.11	0.60	87.48%	95.07%
3.00%	0.56	89.33%	4.96	8.11	0.60	87.90%	95.07%
3.10%	0.56	89.65%	5.12	8.11	0.60	88.29%	95.07%
3.20%	0.56	89.94%	5.29	8.11	0.60	88.66%	95.07%
3.30%	0.56	90.21%	5.45	8.11	0.60	89.00%	95.07%
3.40%	0.56	90.47%	5.62	8.11	0.60	89.32%	95.07%
3.50%	0.56	90.72%	5.79	8.11	0.60	89.63%	95.07%
3.60%	0.56	90.95%	5.95	8.11	0.60	89.92%	95.07%
3.63%	0.56	91.01%	6.00	8.11	0.60	90.00%	95.07%
3.70%	0.57	91.01%	6.12	8.11	0.61	90.00%	95.07%
3.80%	0.58	91.01%	6.28	8.11	0.63	90.00%	95.07%
3.90%	0.60	91.01%	6.45	8.11	0.64	90.00%	95.07%
4.00%	0.61	91.01%	6.61	8.11	0.66	90.00%	95.07%

Assumptions:

12,100 Btu/lb for Coal
14,800 Btu/lb for Petroleum Coke
6% sulfur content of Petroleum Coke
20% Petroleum Coke firing (mmBtu/hr basis)
0.40 lb/mmBtu for Petroleum Coke

Table 3. Derivation of Formulas (Page 1 of 2)

Fundamental Requirements:

1. Coal - Meet NSPS Subpart Da and BACT Emission Limit
   a. 0.6 lb / MMBtu or 70% SO_2 Reduction (NSPS),
   b. 1.2 lb / MMBtu or 90% SO_2 Reduction (NSPS), and
   c. 0.76 lb / MMBtu (30 - day rolling average).

2. Petroleum Coke - Meet 0.4 lb / MMBtu; Equivalent to 95% Reduction

   Calculation: $\frac{0.06 \text{ lb S}}{\text{lb fuel}} \times \frac{\text{lb fuel}}{14{,}800 \text{ Btu}} \times \frac{2 \text{ lb } SO_2}{\text{lb S}} \times \frac{10^6}{\text{MM}} \times (1 - 0.95)$

   $= 0.4$ lb / MMBtu

Proposed Limits:

1. Coals - ≤ 2% Sulfur; Assume 20% Petroleum Coke Co - Firing at All Times
   a. NSPS = 0.6 lb / MMBtu

      Calculation: $\frac{0.0121 \text{ lb S}}{\text{lb fuel}} \times \frac{\text{lb fuel}}{12{,}100 \text{ Btu}} \times \frac{2 \text{ lb } SO_2}{\text{lb S}} \times \frac{10^6}{\text{MM}} \times (1 - 0.7)$

      $= 0.6$ lb / MMBtu

   b. Petroleum Coke = 0.4 lb / MMBtu

   c. Result: $\left(\frac{80}{100} \times 0.6 \text{ lb / MMBtu}\right) + \left(\frac{20}{100} \times 0.4 \text{ lb / MMBtu}\right)$

      $= 0.56$ lb / MMBtu and 75% reduction

Table 3. Derivation of Formulas (Page 2 of 2)

Proposed Limits, continued:

2. Coals >2% Sulfur and ≤ 3.63% Sulfur; Variable Amount of Petroleum Coke
   a. NSPS = 0.6 lb / MMBtu

   Calculation: $\frac{3.63 \text{ lb S}}{100 \text{ lb fuel}} \times \frac{\text{lb fuel}}{12{,}100 \text{ Btu}} \times \frac{2 \text{ lb } SO_2}{\text{lb S}} \times \left(1 - \frac{90}{100}\right)$

   $= 0.6 \text{ lb / MMBtu}$

   b. Petroleum Coke = 0.4 lb / MMBtu
   c. Let C = % Coal Fired

   Equation: $\left(\frac{C}{100} \times 0.6 \text{ lb / MMBtu}\right) + \left[\left(1 - \frac{C}{100}\right) \times 0.4 \text{ lb / MMBtu}\right]$

   $SO_2 \text{ Limit} = \frac{0.6C}{100} - \frac{0.4C}{100} + 0.4 = \frac{0.2C}{100} + 0.4$

3. Coals > 3.63% Sulfur; Variable Amount of Petroleum Coke
   a. NSPS = 90% Reduction
   b. Petroleum Coke = 0.4 lb / MMBtu
   c. Let C = % Coal Fired and S = % Sulfur in Coal

   Equation: $\left[\frac{C}{100} \times \frac{S}{100} \times \frac{1}{12{,}100} \times 2 \times \left(1 - \frac{90}{100}\right) \times 10^6\right] + \left[\left(1 - \frac{C}{100}\right) \times 0.4\right]$

   $= \left(\frac{C}{100} \times S \times 0.1653\right) + \left(0.4 - 0.4 \times \frac{C}{100}\right)$

   $SO_2 \text{ Limit} = \frac{1}{100} \times (0.1653 \times C \times S - 0.4C + 40)$

   Example: 80% Coal and 3.8% Sulfur

   $(0.1653 \times 80 \times 3.8 - 0.4 \times 80 + 40] \times \frac{1}{100} = 0.58 \text{ lb / MMBtu}$

4. Maximum limit when co - firing:
   a. Coal at 0.76 .b / MMBtu, and
   b. Petroleum Coke at 0.4 .b / MMBtu

   Calculation:

   $\left(\frac{80}{100} \times 0.76 \text{ lb / MMBtu}\right) + \left(\frac{20}{100} \times 0.4 \text{ lb / MMBtu}\right) = 0.688 \text{ .b / MMBtu}$

Table 4. Summary of SO_3 and SO_2 Test Cases

Test Case	SO_3 (ppm)	SO_2 Outlet (lb/MMBtu)	SO_2 Inlet (lb/MMBtu)	SO_2 Removal (%)
Baseline	6.19	0.279	1.015	72.7
Blend	10.54	0.498	1.87	73.4
Ratio[a]	1.70	1.784	1.843	

Note: SO_3 and SO_2 are averages of test cases.

[a] Ratio = Baseline ÷ Blend.

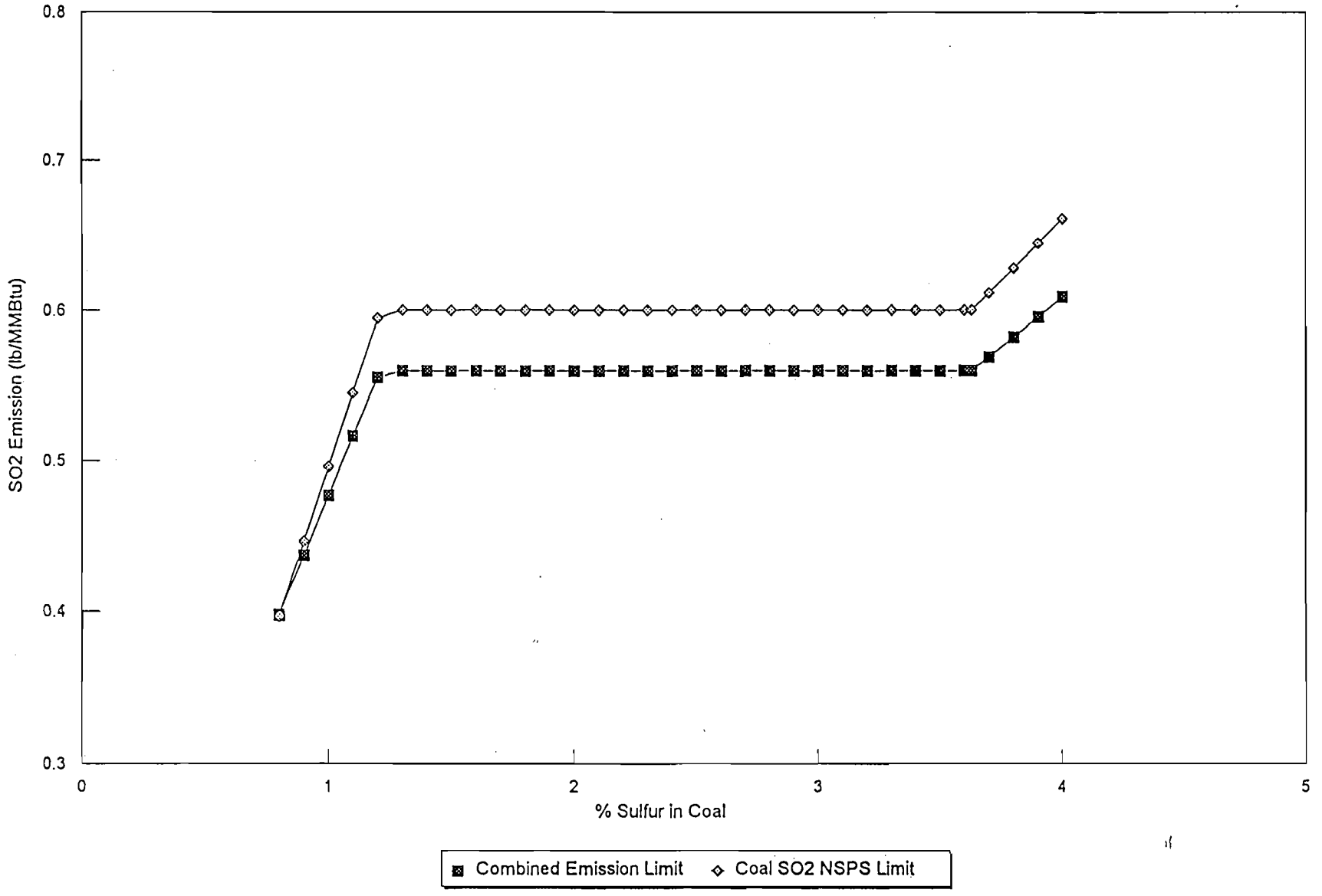

Figure 1
Emission Limits—SO_2 Emission Rate vs. Percent Sulfur in Coal

Source: KBN, 1996.

KBN
A GOLDER ASSOCIATES COMPANY

02-21-96

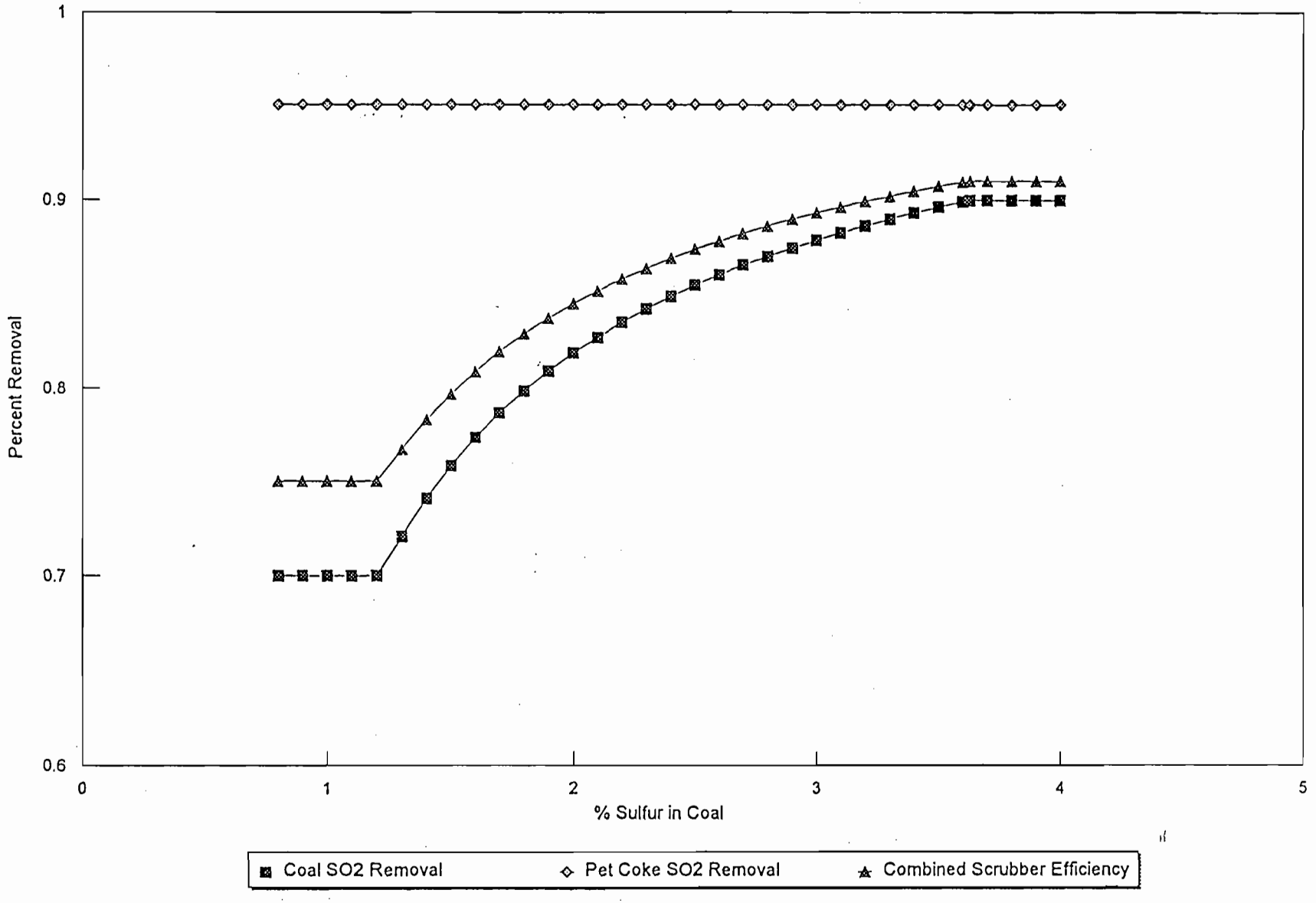

Figure 2
Percent Removal—SO_2 Removal vs. Percent Sulfur in Coal

Source: KBN, 1996.

KBN
A GOLDER ASSOCIATES COMPANY

PETROLEUM COKE-COAL TRIAL TEST BURN RESULTS

APM

CERTIFIED MAIL

ADM 13
R3
R104

st. johns river POWER PARK

SJRO LC 95 483

October 2, 1995

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."

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)

CERTIFIED MAIL

st. johns river POWER PARK

SJRO LC 95 482

October 2, 1995

Mr. Clair Fancy
Florida Dept. of Environmental Protection
Bureau of Air Regulation
Mail Station 5505
2600 Blairstone Road
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. Fancy:

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.

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Sincerely,

Richard Breitmoser
Director Environmental, Health & Safety

RB/JAW/sj

xc: J. Worley (SJRPP)

CERTIFIED MAIL

st. johns river POWER PARK

SJRO LC 95 484

October 2, 1995

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

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

Dear Mr. Pace:

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.

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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

FLORIDA

Department of Environmental Protection

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

Lawton Chiles
Governor

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

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

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.

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.

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.

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

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

SJRO LC 94 214

December 20, 1994

st. johns river POWER PARK

Mr. Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office
Florida Dept. of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

RE: Request to Conduct a Test Burn of Petroleum Coke/Bituminous Blend in St. Johns River Power Park's (SJRPP) Unit #1, Site Certification No. PA 81-13 and PSD-FL-010.

Dear Mr. Oven:

Pursuant to your December 13, 1994 telephone conversation with Jay Worley, SJRPP Sr. Environmental Engineer, SJRPP requests to conduct a petroleum coke/bituminous coal mixture test burn commencing February 01, 1995. The test burn is anticipated to be completed by March 03, 1994 in order to inspect operational equipment during the scheduled Unit 1 outage which commences March 04, 1995.

Approximately 10,000 tons of petroleum coke will be mixed with bituminous coal to achieve mixtures up to 20% petroleum coke. Please refer to Attachment A for an example of the analytical data for the type of petroleum coke SJRPP intends to test burn.

Please contact Jay Worley at (904) 751-7729 if you have any questions or require any additional information regarding this request.

Very truly yours,

Richard Breitmoser, P.E.
Division Chief
Environmental Affairs Division

RB/JAW/pct

xc: C. Fancy, FDEP
E. Frey, FDEP
W. Tutt, RESD
J. Worley, SJRPP

ATTACHMENT A

American Council of Independent Laboratories
American Society for Testing and Materials
Hampton Roads Maritime Association
National Fire Protection Association
Marine Chemist Association

H&T

December 8, 1994

Sample of: TYPICAL 4" X 0 PETROLEUM COKE; AMOCO - YORKTOWN, VIRGINIA

From: Louisiana Carbon

Date Sampled: Week of December 4, 1994

Quality "As Received"	"As Received" Guaranteed Quality
Heat Content (Btu/lb)	14000 minimum
Hardgrove Grindability	60 minimum
Proximate Analysis (% by weight)	
Volatile Matter	12 - 13.5
Fixed Carbon	75 - 79
Ash	0.75 maximum
Moisture	10 maximum
Ultimate Analysis (% by weight)	
Carbon	89.50 DCB
Hydrogen	4.00 DCB
Sulphur	4.00 As Received
Oxygen	4.25 DCB
Nitrogen	1.45 DCB
Chlorine	<0.01

Respectfully submitted,

by Robert F. Lanier

Robert F. Lanier

611 HOWMET DRIVE
HAMPTON, VIRGINIA 23661
(804) 826-5310 FAX: (804) 827-1366
Hampton Roads Testing Laboratories, Inc.

American Council of Independent Laboratories
American Society for Testing and Materials
Hampton Roads Maritime Association
National Fire Protection Association
Marine Chemist Association

HRT

December 12, 1994

Sample of: TYPICAL 4" X 0 PETROLEUM COKE; AMOCO - YORKTOWN, VIRGINIA

From: Louisiana Carbon

Date Sampled: Week of December 4, 1994

PETROLEUM COKE
MINERAL ANALYSIS OF ASH
DRY BASIS

Mineral	Percent
Calcium Oxide	2.4 - 3.0
Magnesium Oxide	0.5 - 1.0
Potassium Oxide	0.4 - 0.9
Iron Oxide	4.0 - 6.0
Sodium Oxide	0.7 - 1.2
Aluminium Oxide	6.5 -10.0
Silicon Dioxide	16.0 -22.0
Titanium Dioxide	0.3 - 0.8
Manganese Dioxide	0.04- 0.09

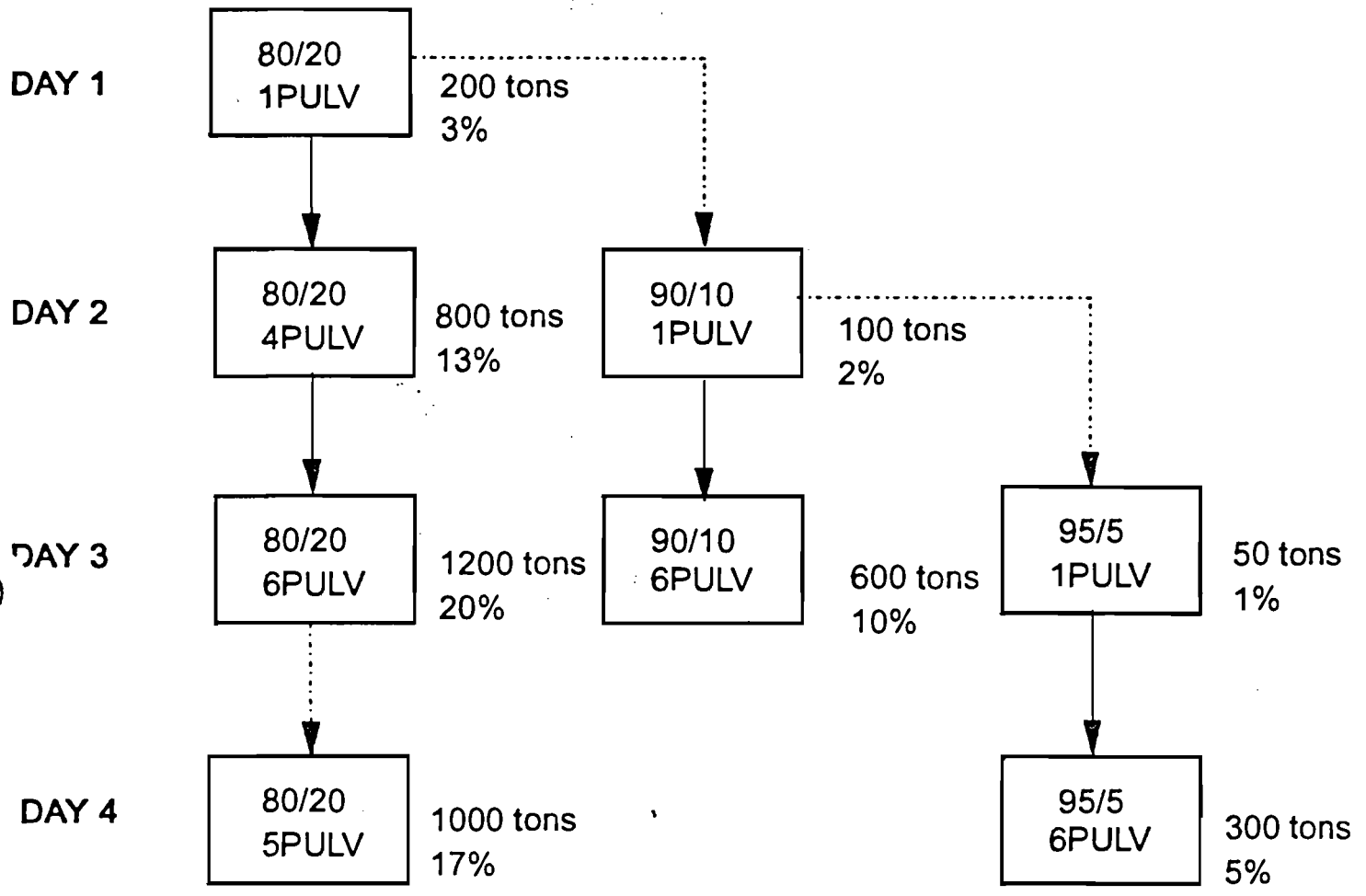
METAL DETERMINATION
OF PETROLEUM COKE

Vanadium	1400 - 2000 ppm
Nickel	200 - 350 ppm

Respectfully submitted,
by Robert N Lanier
Robert N Lanier

611 HOWMET DRIVE
HAMPTON, VIRGINIA 23661
(804) 826-5310 FAX: (804) 827-1366
Hampton Roads Testing Laboratories

St. Johns River Power Park
PETROLEUM COKE
TEST BURN SCHEDULE



LEGEND

Represents action following operationally sucessful test burn

Represents action following operationally unsucessful test burn

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

ATTACHMENT B

CERTIFIED MAIL

st. johns river POWER PARK

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

st. johns river POWER PARK

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) 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
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

7.31% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

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

Date received: August 22, 1995

Analysis report no. 63-90708

Parameter	Results
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) 953-9300

SINCE 1908 Member of the SGS Group (Société Générale de Surveillance)

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

September 1, 1995

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

Sample identification by
SJRPP

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

8.81% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

~~Date sampled~~ BURN DATE: 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.

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 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 #0914B
P.O. #002363

8.81% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date ~~sampled~~ BURN DATE: 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.

[signature]
Mgr., Coal Laboratory

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

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September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:
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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

8.81% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date ~~sampled~~ BURN DATE: July 18, 1995

Date received: August 22, 1995

Analysis report no. 63-90698

Parameter	Results
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.

Manager, Henderson

COMMERCIAL TESTING & ENGINEERING CO.
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300
SINCE 1909
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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

8.70% A.D.L. Provided by Client

Kind of sample reported to us: Coal

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.

Manager, Henderson Laboratory

COMMERCIAL TESTING & ENGINEERING CO.

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

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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 #0919E
P.O. #002363

8.70% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date [illegible]: July 19, 1995

Date received: August 22, 1995

Analysis report no. 63-90700

Parameter	Results
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,
COMMERCIAL TESTING & ENGINEERING CO.

Manager, Henderson Laboratory

COMMERCIAL TESTING & ENGINEERING CO.
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SINCE 1908
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September 1, 1995

PLEASE ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 752, HENDERSON, KY 42420
TELEPHONE: (502) 827-1167
FAX: (502) 826-0719

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

Sample identification by
SJRPP

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

8.70% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

BURN Date ~~sampled~~: July 19, 1995

Date received: August 22, 1995

Analysis report no. 63-90701

Parameter	Results
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.

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

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

September 1, 1995

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

Sample identification by
SJRPP

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

4.00% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date ~~sampled~~: July 20, 1995

Date received: August 22, 1995

Analysis report no. 63-90702

Parameter	Results
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,
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)

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

September 1, 1995

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

Sample identification by
SJRPP

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

4.00% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date [redacted]: July 20, 1995

Date received: August 22, 1995

Analysis report no. 63-90703

Parameter	Results
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

Hampton Roads Testing Laboratories, Inc.
611 Howmet Drive, Hampton, Virginia 23661-1390
Tel: (804) 826-6316 Fax: (804) 827-1386

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 _____
Chemist

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)

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

September 7, 1995

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

Sample identification by
SJRPP

60 Mesh Split
Sample #0925I
P.O. #002363

4.00% A.D.L. Provided by Client

Corrected analysis

Kind of sample reported to us: Coal

Sample taken at: -----

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,
COMMERCIAL TESTING & ENGINEERING CO. RR

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

7.74% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date [redacted]: August 8, 1995

Date received: August 22, 1995

Analysis report no. 63-90705

Parameter	Results
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.

Manager, Henderson Laboratory

COMMERCIAL TESTING & ENGINEERING CO.
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-9300
SINCE 1909
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September 1, 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

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

7.74% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date ~~sampled~~ (BURN): 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,
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 1909
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

7.74% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

BURN Date ~~sampled~~: August 8, 1995

Date received: August 22, 1995

Analysis report no. 63-90707

Parameter	Results
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.

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 (Societe Generale 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 #0939M
P.O. #008306

6.92% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 14, 1995

Date received: August 25, 1995

Analysis report no. 63-90988

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

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 T
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 #0940N
P.O. #008306

Kind of sample reported to us: Coal

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

Parameter	Results
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
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September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE T
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 reported to us: Coal

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: 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 T
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

4.71% A.D.L. Provided by Client

Kind of sample reported to us: Coal

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: 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 T
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 reported to us: Coal

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

Parameter	Results
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

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 T
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

7.56% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 15, 1995

Date received: August 25, 1995

Analysis report no. 63-90993

Parameter	Results
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

COMMERCIAL TESTING & ENGINEERING CO.
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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 #0947S
P.O. #008306

7.15% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 16, 1995

Date received: August 25, 1995

Analysis report no. 63-90994

Parameter	Results
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.
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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) 827-11
FAX: (502) 826-071

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 reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 16, 1995

Date received: August 25, 1995

Analysis report no. 63-90995

Parameter	Results
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: 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 T
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 #0949U
P.O. #008306

7.15% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 16, 1995

Date received: August 25, 1995

Analysis report no. 63-90996

Parameter	Results
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.

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) 827-115
FAX: (502) 826-071

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

Sample identification by
SJRPP

Sample #0952V
P.O. #008306

7.23% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 17, 1995

Date received: August 25, 1995

Analysis report no. 63-90997

Parameter	Results
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

COMMERCIAL TESTING & ENGINEERING CO.
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • (312) 953-8300
SINCE 1909
Member of the SGS Group (Société Générale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE T
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 reported to us: Coal

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

Parameter	Results
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

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 T
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 #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.

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 T
P.O. BOX 752, HENDERSON, KY 42
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 #0956Y
P.O. #008306

Kind of sample reported to us: Coal

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.

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)

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

September 11, 1995

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

Sample identification by
SJRPP

Sample #09572
P.O. #008306

4.17% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 18, 1995

Date received: August 25, 1995

Analysis report no. 63-91001

Parameter	Results
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.

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
P.O. BOX 732, HENDERSON, KY 42
TELEPHONE: (502) 827-
FAX: (502) 826-

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

Sample identification by
SJRPP

Sample #0958Z1
P.O. #008306

4.72% A.D.L. Provided by Client

Kind of sample reported to us: Coal

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

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 T
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 #0960
P.O. #008306

5.50% A.D.L. Provided by Client

Kind of sample reported to us: Coal

Sample taken at: -----

Sample taken by: -----

Date sampled: August 19, 1995

Date received: August 25, 1995

Analysis report no. 63-91003

Parameter	Results
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.

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 (Societe Generale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE T
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 #0951
Composite C
P.O. #008306

5.27% A.D.L. Provided by Client

Kind of sample reported to us: Coal

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 60148 • (312) 953-9300
SINCE 1908
Member of the SGS Group (Societe Generale de Surveillance)

September 11, 1995

PLEASE ADDRESS ALL CORRESPONDENCE T
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

7.65% A.D.L. Provided by Client

Kind of sample reported to us: Coal

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

Parameter	Results
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

COAL ANALYSIS REPORT

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

DATE SMP	AS RECEIVED TONS	%MOIST	%ASH	%SULFUR	BTU	#SO2/MBTU	DRY %ASH	DRY %SULFUR	DRY BTU	-A&M FREE- 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

	AS RECEIVED					DRY			-A&M FREE-
DATE SMP	TONS	%MOIST	%ASH	%SULFUR	BTU	#SO2/MBTU	%ASH	%SULFUR	BTU	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

Hampton Roads Testing Laboratories, Inc.
611 Howmet Drive, Hampton, Virginia 23661-1390
Tel: (804) 826-5310 Fax: (804) 827-1366

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	84.51
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 _____
Chemist

CA-1

Hampton Roads Testing Laborato nc.
611 Howmet Drive, Hampton, Virginia 23661-1390
Tel (804) 826-6316 Fax (804) 827-1366

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 _____
Chemist

Hampton Roads Testing Laboratories, Inc.
611 Howmet Drive, Hampton, Virginia 23661-1390
Tel: (804) 826-5310 Fax: (804) 827-1366

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.T.U./Lb.	14791	15639
Calories/Gram	8217	8688
MOISTURE/ASH FREE B.T.U.		15700

Hampton Roads Testing Laboratories, Inc.

By _____
Chemist

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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-18-95 18:00	13.37	12.49	0.480	1.072	0.293
-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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
7-19-95 02:00	13.30	12.46	0.490	1.039	0.286
7-19-95 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
7-19-95 05:00	13.25	12.51	0.507	1.043	0.286
7-19-95 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
7-19-95 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
7-19-95 12:00	13.30	12.47	0.512	1.025	0.281
7-19-95 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
7-19-95 15:00	13.27	12.48	0.510	1.011	0.275
7-19-95 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
7-19-95 18:00	13.36	12.50	0.501	1.009	0.276
19-95 19:00	13.31	12.54	0.507	1.005	0.272
7-19-95 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
7-19-95 22:00	13.41	12.55	0.489	1.009	0.277
7-19-95 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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-20-95 18:00	13.39	12.42	0.496	1.050	0.289
-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
8-08-95 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
8-08-95 05:00	13.25	12.29	0.537	1.003	0.278
8-08-95 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
8-08-95 08:00	13.36	12.40	0.552	0.986	0.272
8-08-95 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
8-08-95 12:00	13.38	12.36	0.567	0.953	0.258
8-08-95 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
8-08-95 15:00	13.29	12.38	0.553	0.938	0.248
8-08-95 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
08-95 18:00	13.47	12.44	0.557	0.954	0.248
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
8-08-95 22:00	13.43	12.46	0.546	0.944	0.250
8-08-95 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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-10-95 18:00	13.29	**	**	1.394	**
-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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-11-95 18:00	13.46	12.72	0.494	1.704	0.480
-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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-13-95 18:00	13.51	12.72	0.447	1.759	0.491
-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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
16-95 18:00	13.40	12.61	0.555	1.730	0.481
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
-17-95 18:00	13.44	12.60	0.598	2.166	0.565
-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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-18-95 18:00	13.47	12.64	0.490	2.282	0.560
-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	1inCO2_C %	1outCO2_C %	1outNOX_MM #/M	1inSO2_MM #/M	1outSO2_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
-19-95 18:00	13.49	12.81	0.458	2.253	0.489
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 Location:
Source : Unit 1 7-18-95 Channel : 1Opacity Units: %

00:00	5.5	5.5	5.9	5.3	6.6	5.7	5.5	6.0	5.5	11.7ZC	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 Location:
Source : Unit 1 Channel : 1Opacity Units: %

7/19-95

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 Location:
Source : Unit 1 7-20-95 Channel : 1Opacity 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_2, CO_2, NO_x 1215-1300 CAL. DRIFT. A.R.

Company: St. Johns Unit 1 Location:
Source : Unit 1 9-5-95 Channel : 1Opacity 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 [redacted] APP.B PART 75

SO_2, CO_2, [redacted]NOx 0300 - 0345 OTHER

Company: St. Johns Unit 1 Location:
Source : Unit 1 5-9-95 Channel : 1Opacity 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)

0415

NOx 0807- [redacted] APP. B - PART 75

Pollution Monitor Daily Report V4.1 08/10/1995 Page # 1
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

SO_2 1315 - 1330 G.E.
NOx 1615 - 1645 G.E.
SO_2, CO_2, VOC 1800 - 1815 G.E.

Pollution Monitor Daily Report V4.1 08/11/1995 Page # 1
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

Pollution Monitor Daily Report V4.1 08/12/1995 Page # 1
Company: St. Johns Unit 1 Location:
Source : Unit 1 Channel : 1Opacity 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

Pollution Monitor Daily Report V4.1 08/13/1995 Page # 1
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 0007-2400 [redacted] (App.F.-P.
>10%

Pollution Monitor Daily Report V4.1 08/14/1995 Page # 1
Company: St. Johns Unit 1 Location:
Source : Unit 1 Channel : 1Opacity 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 0967-0215 APP.B - APP.F-

Pollution Monitor Daily Report V4.1 08/15/1995 Page # 1
Company: St. Johns Unit 1 Location:
Source : ~~Unit 1~~ Channel : 1Opacity 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 >55 LIC – APP. B (PART 75) 0007-0215
11 0945-1000 D.E.
SO2, CO2, NOx 1330-1430 D.E.

Pollution Monitor Daily Report V4.1 08/16/1995 Page # 1
Company: St. Johns Unit 1 Location:
Source : Unit 1 Channel : 1Opacity Units: %

00:00	6.2	5.3	4.7	4.8	4.4	4.8	4.8	4.8	5.1	10.1IC	Avg:	5.0 9
01:00	14.3IC	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_2, CO_2, NO_x 1245-1360 hrs.
1445-1515 hrs.

Pollution Monitor Daily Report V4.1 08/17/1995 Page # 1
Company: St. Johns Unit 1 Location:
Source : Unit 1 Channel : 1Opacity 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 - PAR 75 > 5
1545-1600 U.E.

Company: St. Johns Unit 1
Source : Unit 1

Location:
Channel : 1Opacity Units: %

5-15-15

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

NOx 0800-0900 u.e

SO2, CO2, NOx 0915-1000 u.e.

Company: St. Johns Unit 1 Location:
Source : Unit 1 Channel : 1Opacity 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	CO2	
MODEL NUMBER	41H	
MANUFACTURER	TECO	
SERIAL NUMBER	41H-49357-282	
MEASUREMENT SPAN	20	%
BOILER LOAD	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	12.67
AVERAGE RM VALUE	12.22
MEAN DIFFERENCE	-0.44
NUMBER OF RUNS	9
STANDARD DEVIATION	0.12
T - VALUE	2.306
CONFIDENCE COEFFICIENT	0.09
RELATIVE ACCURACY, %	4.34

St. John's River Power Park

Unit 1 Outlet

RELATIVE ACCURACY SO2 ANALYZER

RATA TABLE 3

ANALYZER TYPE	SO2	
MODEL NUMBER	43H	
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	139.00		
AVERAGE RM VALUE	139.41		
MEAN DIFFERENCE	0.41		
NUMBER OF RUNS	9		
STANDARD DEVIATION	9.06	BIAS TEST	PASS
T - VALUE	2.306	BIAS ADJUSTMENT FACTOR	1.000
CONFIDENCE COEFFICIENT	6.96		
RELATIVE ACCURACY, %	5.29	NEXT TEST	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

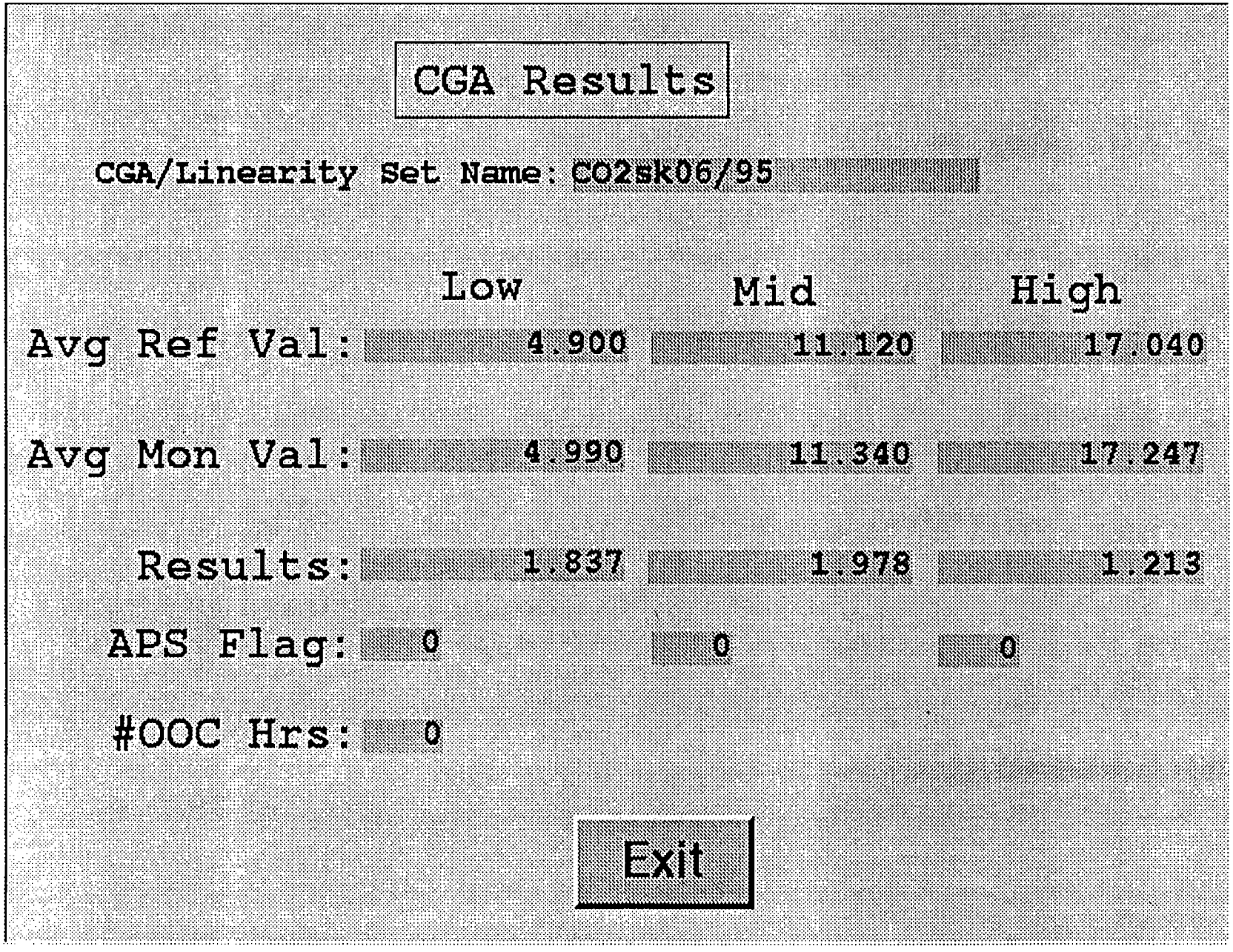
RELATIVE ACCURACY HIGH LOAD FLOW

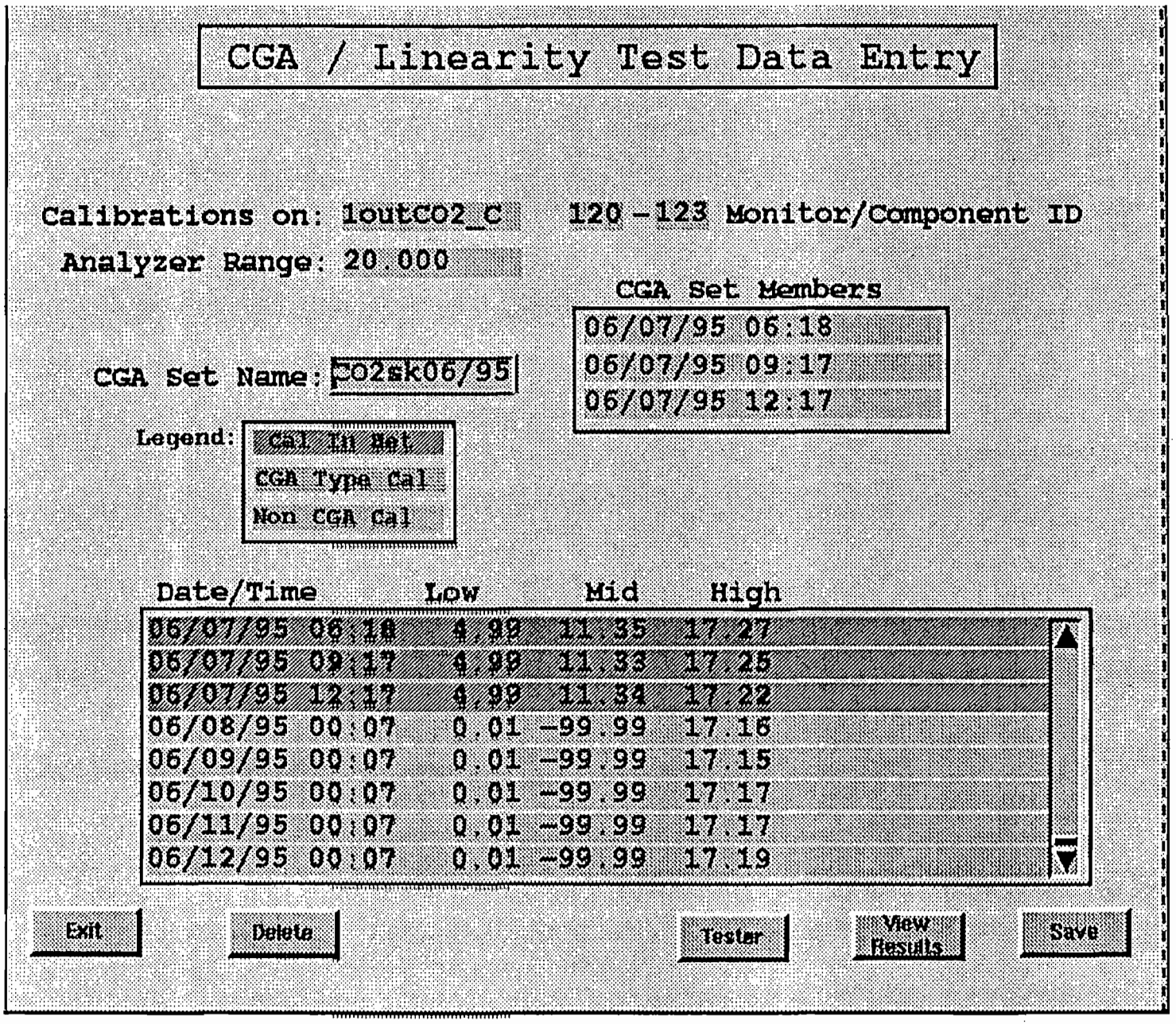
ANALYZER TYPE	FLOW	
MODEL NUMBER	Ultraflow100	
MANUFACTURER	USI	
SERIAL NUMBER	R-08771U-0194	
MEASUREMENT SPAN	144000000	scfh
BOILER LOAD	650	MW

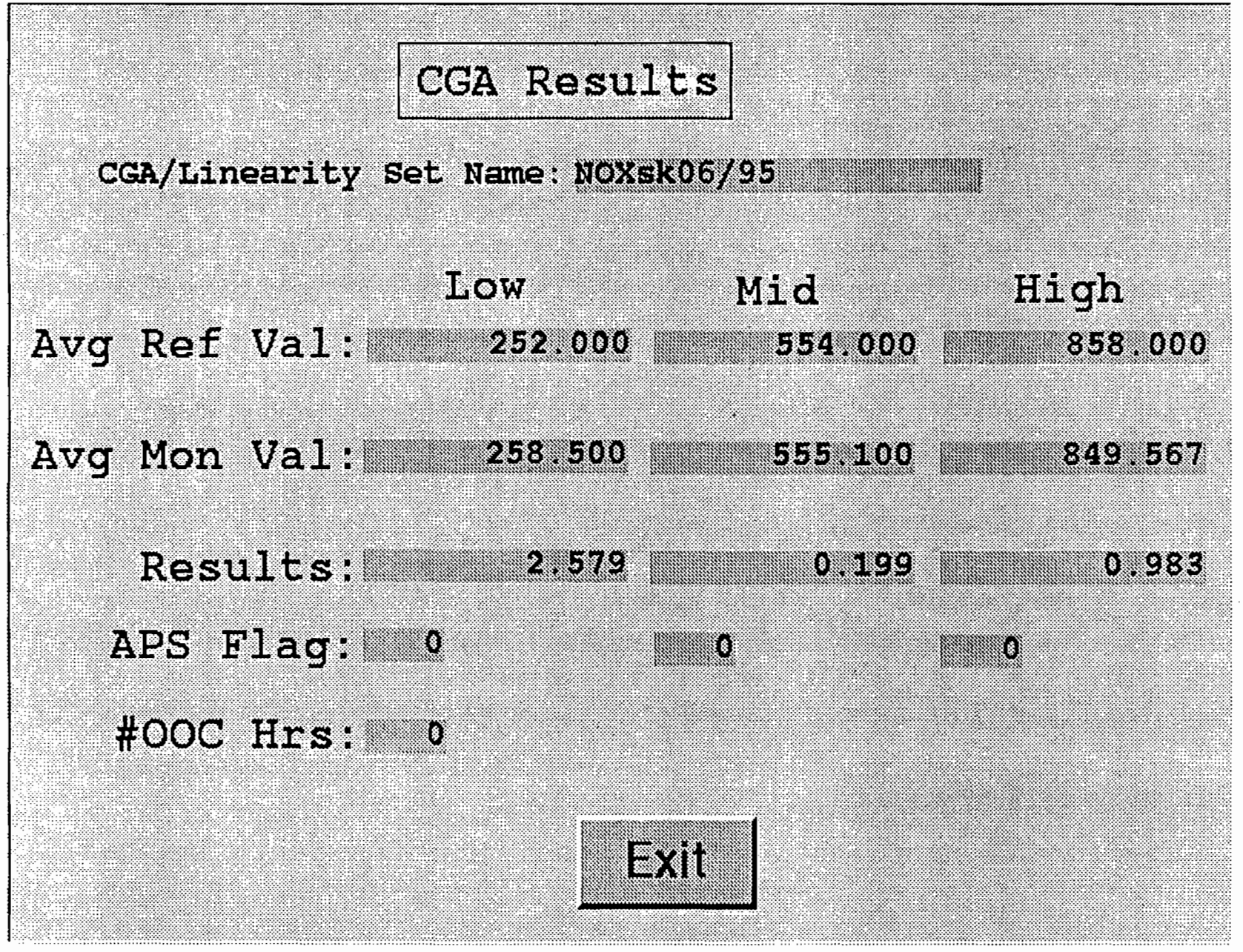
RATA TABLE 6

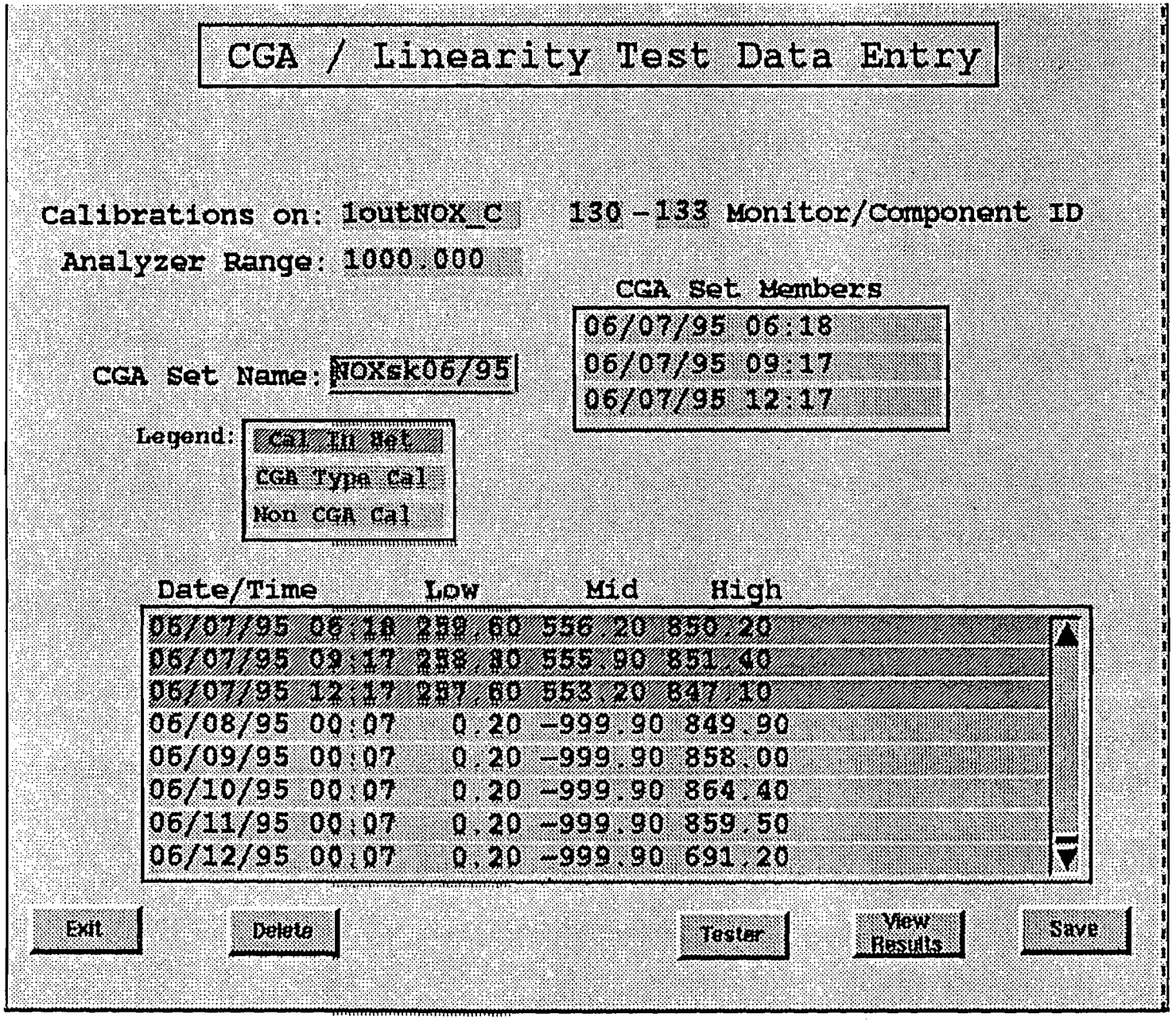
RUN USED	RUN NUMBER	RM DATA scfh	DATE	TIME	CEMS DATA scfh	DIFFERENCE scfh
Y	1	90767400	17-Nov-94	08:30-09:00	95928000	-5160600
Y	2	90740100	17-Nov-94	09:20-09:50	96048000	-5307900
Y	3	91426700	17-Nov-94	10:10-10:40	95712000	-4285300
N	4	90410800	17-Nov-94	11:10-11:40	96402000	-5991200
Y	5	91297900	17-Nov-94	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

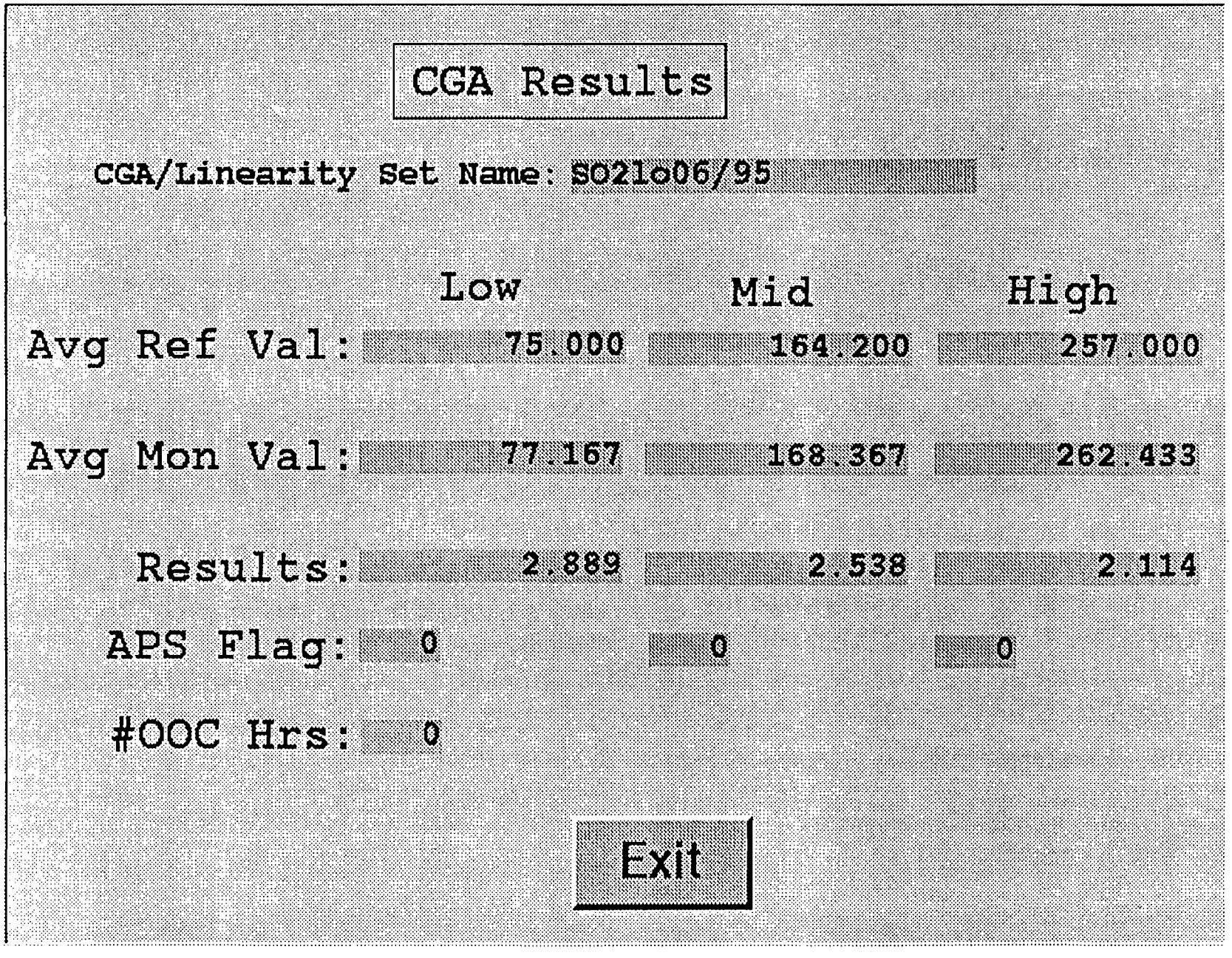
AVERAGE CEM VALUE	96780000
AVERAGE RM VALUE	91883489
MEAN DIFFERENCE	-4896511
NUMBER OF RUNS	9
STANDARD DEVIATION	540840
T - VALUE	2.306
CONFIDENCE COEFFICIENT	415726
RELATIVE ACCURACY, %	5.78
BIAS TEST	PASS
BIAS ADJUSTMENT FACTOR	1.000
NEXT TEST	ANNUAL

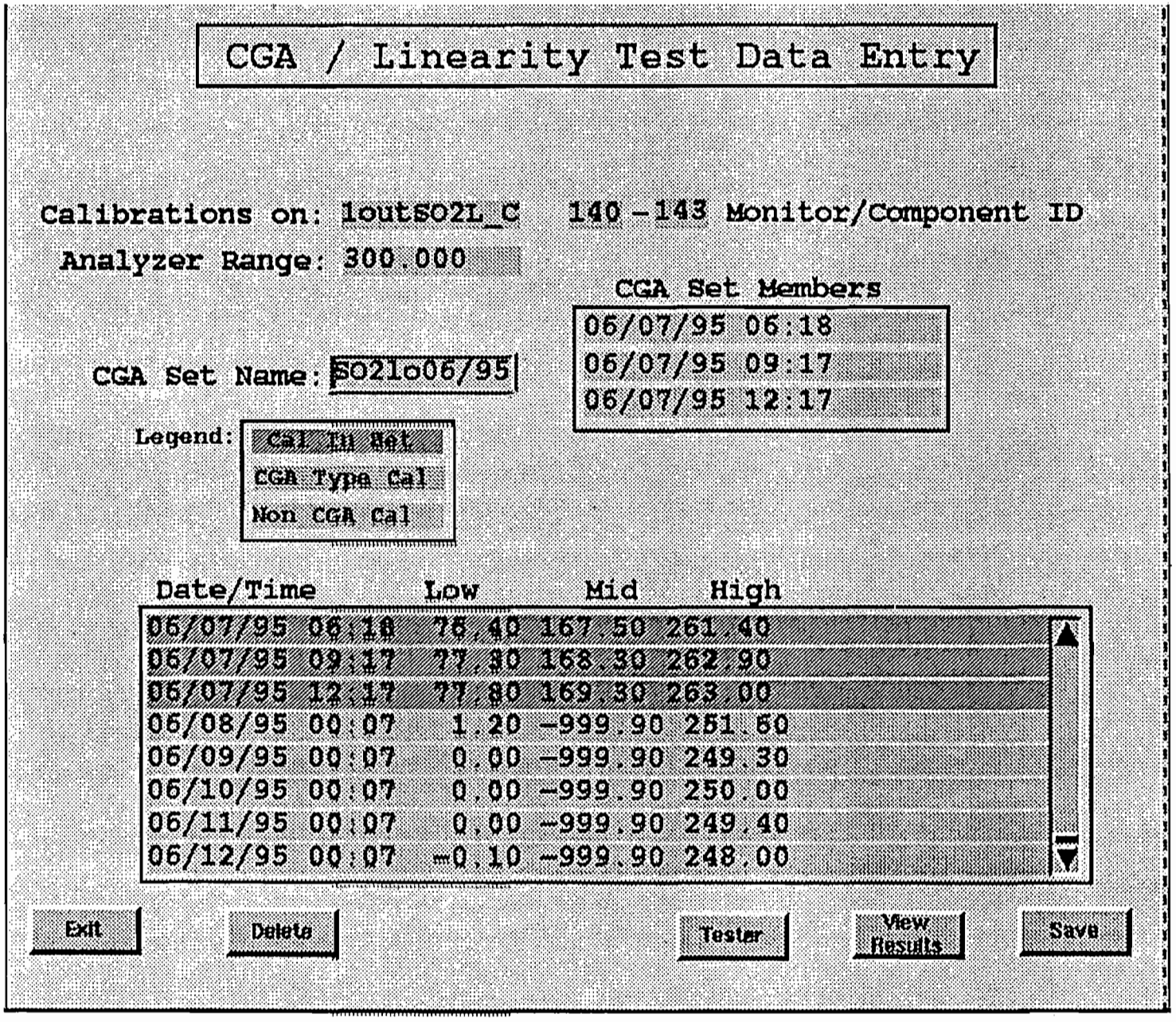

CGA Results
CGA/Linearity Set Name: CO2sk06/95
Low
Mid
High
Avg Ref Val: 4.900 11.120 17.040
Avg Mon Val: 4.990 11.340 17.247
Results: 1.837 1.978 1.213
APS Flag: 0 0 0
#OOC Hrs: 0
Exit

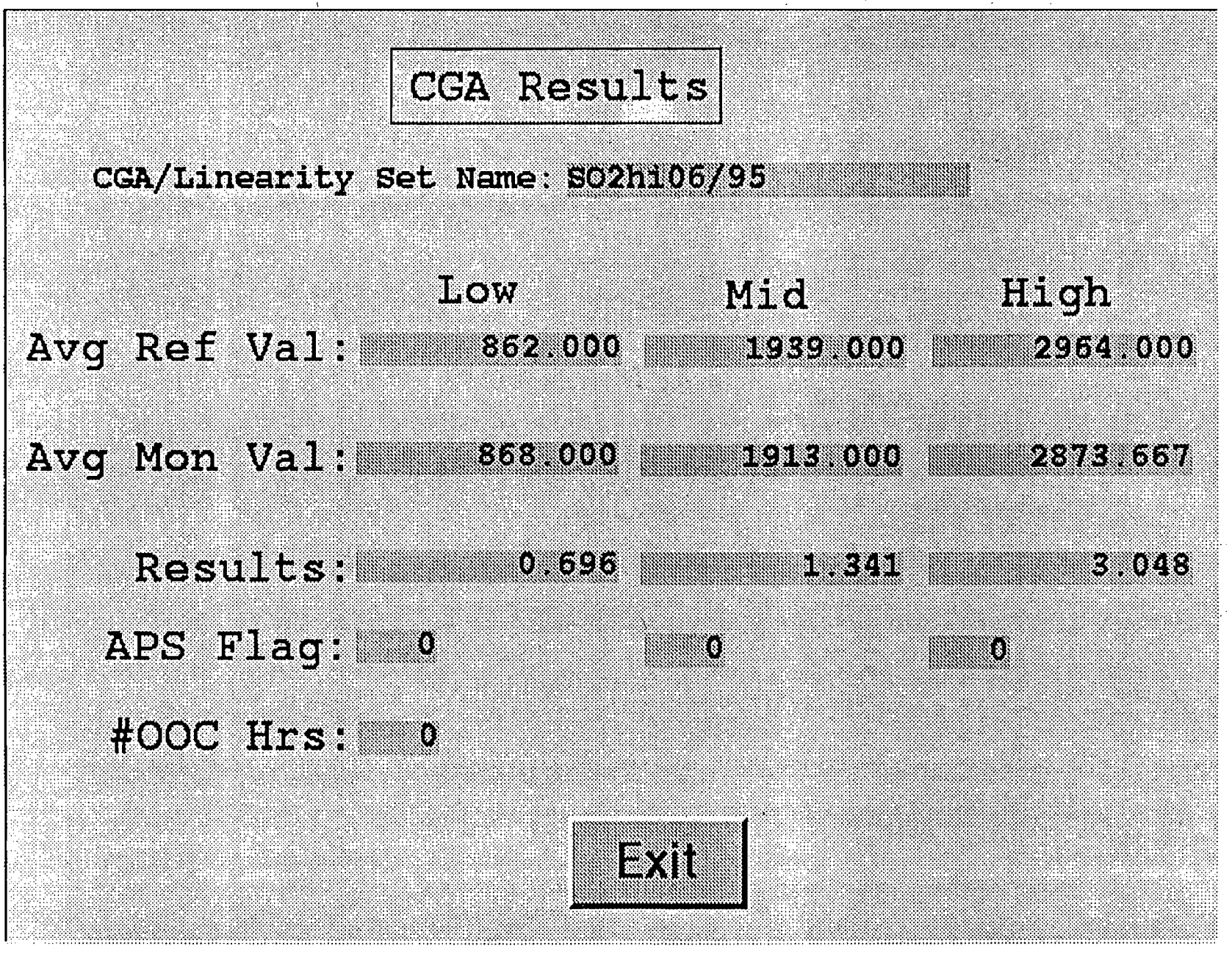

CGA / Linearity Test Data Entry
Calibrations on: 1outCO2_C
120 -123 Monitor/Component ID
Analyzer Range: 20.000
CGA Set Members
06/07/95 06:18
06/07/95 09:17
06/07/95 12:17
CGA Set Name: co2sk06/95
Legend:
Cal In Set
CGA Type Cal
Non CGA Cal
Date/Time Low Mid High
06/07/95 06:18 4.99 11.35 17.27
06/07/95 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 17.16
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

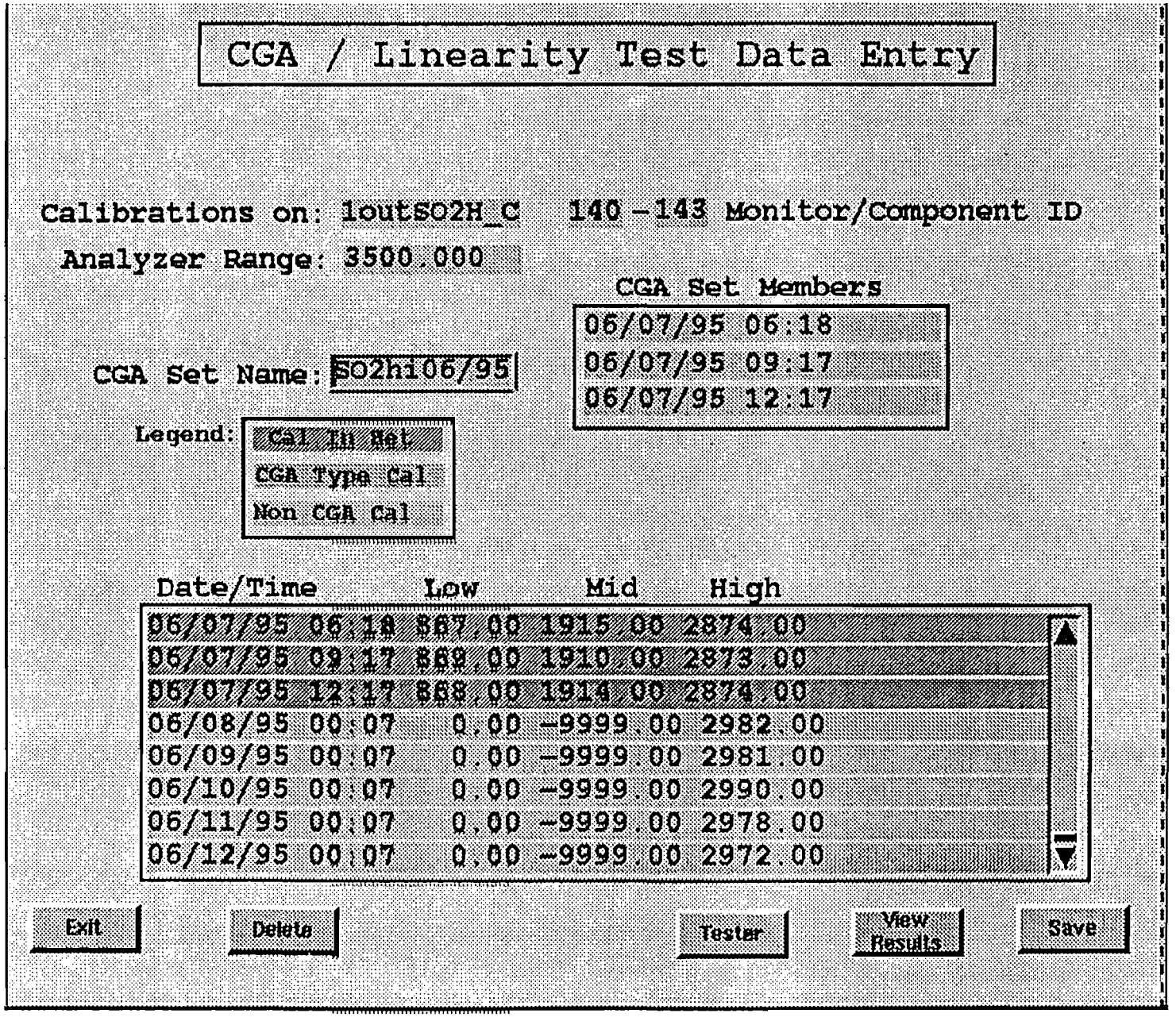

CGA Results
CGA/Linearity Set Name: NOXsk06/95
Low
Mid
High
Avg Ref Val: 252.000 554.000 858.000
Avg Mon Val: 258.500 555.100 849.567
Results: 2.579 0.199 0.983
APS Flag: 0 0 0
#OOC Hrs: 0
Exit


CGA / Linearity Test Data Entry
Calibrations on: 1outNOX_C
130 -133 Monitor/Component ID
Analyzer Range: 1000.000
CGA Set Members
06/07/95 06:18
06/07/95 09:17
06/07/95 12:17
CGA Set Name: NOXsk06/95
Legend:
Cal In Set
CGA Type Cal
Non CGA Cal
Date/Time Low Mid High
06/07/95 06:18 250.60 556.20 850.20
06/07/95 09:17 248.80 555.90 851.40
06/07/95 12:17 247.60 553.20 847.10
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: SO21o06/95
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: 1outSO2L_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: SO21o06/95
Legend:
Cal In Bat
CGA Type Cal
Non CGA Cal
Date/Time Low Mid High
06/07/95 06:18 76.40 167.50 261.40
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: SO2hi06/95
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 06:18 867.00 1915.00 2874.00
06/07/95 09:17 869.00 1910.00 2873.00
06/07/95 12:17 868.00 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_3 (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_3 (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

CERTIFIED MAIL

SJRO LC 95 094

June 14, 1995

Mr. Steve Pace
RESD
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 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:

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 (RESD) 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	344 FUEL INPUT RATE (TONS/HR) 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	0/S	36.5	34	36	88.
0700	E.A.	4952	4.40	640	47	44	44	0/S	46	43.5	45	86.4
0800	E.A.	5131	4.57	657	46.5	44.5	44	0/S	45.5	40	44.5	96.
0900	E.A	5152	4.56	658	46	44.5	44	0/S	44.5	40	45.5	86.
1000	E.A	5161	4.58	658	46	44	44	0/S	45.5	40	45	86.
1100	E.A	5152	4.56	658	45.5	42	43	0/S	45	40	44	86.
1200	E A	5146	4.57	659	46	43	44	0/S	45.5	40	45	86.
1300	E A	5119	4.58	659	46.5	45	43.5	0/S	44	38.5	44	88.
1400	E A	5176	4.57	658	46	44	43.5	0/S	44.5	38.5	45	88.
1500	E A	5078	4.36	632	43.5	41.5	41.5	0/S	41	30	40.5	88.
1600	E A	5042	4.37	636	40.5	39	38.5	38.5	39.5	0/S	39.5	79.
1700	E A	5172	4.59	660	43	42.5	42	42.5	42.5	0/S	42.5	87.
1800	m T	5155	4.58	656	43	42.5	43	43.5	43.5	0/S	43	88.
1900	m T	5165	4.56	659	44	42.5	42.5	43.5	43.5	0/S	43	88.
2000	m T	5125	4.52	657	44	42.5	42.5	43.5	43.5	0/S	43	88.
2100	m T	5161	4.56	658	44	42	42.5	43	43	0/S	42.5	88.
2200	m T	4999	4.32	629	42.5	40	41	41.5	42.5	0/S	42.5	
2300	m T	4989	4.35	630	45.5	43	43	43	44	0/S	44	

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	
					FUEL INPUT RATE (TONS/HR)							
					A	B	C	D	E	F	G	
0000	mT	4961	4.34	629	42	39.5	41	41.5	43	o/s	42.5	3
0100	mT	5227	4.53	658	47.5	45	45	45.5	45.5	o/s	45	33.
0200	mT	5121	4.53	654	44	41.5	42.5	43	44	o/s	44	39.
0300	mT	5176	4.51	654	46	43	43.5	37.5	44	o/s	43.5	33.
0400	mT	5106	4.50	653	45	42.5	43.5	40.5	45	o/s	45.5	3
0500	mT	5162	4.55	657	44.5	41	41.5	41	42.5	o/s	42	38.
0600	"	5147	4.56	659	45	42	42.5	43	44	o/s	43.5	38.
0700	"	5142	4.55	657	44.5	42	42.5	43	44	o/s	43	38.
0800	"	5188	4.55	658	44	41	42	43	43.5	o/s	44	38.
0900	"	5181	4.53	657	46	43	43.5	44	44	o/s	45	38.1
1000	"	5146	4.59	659	44.5	41.5	43	44	44.5	o/s	43.5	38.
1100	"	5206	4.57	659	45	41.5	42.5	42.5	44.5	o/s	43	38.
1200	"	5325	4.71	675	46	42.5	43.5	43.5	45	o/s	44	38.
1300	"	5394	4.71	676	46	43	44	44	45	o/s	44.5	38.
1400	"	5317	4.68	673	44.5	41.5	42.5	42.5	44	o/s	43	38.
1500	"	5293	4.74	674	42.5	40	41	41	41.5	o/s	42	38.1
1600	"	5267	4.67	667	44.5	42.5	43.5	43.5	44.5	o/s	44	38.
1700	"	5248	4.70	677	45	42.5	43.5	44	44.5	o/s	44	38.
1800	Eap	5275	4.70	673	45	42.5	43.5	43.5	44	o/s	44.5	38.
1900	Eap	5267	4.70	674	45	42	43	43	44	o/s	43.5	38.
2000	Eap	5285	4.70	674	45.5	43	43.5	43.5	45	o/s	44.5	38.
2100	Eap	5308	4.68	675	45	42.5	43.5	44	44.5	o/s	44	38.
2200	Eap	5287	4.70	673	45.5	42.5	43	43.5	44.5	o/s	44	38.
2300	Eap	5279	4.71	675	45	43	43.5	43.5	44.5	o/s	44.5	38.

BEST AVAILABLE COPY

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

DATE: 7/20/95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	STEAM PRODUCTION (MMLBS/HR)	MW/HR	FUEL INPUT RATE (TONS/HR) 34A	40B	46C	52D	58E	64F	70G	η_B
0000	EAP	5299	4.73	678	45.5	43	43.5	42	44	0/S	44	
0100	EAP	5309	4.70	676	46	44	45	41	46	0/S	45.5	
0200	EAP	5303	4.73	670	46	43.5	44	42	45.5	0/S	45.5	88.
0300	EAP	5307	4.72	671	46	44	44.5	41	45.5	0/S	45	88.
0400	EAP	5323	4.69	673	45.5	43	43.5	41	45	0/S	44.5	
0500	EAP	5318	4.72	671	44.5	41.5	44.5	0/S	45.5	41.5	45.5	87.
0600	EA	5209	4.51	651	43	40.5	42.5	0/S	42.5	42	42	
0700	EA	5200	4.56	660	44	43	43	0/S	44.3	43	43.5	BIA EFF
0800	EA	5188	4.59	660	45.5	42.5	43.5	0/S	44.5	43	44	88.
0900	EA	5170	4.60	659	44	44.5	43.5	0/S	44.5	43	44.5	88.
1000	EA	5184	4.59	658	45	42.5	43	0/S	44.5	43	46	88.
1100	EA	5291	4.68	671	46	44	44	0/S	45	43.5	45	88.
1200	EA	5274	4.68	674	46	44.5	44	0/S	45	43.5	45	88.
1300	EA	5262	4.69	671	46	44.5	44	0/S	45	43.5	45	88.
1400	EA	5265	4.69	671	46	44	43.5	0/S	44.5	43.5	44.5	88.
1500	EA.	5258	4.69	671	46	44	44	0/S	45.5	43	44.5	88.
1600	EA	5332	4.74	672	46.5	44	44	0/S	45	43.5	45	88.
1700	EA	5318	4.68	668	46.5	45	45	0/S	45.0	43.5	45	88.
1800	MD	5322	4.69	670	46	45	45	0/S	45	43.5	44.5	88
1900	Test Complete per S.S.											
2000												
2100												
2200												
2300												

ST. JOHNS RIVER POWER PARK

PETROLEUM COKE/COAL TRIAL BURN

BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK

DATE: 8-8-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) (K#/hr) A	B	C	D	E	F	G
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	7[illegible]	72	—
1000	JB	5983	88.6	1005	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	RM	5947	88.6	998	2394	4.70	669	94	78	79	85	82	78	—
1400	JB	5984	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	RM	5998	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	[illegible]	5955	88.5	1001	2403	4.72	671	86	80	81	85	84	79	—
1900	[illegible]	5892	88.5	1000	2400	4.60	658	86	81	82	85	84	81	—
2000	[illegible]	5867	88.5	1002	2405	4.57	656	87	81	83	86	85	80	—
2100	[illegible]	5849	88.6	1003	2399	4.61	659	84	78	80	84	79	77	—
2200	[illegible]	5863	88.5	1006	2414	4.59	660	83	76	79	86	81	76	—
2300	[illegible]	5757	88.6	998	2398	4.52	644	79	74	76	85	79	75	—

DEBUG

ST. JOHNS RIVER POWER PARK

PETROLEUM COKE/COAL TRIAL BURN

BASELINE & BLEND OPERATIONAL DATA - POWER BLOCK

DATE: 8-9-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) (kT/hr) A	B	C	D	E	F	G
0000	CA	5733	88.6	1002	2421	4.41	634	76	69	72	86	77	74	—
0100	CA	5880	88.6	1002	2398	4.61	660	85	78	80	79	81	77	—
0200	CA	5780	88.8	1003	2422	4.56	660	84	78	79	79	81	77	—
0300	CA	5843	88.8	1002	2406	4.60	658	83	77	79	80	82	79	—
0400	CA	5859	88.7	1008	2407	4.59	659	86	79	82	82	83	80	—
0500	CA	5885	88.8	1006	2399	4.59	660	85	80	81	81	83	78	—
0600	WD	5828	88.8	1003	2394	4.49	650	84	77	81	80	83	78	—
0700 → VWO	WD	5979	88.8	999	2405	4.72	675	86	81	84	84	87	82	—
0800	WD	5958	88.7	999	2405	4.72	672	87	80	82	82	85	80	—
0900	WD	5958	88.7	1001	2401	4.71	672	86	80	84	83	86	81	—
1000	WD	5976	88.6	1003	2403	4.71	672	87	81	84	84	87	82	—
1100	WD	5949	88.7	999	2402	4.72	672	87	82	85	84	87	82	—
1200	WD	5992	88.6	1003	2412	4.71	673	87	82	85	84	88	82	—
1300	WD	5968	88.4	1003	2415	4.73	674	86	80	89	88	87	80	—
1400	WD	5983	88.5	1005	2410	4.72	674	77	73	76	75	79	74	55 — G Pwr I/s
1500	WD	5951	88.6	1009	2394	4.69	670	79	74	76	75	80	55	77
1600	WD	5949	88.6	994	2417	4.76	674	75	70	74	73	76	70	74 — A Pwr o/s
1700	WD	6028	88.5	996	2405	4.74	670	—	83	86	85	89	83	87
1800	EA	5989	88.6	1008	2402	4.70	669	—	83	85	84	88	83	87
1900	EA	5849	88.9	1004	2392	4.60	659	—	82	85	84	86	83	86
2000	EA	5851	88.7	985	2400	4.65	657	—	82	83	83	85	81	84
2100	EA	5878	88.7	1006	2420	4.60	658	—	82	82	82	86	80	84
2200	EA	5920	88.8	1005	2405	4.50	659	—	80	82	83	84	80	84
2300	EA	5837	88.8	1002	2390	4.60	657	—	84	85	85	86	84	87

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

DATE: 8-10-95 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (Kft/hr) A	B	C	D	E	F	G
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	Ry	5849	88.7	1001	2383	4.58	658	—	79	81	82	83	78	83
0800	Ry	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	2399	4.40	639		81	82	84	84	81	81
1100	Ry	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	Ry	5848	88.7	1004	2404	4.59	658	75	69	71	71	73	68	72
1400	Ry	5871	88.8	1007	2400	4.62	658	84	79	—	81	83	78	82
1500	JB	5839	88.8	999	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	6029	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 (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) A	B	C	D	E	F	G
0000	DB	5756	89	1000	2401	4.60	659	o/s	74	76	77	81	76	80
0100	DB	5865	88.9	1001	2409	4.58	653	o/s	78	83	81	85	80	85
0200	DB	5705	88.9	997	2392	4.50	642	o/s	75	77	76	80	74	77
0300	DB	5745	88.9	1008	2402	4.52	655	o/s	77	82	81	85	79	84
0400	DB	5784	88.8	1007	2413	4.53	652	o/s	78	83	82	86	81	85
0500	DB	5813	88.9	1004	2407	4.58	658	o/s	79	83	81	85	80	84
0600	MH	5794	89	1007	2387	4.57	659	o/s	80	83	83	85	80	84
0700	MH	5801	89	1004	2388	4.58	659	o/s	80	81	82	84	80	84
0800	MH	5821	88.9	996	2385	4.61	658	o/s	79	80	83	83	79	83
0900	MH	5787	89	1000	2384	4.59	659	o/s	79	80	81	82	78	83
1000	MH	5803	89	1003	2381	4.59	659	o/s	80	80	81	83	79	83
1100	MH	5955	88.8	1010	2384	4.65	669	o/s	81	83	84	86	81	86
1200	MH	5934	88.8	1008	2383	4.68	673	o/s	81	83	82	86	81	85
1300	MH	6019	88.7	987	2391	4.76	670	o/s	50	73	73	74	73	74
1400	MH	5919	88.7	998	2384	4.71	669	77	71	73	50	75	71	74
1500	MH	5993	88.8	997	2372	4.69	665	o/s	74	76	76	78	74	77
1600	MH	5928	89	1000	2380	4.70	670	o/s	80	81	81	83	79	84
1700	MH	5931	88.9	1003	2389	4.70	672	o/s	80	81	82	84	80	84
1800	DS	5925	89.0	1002	2383	4.70	670	o/s	80	82	81	84	79	83
1900	DS	5897	89.0	1002	2386	4.69	668	o/s	80	82	82	84	79	84
2000	DS	5893	89.0	1002	2391	4.68	669	o/s	81	82	82	84	80	84
2100	DS	5937	88.9	1003	2390	4.71	669	o/s	80	83	82	84	81	84
2200	DS	5934	89.1	1011	2382	4.68	669	o/s	81	82	82	84	80	85
2300	DS	5916	93.9	1001	2385	4.68	667	o/s	80	83	83	84	79	83

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ST. JOHNS RIVER POWER PARK
PETROLEUM COKE/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 (MMLBS/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/S	81	82	82	83	79	84
0100	DS	5942	89.2	1001	2392	4.72	668	0/S	81	82	83	84	79	84
0200	DS	5889	88.8	1005	2381	4.65	657	0/S	79	81	82	83	78	82
0300	DS	5789	88.9	1001	2389	4.55	650	0/S	79	81	81	83	78	82
0400	DS	5633	89.0	999	2401	4.43	635	0/S	75	77	78	80	75	79
0500	DS	5264	94.0	995	2381	4.09	595	0/S	75	77	77	79	74	78
0600	EAP	5445	~~94.0~~ 89.1 EAP	999	2394	4.18	612	0/S	72	75	75	76	72	76
0700	EAP	5611	89.0	992	2378	4.35	632	0/S	73	76	76	78	73	77
0800	EAP	5699	89.0	1005	2376	4.51	650	0/S	78	81	80	82	78	82
0900	EAP	5760	89.1	997	2378	4.61	659	0/S	80	81	82	84	79	83
1000	EAP	5794	89.1	1007	2391	4.56	657	0/S	75	78	80	80	76	79
1100	EAP	5777	89.1	1000	2381	4.61	657	0/S	79	82	82	84	79	83
1200	EAP	5771	89.0	1001	2373	4.57	654	0/S	76	80	79	81	76	80
1300	EAP	5857	89.0	1004	2378	4.59	660	0/S	80	82	80	84	77	83
1400	EAP	5810	88.9	1001	2385	4.63	658	0/S	74	77	77	79	79	81
1500	EAP	5877	88.9	1003	2380	4.61	656	0/S	77	80	82	83	77	83
1600	EAP	5922	88.9	1002	2392	4.61	658	0/S	79	81	81	83	79	83
1700	EAP	5809	89.0	999	2387	4.60	657	0/S	79	81	81	84	78	83
1800	DB	5806	89	1000	2393	4.55	659	0/S	77	81	80	84	77	82
1900	DB	5777	89.1	1004	2402	4.60	657	0/S	78	82	81	85	80	84
2000	DB	5804	89.1	1002	2398	4.59	657	0/S	77	81	81	84	77	83
2100	DB	5832	89.0	993	2401	4.62	657	0/S	77	81	79	82	77	80
2200	DB	5780	89.0	997	2395	4.51	654	0/S	78	81	80	84	78	81
2300	DB	5790	88.9	998	2391	4.46	648	0/S	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 (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TON/HR) A	B	C	D	E	F	G
	0000	DB	5746	89.1	999	2381	4.55	654	0/S	85	85	85	87	83	85
	0100	DB	5699	89.0	993	2396	4.50	654	0/S	81	81	85	88	77	80
	0200	DB	5591	88.9	1002	2396	4.45	632	0/S	81	80	85	85	80	85
	0300	DB	5791	89.0	1004	2403	4.50	650	0/S	83	82	86	88	80	85
	0400	DB	5730	88.9	998	2411	4.47	643	0/S	79	82	81	85	80	84
	0500	DB	5601	88.8	1009	2417	4.35	630	0/S	75	78	76	80	75	78
	0600	MT	5571	88.9	999	2386	4.35	635	0/S	75	76	77	78	72	77
	0700	MT	5441	89.0	1000	2385	4.20	619	0/S	74	75	76	77	73	77
	0800	MT	5774	88.8	997	2400	4.60	659	0/S	81	82	82	84	80	84
	0900	MT	5786	88.9	999	2383	4.58	657	0/S	77	80	79	81	76	81
	1000	MT	5835	88.9	1001	2387	4.60	661	0/S	79	81	83	83	79	83
	1100	MT	5802	89.0	999	2386	4.60	661	0/S	80	82	83	83	80	83
	1200	MT	5854	88.9	1004	2391	4.61	661	0/S	79	81	82	83	77	84
IWO	1300	MT	5902	88.9	1005	2397	4.65	676	0/S	81	82	83	85	81	84
VWO	1400	MT	5722	88.8	1003	2383	4.70	674	0/S	80	82	82	84	80	84
VWO	1500	MT	5944	88.8	1001	2378	4.69	671	0/S	80	82	82	84	80	84
VWO	1600	MT	5930	88.9	1003	2389	4.71	672	0/S	80	82	82	84	80	85
	1700	MT	5943	89.1	1003	2387	4.71	669	0/S	80	82	82	83	80	85
	1800	DS	5912	89.1	1001	2389	4.69	672	0/S	79	81	81	83	79	83
	1900	DS	5934	89.1	997	2393	4.70	671	0/S	79	82	82	84	79	83
	2000	DS	5910	88.9	1000	2393	4.68	671	0/S	81	82	83	85	81	85
	2100	DS	5930	89.0	998	2390	4.69	674	0/S	82	83	83	84	80	84
	2200	DS	5908	88.9	985	2397	4.71	670	0/S	79	80	81	83	78	82
	2300	DS	5915	88.9	1003	2387	4.67	671	0/S	79	81	80	83	79	84

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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 (MMLBS/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	o/s	80	82	82	81	80	84
0100	DS	5879	88.9	994	2391	4.64	658	o/s	80	82	81	83	79	83
0200	DS	5885	88.8	1002	2391	4.63	659	o/s	79	82	82	84	80	83
0300	DS	5844	88.9	997	2404	4.61	639	o/s	73	76	77	77	75	79
0400	DS	5906	88.8	1001	2389	4.67	658	o/s	79	81	81	77	78	8_
0500	DS	5838	88.7	1001	2385	4.59	658	o/s	79	82	82	82	79	84
0600	CA	5828	33.9	1003	2400	4.59	657	o/s	79	82	82	81	73	34
0700	CA	5801	86.4	987	2406	4.63	655	o/s	77	80	81	80	74	79
0800	CA	5731	33.9	997	2405	4.62	657	o/s	78	80	81	81	78	84
0900	CA	5814	89.0	1007	2401	4.60	658	o/s	80	81	82	81	79	83
1000	CA	5901	33.7	1005	2410	4.63	667	o/s	83	84	85	84	33	86
1100	CA	5951	89.1	1001	2399	4.70	667	o/s	80	33	33	82	81	35
1200	CA	5923	89.1	1005	2398	4.73	667	o/s	81	83	83	81	80	85
1300	CA	5915	39.1	1005	2411	4.72	671	o/s	80	82	83	83	81	84
1400	CA	5955	89.1	1000	2398	4.71	665	o/s	81	82	82	82	80	83
1500	CA	5953	89.0	1001	2404	4.72	668	o/s	80	82	82	84	82	84
1600	CA	5957	89.0	996	2396	4.72	665	o/s	80	81	81	81	80	83
1700	CA	5959	89.0	998	2401	4.71	667	o/s	80	81	82	81	80	83
1800	EAP	5962	89.9	1000	2386	4.72	671	o/s	80	82	82	82	79	84
1900	EAP	5934	89.0	997	2387	4.71	670	o/s	80	82	82	82	79	83
2000	EAP	5950	89.0	997	2393	4.72	670	o/s	81	81	81	81	79	83
2100	EAP	5970	89.0	1007	2372	4.66	667	o/s	82	84	84	84	81	86
2200	EAP	5974	89.0	1004	2390	4.71	672	o/s	78	80	80	80	76	82
2300	EAP	5877	88.9	1001	2392	4.66	668	o/s	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 (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) A	B	C	D	E	F	G
0000	EAP	5680	89.1	1012	2381	4.39	640	0/S	77	79	80	80	77	83
0100	EAP	5814	88.9	1002	2393	4.63	659	0/S	80	81	82	82	79	84
0200	EAP	5864	89.0	1003	2391	4.60	657	0/S	78	80	80	79	77	81
0300	EAP	5818	89.1	997	2389	4.61	657	0/S	78	80	80	80	78	82
0400	EAP	5791	88.9	987	2399	4.57	648	0/S	77	79	78	78	75	79
0500	EAP	5833	89.0	1013	2374	4.52	658	0/S	80	81	81	81	78	82
0600	EA	5841	88.8	1006	2408	4.57	658	0/S	78	79	80	80	78	81
0700	EA	5815	88.9	988	2401	4.60	659	0/S	79	81	80	81	77	83
0800	EA	5676	88.7	1000	2426	4.38	635	0/S	69	72	72	72	70	75
0900	EA	5904	88.6	998	2392	4.69	667	0/S	78	80	80	80	78	82
1000	EA	6025	88.7	995	2404	4.74	672	0/S	83	82	83	82	80	83
1100	EA	5983	88.7	1002	2399	4.70	667	0/S	80	82	83	81	81	82
1200	EA	5975	88.7	994	2401	4.72	667	0/S	79	83	82	82	80	84
1300	EA	5947	88.5	1008	2406	4.70	670	0/S	81	82	83	82	81	85
1400	EA	5990	88.3	998	2411	4.73	669	0/S	81	82	82	83	80	84
1500	EA	5970	88.3	999	2400	4.70	667	0/S	79	81	82	81	79	83
1600	EA	5938	88.8	1000	2412	4.73	670	0/S	79	83	84	82	81	84
1700	EA	5935	88.5	1002	2393	4.68	667	0/S	81	82	83	82	80	84
1800	MH	6006	88.5	992	2401	4.75	672	0/S	77	79	79	79	77	82
1900	MH	6005	88.4	998	2399	4.75	677	0/S	82	84	84	83	82	85
2000	MH	5991	88.4	997	2391	4.71	671	0/S	81	82	84	82	80	83
2100	MH	6012	88.6	1000	2389	4.71	673	0/S	81	83	83	81	80	84
2200	MH	5975	88.8	1000	2393	4.73	675	0/S	80	81	81	81	79	83
2300	MH	5898	89.0	1002	2405	4.60	660	0/S	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 (psig)	STEAM PRODUCTION (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) A	B	C	D	E	F	G
0000	MT	5814	88.9	1003	2382	4.58	658	o/s	78	80	80	80	77	83
0100	MT	5815	88.9	1001	2385	4.57	661	o/s	78	80	80	81	78	81
0200	MT	5848	88.8	1001	2393	4.57	651	o/s	74	76	77	77	75	79
0300	MT	5825	88.8	986	2393	4.62	660	o/s	79	81	81	83	79	83
0400	MT	5867	88.7	995	2388	4.62	661	o/s	79	81	81	83	79	83
0500	MT	5812	88.8	999	2388	4.57	654	o/s	75	78	78	80	76	80
0600	"	5721	88.8	1000	2399	4.52	650	o/s	78	79	80	82	78	82
0700	"	5800	88.9	1008	2400	4.58	660	o/s	77	78	78	81	76	81
0800	"	BD	BD	1007	2399	4.29	621	o/s	75	77	78	81	76	81
0900	"	5924	88.7	1004	2389	4.68	668	o/s	79	82	80	83	78	83
1000	"	5959	88.7	1002	2395	4.70	671	o/s	80	82	82	84	79	84
1100	"	5990	88.7	1005	2411	4.72	673	o/s	80	83	82	84	80	84
1200	"	5956	88.6	1000	2407	4.73	671	o/s	82	82	83	85	80	85
1300	"	5970	88.6	1008	2392	4.67	669	o/s	82	85	84	87	83	86
1400	"	6037	88.7	987	2399	4.74	665	o/s	79	80	80	83	78	81
1500	"	6007	88.6	1006	2381	4.66	660	o/s	82	84	85	87	82	87
1600	MT	5174	33.5	990	2371	4.75	668	o/s	79	81	81	83	77	83
1700	MT	6,043	88.6	990	2373	4.75	663	o/s	77	82	80	82	77	81
1800	Eap	5949	88.9	1001	2413	4.75	677	o/s	80	83	83	85	80	85
1900	Eap	5950	89.1	992	2380	4.72	664	o/s	79	80	82	81	78	82
2000	Eap	5971	89.1	995	2389	4.72	671	o/s	80	81	81	83	79	83
2100	Eap	5922	89.1	999	2386	4.70	672	o/s	81	83	83	84	79	85
2200	Eap	5929	89.1	999	2391	4.72	673	o/s	81	82	82	83	79	84
2300	Eap	5829	89.3	1005	2393	4.59	658	o/s	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 (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) A	B	C	D	E	F	G
0000	EAP	5827	89.3	1003	2399	4.62	658	0/S	81	82	82	84	80	84
0100	EAP	5813	89.2	1004	2389	4.62	658	0/S	80	81	80	84	79	82
0200	EAP	5897	89.1	996	2391	4.63	658	0/S	81	82	82	85	80	84
0300	EAP	5839	89.2	998	2385	4.61	657	0/S	80	81	82	83	79	83
0400	EAP	5669	88.8	1002	2383	4.46	637	0/S	77	80	79	81	75	78
0500	EAP	5123	89.0	1011	2374	3.97	560	0/S	72	75	74	76	71	75
0600	EA	5866	88.6	992	2411	4.62	658	0/S	76	78	79	80	76	80
0700	EA	5882	88.6	999	2398	4.60	658	0/S	78	79	78	82	78	82
0800	EA	5919	88.4	996	2393	4.61	655	0/S	80	82	82	84	79	83
0900	EA	5859	88.4	1003	2407	4.60	658	0/S	79	80	80	84	78	82
1000	EA	5913	88.4	1004	2401	4.60	658	0/S	79	81	81	83	79	82
1100	EA	5962	88.6	1001	2407	4.72	673	0/S	80	81	81	83	80	83
1200	EA	6000	88.6	996	2397	4.71	669	0/S	77	79	80	81	76	81
1300	EA	5968	88.7	997	2405	4.72	672	0/S	77	79	80	81	77	81
1400	EA	6013	88.6	1001	2404	4.71	670	0/S	77	79	79	81	77	81
1500	EA	5960	88.5	997	2403	4.73	670	0/S	77	79	79	80	76	81
1600	EA	6012	88.4	1001	2401	4.71	670	0/S	77	79	79	81	76	81
1700	EA	5962	88.4	1001	2409	4.73	673	0/S	77	79	77	81	76	81
1800	MD	5993	88.3	1006	2402	4.69	669	0/S	76	78	78	79	76	81
1900	MD	5997	88.3	1001	2401	4.69	672	0/S	76	76	78	78	77	80
2000	MD	5999	88.3	1002	2407	4.72	672	0/S	76	80	79	84	77	82
2100	MD	5959	88.3	1000	2406	4.72	672	0/S	77	81	80	84	78	83
2200	RG	5794	88.4	993	2313	4.55	657	0/S	71	72	73	76	73	76
2300	MD	5734	88.4	993	2393	4.47	638	0/S	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 (MM LBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) KLBS/HR A	B	C	D	E	F	G
0000	WD	5712	88.4	1000	2401	4.59	636	0/S	78	78	76	81	75	78
0100	WD	5703	88.4	1001	2398	4.59	633	0/S	74	78	76	81	75	78
0200	WD	5755	88.6	1009	2398	4.52	651	0/S	75	77	77	81	75	81
0300	WD	5754	88.8	1001	2397	4.62	657	0/S	74	78	77	81	75	81
0400	WD	5798	88.8	1000	2399	4.61	658	0/S	74	78	77	81	75	81
0500	WD	5865	88.7	1005	2400	4.61	661	0/S	74	76	77	81	74	81
0600	L.G.	5824	88.6	1003	2398	4.57	655	0/S	75	76	78	80	73	80
0700	Tony	5834	88.6	1000	2401	4.57	652	0/S	74	76	77	79	74	80
0800	Tony	5860	88.7	1010	2397	4.57	654	0/S	75	76	78	79	73	80
0900	Tony	5984	88.6	999	2401	4.67	663	0/S	77	78	79	80	75	74
1000	Tony	5993	88.6	1006	2392	4.70	670	0/S	75	76	77	81	75	79
1100	Tony	5954	88.7	999	2397	4.71	672	0/S	76	78	78	80	76	80
1200	Tony	5964	88.6	998	2401	4.71	672	0/S	76	78	78	81	76	81
1300	Tony	5924	88.7	1003	2401	4.71	670	0/S	76	78	78	80	75	80
1400	Tony	5950	88.6	1002	2404	4.72	670	0/S	75	77	77	80	74	80
1500	Tony	5944	88.7	999	2400	4.71	670	0/S	76	78	78	81	75	80
1600	Tony	5965	88.6	986	2410	4.71	670	0/S	75	76	78	80	74	80
1700	Tony	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	5949	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 (MM LBS/HR)	GROSS MW	FUEL INPUT RATE (TONS/HR) KLBS/HR A	B	C	D	E	F	G
0000	AB	5969	88.2	998	2403	4.62	658	O/S	74	76	76	78	74	78
0100	AB	5868	88.5	997	2408	4.61	660	O/S	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	O/S	76	75	77	76	74	76
0500	AB	5885	88.6	1004	2402	4.64	664	—	77	75	77	77	74	76
0600	A.L.	5942	88.5	1002	2383	4.65	665	O/S	76	75	77	76	74	76
0700	A.L.	5991	88.5	1002	2397	4.67	667	O/S	76	75	77	76	75	76
0800	A.L.	5923	88.5	997	2401	4.63	662	O/S	76	76	77	76	75	76
0900	A.L.	5906	88.6	1001	2402	4.67	664	O/S	74	74	77	75	75	76
1000	A.L.	5924	88.5	1000	2387	4.64	658	O/S	76	74	77	77	74	75
1100	A.L.	5831	88.8	1003	2402	4.59	664	O/S	77	75	77	76	75	76
1200	A.L.	5890	88.9	994	2400	4.66	665	O/S	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	MD	BD	BD	990	2405	4.74	675	O/S	76	80	79	78	77	82
1900	MD	BD	BD	1000	2398	4.68	673	O/S	77	81	80	78	79	83
2000	MD	BD	BD	1006	2401	4.70	674	O/S	77	82	80	79	79	83
2100	MD	BD	BD	1003	2407	4.55	660	O/S	78	82	79	83	76	79
2200	MD	BD	BD	1005	2398	4.59	660	O/S	75	80	79	83	76	81
2300	MD	BD	BD	1004	2395	4.58	660	O/S	75	80	77	81	77	80

BOIT OFF UNO BACK TO ABS

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

DATE: 8/20/98 UNIT #: 1

TIME	INITIALS	HEAT INPUT (MMBTU/HR)	BOILER EFFICIENCY (%)	MAIN STEAM TEMPERATURE (DEG. F)	MAIN STEAM PRESSURE (psig)	STEAM PRODUCTION (MMLBS/HR)	GROSS MW	FUEL INPUT RATE (CONVEYOR) KLBS/HR						
								A	B	C	D	E	F	G
0000	MD	BD	BD	995	2397	4.54	651	d/s	75	80	77	81	78	81
0100														
0200														
0300														
0400														
0500														
0600														
0700														
0800														
0900														
1000														
1100														
1200														
1300														
1400														
1500														
1600														
1700														
1800														
1900														
2000														
2100														
2200														
2300														

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 valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000						
0100						
0200						
0300						
0400						
0500						
0600						
0700	CS	6.07 / 5.96	3.09 / 2.89	4	1.33	1.25
0800	CS	6.08 / 5.97	3.06 / 2.83	3	1.335	1.25
0900	CS	6.08 / 5.95	2.98 / 2.77	3	1.335	1.25
1000	CS	6.07 / 5.95	2.92 / 2.69	3	1.34	1.25
1100	CS	6.06 / 5.94	2.90 / 2.67	3	1.335	1.25
1200	CS	6.06 / 5.93	2.96 / 2.74	3	1.33	1.25
1300	CS	6.04 / 5.92	2.92 / 2.70	3	1.34	1.25
1400	CS	6.03 / 5.92	2.91 / 2.67	3	1.34	1.25
1500	CS	6.03 / 5.93	2.88 / 2.66	4	1.34	1.25
1600	CS	6.04 / 5.93	2.90 / 2.68	4	1.34	1.20
1700	CS	6.02 / 5.92	2.92 / 2.69	5	1.345	1.25
1800	VAM	6.04 / 5.93	2.87 / 2.65	5	1.34	1.25
1900	VAM	6.05 / 5.96	3.65 / 3.44	3	1.34	1.20
2000	VAM	6.03 / 5.94	3.32 / 3.10	3	1.335	1.20
2100	VAM	6.03 / 5.93	3.27 / 3.06	4	1.335	1.25
2200	VAM	6.04 / 5.94	3.21 / 2.99	4	1.33	1.20
2300	VAM	6.03 / 5.94	3.20 / 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	Vam	6.07 / 5.98	3.72 / 3.52	4	1.34	1.20
0100	Vam	6.05 / 5.97	3.38 / 3.16	4	1.33	1.25
0200	Vam	6.05 / 5.97	3.33 / 3.12	4	1.32	1.20
0300	Vam	6.05 / 5.97	3.26 / 3.05	4	1.33	1.20
0400	Vam	6.06 / 5.97	3.29 / 3.07	4	1.33	1.25
0500	Vam	6.04 / 5.95	3.24 / 3.01	3	1.33	1.25
0600	CS	6.03 / 5.95	3.30 / 3.08	3	1.32	1.25
0700	CS	6.07 / 5.98	3.77 / 3.57	3	1.33	1.10
0800	CS	6.05 / 5.96	3.46 / 3.24	3	1.335	1.20
0900	CS	6.05 / 5.96	3.33 / 3.12	3	1.33	1.20
1000	CS	6.04 / 5.94	3.33 / 3.11	3	1.33	1.20
1100	CS	6.03 / 5.93	3.28 / 3.08	3	1.33	1.25
1200	CS	6.02 / 5.93	3.33 / 3.13	3	1.33	1.25
1300	CS	6.02 / 5.93	3.27 / 3.06	4	1.34	1.25
1400	CS	6.03 / 5.94	3.22 / 3.00	4	1.325	1.20
1500	CS	6.03 / 5.94	3.16 / 2.94	5	1.33	1.25
1600	CS	6.06 / 5.97	3.48 / 3.27	5	1.33	1.25
1700	CS	6.04 / 5.95	3.36 / 3.14	4	1.33	1.25
1800	Vam	6.03 / 5.94	3.27 / 3.04	3	1.33	1.25
1900	Vam	6.04 / 5.92	3.62 / 3.41	3	1.33	1.25
2000	Vam	6.05 / 5.95	3.81 / 3.59	3	1.33	1.25
2100	Vam	6.02 / 5.93	3.51 / 3.27	3	1.33	1.25
2200	Vam	6.01 / 5.91	3.40 / 3.17	4	1.33	1.25
2300	Vam	6.00 / 5.90	3.32 / 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 (% close of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	[illegible]	6.00 / 5.90	3.24 / 2.99	4	1.33	1.25
0100	[illegible]	6.01 / 5.91	3.21 / 2.98	5	1.33	1.25
0200	[illegible]	6.01 / 5.91	3.23 / 2.99	5	1.33	1.20
0300	[illegible]	6.04 / 5.94	3.58 / 3.36	5	1.33	1.20
0400	[illegible]	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		5				
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 (% time 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.	5.79 / 5.71	3.74 / 3.56	5	1.33	1.30
1100	T.D.	5.78 / 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 (% time 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.	5.68 / 5.67	2.98 / 2.50	5	1.335	1.25
0800	T.D.	5.77 / 5.67	2.78 / 2.51	5	1.34	1.20
0900	T.D.	5.35 / 5.64	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 / 5.68	2.61 / 2.62	6	1.33	1.30
1200	T.D.	5.0 / 5.70	2.64 / 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	3.30 / 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 - AQCS

DATE: 8-10-95 TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time 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	1.33	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 / 5.76	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	5.76 / 5.76	2.65 / 2.66	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 / 5.80	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	1.33.5	1.30
1400	T.D.	5.81 / 5.81	2.75 / 2.76	7	1.34	1.40
1500	T.D.	5.82 / 5.82	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	2.76 / 2.78	7	1.34	1.30
1800	DH	5.82 / 5.83	3.31 / 3.35	7	1.33	1.40
1900	DH	5.82 / 5.84	3.44 / 3.47	7	1.36	1.30
2000	DH	5.85 / 5.86	3.51 / 3.53	6	1.34	1.25
2100	DH	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 (% done of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	MM	5.80/5.82	3.34/3.41	5	1.335	1.25
0100	MM	5.80/5.83	3.35/3.38	5	1.33	1.20
0200	MM	5.81/5.83	3.32/3.34	5	1.325	1.20
0300	MM	5.80/5.82	3.26/3.28	6	1.325	1.10
0400	MM	5.81/5.83	3.34/3.37	6	1.34	1.20
0500	MM	5.81/5.84	3.07/3.08	5	1.34	1.20
0600	Vam	5.78/5.82	3.06/3.09	6	1.34	1.25
0700	Vam	5.77/5.81	2.87/2.88	6	1.355	1.25
0800	Vam	5.79/5.83	3.10/3.13	6	1.345	1.25
0900	Vam	5.80/5.84	3.19/3.23	6	1.355	1.25
1000	Vam	5.80/5.84	3.09/3.13	6	1.355	1.25
1100	Vam	5.80/5.84	3.15/3.18	6	1.36	1.25
1200	Vam	5.80/5.84	3.17/3.20	5	1.37	1.30
1300	Vam	5.83/5.84	3.05/3.05	5	1.365	1.25
1400	Vam	5.81/5.85	3.08/3.12	6	1.38	1.35
1500	Vam	5.81/5.86	3.15/3.18	5	1.38	1.35
1600	Vam	5.82/5.87	3.12/3.15	5	1.38	1.30
1700	Vam	5.80/5.85	3.08/3.10	6	1.38	1.30
1800	R. Rod.	5.79/5.86	2.96/2.97	6	1.38	1.30
1900	R. Rod.	5.81/5.87	2.96/2.98	6	1.37	1.31
2000	R. Rod.	5.81/5.87	3.11/3.12	7	1.35	1.27
2100	R. Rod.	5.82/5.89	3.13/3.14	7	1.032	1.27
2200	R. Rod	5.81/5.87	3.04/3.05	6	1.021	1.25
2300	R. Rod.	5.83/5.89	3.03/3.05	6	1.033	1.24

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 reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	R. Rudy	5.81 / 5.87	3.05 / 3.06	6	1.034	1.27
0100	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	Van	5.83 / 5.91	3.09 / 3.10	6	1.37	1.10
0700	Van	5.80 / 5.88	2.69 / 2.70	6	1.37	1.15
0800	Van	5.81 / 5.90	3.13 / 3.16	6	1.37	1.25
0900	Van	5.83 / 5.89	3.11 / 3.12	6	1.355	1.25
1000	Van	5.82 / 5.88	3.12 / 3.16	6	1.36	1.25
1100	Van	5.82 / 5.88	3.12 / 3.14	6	1.37	1.25
1200	Van	5.82 / 5.89	3.16 / 3.17	6	1.36	1.25
1300	Van	5.80 / 5.87	3.06 / 3.07	6	1.37	1.25
1400	Van	5.82 / 5.88	3.11 / 3.12	6	1.36	1.25
1500	Van	5.81 / 5.87	3.07 / 3.09	6	1.37	1.30
1600	Van	5.84 / 5.90	3.06 / 3.05	6	1.365	1.25
1700	Van	5.86 / 5.89	2.73 / 2.77	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 / 5.89	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	TD	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 (% time 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 / 2.64	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	Vam	5.79 / 5.83	2.58 / 2.60	8	1.34	1.25
0700	Vam	5.79 / 5.84	2.58 / 2.59	8	1.34	1.25
0800	Vam	5.80 / 5.84	2.56 / 2.58	8	1.34	1.30
0900	Vam	5.80 / 5.83	2.57 / 2.58	8	1.32	1.25
1000	Vam	5.80 / 5.83	2.56 / 2.58	8	1.34	1.25
1100	Vam	5.81 / 5.83	2.55 / 2.57	8	1.34	1.02
1200	Vam	5.81 / 5.83	2.56 / 2.58	8	1.34	1.25
1300	Vam	5.81 / 5.84	2.54 / 2.55	8	1.34	1.30
1400	Vam	5.83 / 5.86	3.00 / 3.10	8	1.35	1.30
1500	Vam	5.80 / 5.83	2.65 / 2.65	8	1.35	1.30
1600	Vam	5.80 / 5.85	2.59 / 2.59	8	1.36	1.30
1700	Vam	5.82 / 5.85	2.55 / 2.55	8	1.355	1.30
1800	T.D.	5.78 / 5.81	2.59 / 2.57	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 / 5.87	3.17 / 3.17	9	1.35	1.20
2200	TD	5.86 / 5.87	3.12 / 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: 8.14.91 TOWER: A

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time 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.	5.73 / 5.86	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.	5.72 / 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	Vom	5.77 / 5.80	3.14 / 3.13	8	1.35	1.40
1900	Vom	5.80 / 5.82	3.45 / 3.44	8	1.36	1.30
2000	Vom	5.79 / 5.82	3.47 / 3.47	8	1.36	1.30
2100	Vom	5.80 / 5.82	3.48 / 3.42	8	1.355	1.30
2200	Vom	5.78 / 5.80	3.16 / 3.13	8	1.35	1.30
2300	Vom	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 (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	Van	5.79 / 5.81	3.29 / 3.27	7	1.35	1.20
0100	Van	5.79 / 5.82	3.19 / 3.19	8	1.35	1.20
0200	Van	5.80 / 5.83	3.20 / 3.19	8	1.345	1.25
0300	Van	5.79 / 5.82	3.27 / 3.26	8	1.345	1.30
0400	Van	5.83 / 5.86	3.30 / 3.30	8	1.34	1.30
0500	Van	5.83 / 5.85	3.25 / 3.24	8	1.34	1.25
0600	CS	5.83 / 5.85	3.26 / 3.26	8	1.35	1.20
0700	CS	5.80 / 5.83	3.33 / 3.33	8	1.34	1.20
0800	CS	5.83 / 5.86	3.36 / 3.36	6	1.34	1.20
0900	CS	5.82 / 5.84	3.35 / 3.34	8	1.34	1.25
1000	CS	5.82 / 5.84	3.35 / 3.34	8	1.34	1.25
1100	CS	5.85 / 5.87	3.32 / 3.32	8	1.35	1.25
1200	CS	5.86 / 5.88	3.90 / 3.92	9	1.34	1.25
1300	CS	5.87 / 5.89	4.33 / 4.37	9	1.34	1.25
1400	CS	5.89 / 5.90	4.61 / 4.65	9	1.34	1.25
1500	CS	5.92 / 5.93	4.64 / 4.69	9	1.35	1.25
1600	CS	5.92 / 5.93	4.76 / 4.83	9	1.33	1.25
1700	CS	5.93 / 5.94	4.70 / 4.76	9	1.33	1.25
1800	Van	5.93 / 5.94	4.65 / 4.71	9	1.34	1.30
1900	Van	5.93 / 5.94	4.55 / 4.61	9	1.34	1.30
2000	Van	5.92 / 5.93	4.61 / 4.66	9	1.34	1.30
2100	Van	5.94 / 5.95	4.57 / 4.64	8	1.34	1.25
2200	Van	5.93 / 5.94	4.51 / 4.57	8	1.34	1.30
2300	Van	5.92 / 5.94	4.51 / 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 (% close of reagent 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	4.62 / 4.68	6	1.34	1.25
1900	Vam	5.96 / 5.96	4.80 / 4.86	6	1.35	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 / 4.92	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	4.84 / 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 (% time 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 (% close of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	6.0 / 5.99	4.14 / 4.11	10	1.31	1.25
0100	T.D.	6.0 / 6.0	4.04 / 4.0	10	1.305	1.25
0200	T.D.	5.99 / 5.98	3.92 / 3.95	10	1.31	1.25
0300	T.D.	5.97 / 5.97	3.97 / 3.92	10	1.305	1.25
0400	T.D.	5.97 / 5.98	4.13 / 4.12	11	1.30	1.30
0500	T.D.	5.94 / 5.94	4.0 / 3.96	11	1.30	1.35
0600	DJA	597 / 596	3.95 / 3.89	12	1.29	1.30
0700	DJA	596 / 596	412 / 408	12	1.29	1.25
0800	DJA	597 / 597	420 / 4.15	13	1.29	1.28
0900	DJA	596 / 596	397 / 390	13	1.28	1.25
1000	DJA	598 / 597	4.24 / 4.26	14	1.28	1.30
1100	DJA	599 / 599	435 / 432	14	1.28	1.28
1200	DJA	598 / 597	418 / 416	14	1.295	1.35
1300	DJA	595 / 594	403 / 397	15	1.29	1.30
1400	DJA	600 / 5.99	4.32 / 4.28	16	1.29	1.40
1500	DJA	598 / 597	437 / 433	16	1.29	1.40
1600	DJA	596 / 594	373 / 364	17	1.29	1.35
1700	DJA	598 / 597	4.32 / 4.28	17	1.30	1.50
1800	T.D.	5.99 / 5.98	3.65 / 3.58	17	1.30	1.45
1900	T.D	5.94 / 5.94	3.58 / 3.49	17	1.28	1.45
2000	TD	597 / 5.94	3.89 / 3.79	17	1.28	1.40
2100	T.D.	5.94 / 5.97	3.98 / 3.90	17	1.27	1.40
2200	T.D.	5.97 / 5.94	3.56 / 3.81	17	1.27	1.40
2300	T.D.	5.99 / 5.98	3.91 / 3.91	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 (% close of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	5.97 / 5.97	3.94 / 3.72	17	1.27	1.40
0100	T.D.	5.99 / 5.98	3.92 / 3.84	18	1.27	1.45
0200	T.D.	5.97 / 5.96	3.74 / 3.81	18	1.26	1.45
0300	T.D.	5.94 / 5.91	3.76 / 3.61	19	1.265	1.40
0400	TD	5.97 / 5.91	3.91 / 3.81	20	1.265	1.4
0500	T.D.	5.94 / 5.94	3.91 / 3.90	20	1.27	1.4
0600	DJA	598 / 597	3.92 / 3.86	22	1.265	1.45
0700	DJA	600 / 598	459 / 456	22	1.26	1.45
0800	DJA	600 / 599	464 / 467	22	1.27	1.45
0900	DJA	601 / 600	3.65 / 3.58	22	1.265	1.50
1000	DJA	602 / 601	473 / 469	21	1.27	1.50
1100	DJA	600 / 599	359 / 351	21	1.27	1.45
1200	DJA	600 / 598	463 / 459	21	1.27	1.50
1300	DJA	601 / 599	391 / 385	21	1.27	1.47
1400	DJA	596 / 594	3.52 / 3.44	21	1.27	1.45
1500	DJA	599 / 597	461 / 456	21	1.29	1.40
1600	DJA	598 / 596	350 / 342	21	1.325	1.45
1700	DJA	605 / 603	480 / 476	19	1.30	1.45
1800	T.D.	6.09 / 6.08	4.16 / 4.08	12	1.29	1.35
1900	T.D.	6.07 / 6.07	3.87 / 3.71	12	1.29	1.31
2000	T.D.	6.12 / 6.10	4.21 / 4.20	9	1.29	1.25
2100	T.D.	6.11 / 6.05	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		6.09 / 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 pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000						
0100						
0200						
0300						
0400						
0500						
0600						
0700	CS	5.86 / 5.96	3.41 / 3.30	5	1.33	1.15
0800	CS	5.86 / 5.95	3.45 / 3.33	5	1.335	1.20
0900	CS	5.88 / 5.96	3.44 / 3.33	4	1.32	1.20
1000	CS	5.84 / 5.92	3.44 / 3.33	4	1.34	1.20
1100	CS	5.87 / 5.94	3.40 / 3.31	4	1.33	1.20
1200	CS	5.86 / 5.94	3.40 / 3.30	4	1.33	1.20
1300	CS	5.84 / 5.92	3.37 / 3.27	4	1.33	1.20
1400	CS	5.83 / 5.91	3.40 / 3.27	4	1.34	1.20
1500	CS	5.82 / 5.90	3.44 / 3.33	5	1.33	1.15
1600	CS	5.85 / 5.93	3.40 / 3.30	4	1.33	1.20
1700	CS	5.84 / 5.91	3.39 / 3.30	4	1.33	1.25
1800	Vam	5.83 / 5.91	3.42 / 3.31	4	1.34	1.25
1900	Vam	5.79 / 5.87	3.37 / 3.27	4	1.33	1.20
2000	Vam	5.78 / 5.85	3.42 / 3.30	4	1.33	1.20
2100	Vam	5.78 / 5.87	3.41 / 3.30	4	1.33	1.25
2200	Vam	5.78 / 5.87	3.36 / 3.27	4	1.33	1.20
2300	Vam	5.78 / 5.86	3.44 / 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 reagent feed valve)	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	CS	5.76 / 5.84	3.44 / 3.31	4	1.32	1.15
0700	CS	5.76 / 5.84	3.44 / 3.32	5	1.32	1.10
0800	CS	5.75 / 5.84	3.41 / 3.31	4	1.32	1.10
0900	CS	5.75 / 5.82	3.49 / 3.36	4	1.32	1.15
1000	CS	5.75 / 5.82	3.41 / 3.31	4	1.32	1.20
1100	CS	5.77 / 5.83	3.37 / 3.27	4	1.32	1.20
1200	CS	5.77 / 5.84	3.34 / 3.26	4	1.32	1.25
1300	CS	5.76 / 5.83	3.35 / 3.25	4	1.32	1.25
1400	CS	5.74 / 5.80	3.41 / 3.29	4	1.335	1.25
1500	CS	5.75 / 5.83	3.38 / 3.27	4	1.32	1.20
1600	CS	5.74 / 5.81	3.60 / 3.45	5	1.32	1.25
1700	CS	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 / 3.24	4	1.33	1.25
2000	Va	5.67 / 5.82	3.61 / 3.46	4	1.33	1.25
2100	Va	5.72 / 5.81	3.59 / 3.46	4	1.33	1.20
2200	Va	5.72 / 5.82	3.30 / 3.23	4	1.33	1.25
2300	Va	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
0000	[illegible]	5.73 / 5.82	3.08 / 3.02	5	1.33	1.20
0100	[illegible]	5.72 / 5.81	3.10 / 3.03	5	1.33	1.20
0200	[illegible]	5.74 / 5.82	3.05 / 3.00	5	1.33	1.25
0300	[illegible]	5.75 / 5.82	3.04 / 2.99	5	1.33	1.20
0400	[illegible]	5.77 / 5.85	3.05 / 3.00	5	1.33	1.20
0500	MN	5.77 / 5.84	3.06 / 3.01	5	1.33	1.25
0600	CS	5.75 / 5.84	3.03 / 2.97	5	1.33	1.20
0700	CS	5.77 / 5.85	3.02 / 2.96	5	1.32	1.25
0800	CS	5.76 / 5.84	3.02 / 2.97	5	1.315	1.25
0900	CS	5.76 / 5.84	3.01 / 2.96	4	1.32	1.10
1000	CS	5.75 / 5.82	2.95 / 2.91	4	1.30	1.25
1100	CS	5.74 / 5.81	2.91 / 2.88	4	1.31	1.20
1200	CS	5.75 / 5.82	3.37 / 3.25	4	1.32	1.25
1300	CS	5.76 / 5.83	3.21 / 3.12	4	1.37	1.25
1400	CS	5.78 / 5.86	3.41 / 3.31	4	1.365	1.25
1500	CS	5.75 / 5.83	3.13 / 3.07	4	1.375	1.25
1600	CS	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 (% time of reagent feed valve)	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.	5.69 / 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 / 3.17	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 (% time of reagent 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.	5.71 / 5.94	5.06 / 3.51	3	1.335	1.20
0700	T.D.	5.81 / 5.78	3.36 / 3.42	3	1.34	1.20
0800	T.D.	5.76 / 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 / 5.77	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.	5.81 / 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.	5.81 / 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 (% flow 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	5.77 / 5.80	2.75 / 2.77	5	1.33	1.10
0800	T.D.	5.74 / 5.79	2.82 / 2.84	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 / 5.72	2.87 / 2.93	7	1.32	1.05
1100	TD	5.80 / 5.81	2.91 / 2.94	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.	5.74 / 5.79	2.90 / 2.93	6	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	2.94 / 2.97	6	1.34	1.05
1800	LJA	5.86 / 582	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	582 / 584	3.20 / 3.17	8	1.32	1.20
2100	LJA	581 / 584	3.20 / 3.18	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 (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	MM	5.86/5.85	3.24/3.23	6	1.325	1.09
0100	MM	5.81/5.84	3.20/3.18	6	1.325	1.10
0200	MM	5.81/5.85	3.17/3.15	6	1.325	1.11
0300	MM	5.75/5.84	3.15/3.13	7	1.335	1.02
0400	MM	5.83/5.87	3.19/3.16	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. Rods.	5.81/5.84	2.98/2.96	6	1.023	1.25
1900	R. Rods	5.80/5.84	2.99/2.99	6	1.022	1.20
2000	R. Rods.	5.81/5.86	3.85/3.75	6	1.022	1.20
2100	R. Rods.	5.88/5.91	4.15/4.01	6	1.026	1.15
2200	R. Rods.	5.91/5.94	4.43/4.24	5	1.024	1.15
2300	R. Rods	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 pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	R. Rody	5.95 / 5.98	4.51 / 4.30	5	1,023	1.20
0100	R. Rody	5.93 / 5.97	3.65 / 3.56	5	1.023	1.20
0200	R. Rody	597 / 5.98	3.40 / 3.35	5	1.020	1.20
0300	R. Rody	5.92 / 5.96	3.13 / 3.12	5	1.020	1.10
0400	R. Rody	5.88 / 5.95	2.91 / 2.92	5	1.018	1.10
0500	R. Rody	5.87 / 5.95	2.78 / 2.81	5	1.016	1.0
0600	Vam	5.90 / 5.97	2.73 / 2.77	5	1.36	1.15
0700	Vam	5.89 / 5.94	2.69 / 2.73	6	1.36	1.10
0800	Vam	5.89 / 5.94	2.70 / 2.74	6	1.36	1.10
0900	Vam	5.89 / 5.94	2.69 / 2.73	6	1.35	1.20
1000	Vam	5.90 / 5.93	2.75 / 2.77	6	1.35	1.15
1100	Vam	5.88 / 5.92	2.71 / 2.75	6	1.35	1.10
1200	Vam	5.87 / 5.91	2.74 / 2.77	6	1.36	1.15
1300	Vam	5.82 / 5.90	2.69 / 2.69	6	1.36	1.20
1400	Vam	5.87 / 5.90	2.74 / 2.77	6	1.36	1.15
1500	Vam	5.87 / 5.89	2.75 / 2.78	6	1.37	1.20
1600	Vam	5.89 / 5.90	2.73 / 2.77	6	1.36	1.20
1700	Vam	5.84 / 5.90	3.05 / 3.05	6	1.36	1.20
1800	T.D.	5.82 / 5.87	2.71 / 2.73	6	1.34	1.15
1900	T.D.	5.81 / 5.87	2.67 / 2.71	6	1.345	1.15
2000	T.D.	5.85 / 5.89	2.70 / 2.73	7	1.35	1.20
2100	T.D.	5.83 / 5.87	2.72 / 2.74	7	1.35	1.15
2200	T.D	5.82 / 5.85	2.73 / 2.77	7	1.34	1.10
2300	TD	5.83 / 5.86	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: 8-13-95 TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	TD	5.82 / 5.87	2.71 / 2.76	7	1.34	1.10
0100	TD	5.79 / 5.84	2.68 / 2.73	7	1.33	1.05
0200	TD	5.82 / 5.89	3.45 / 3.40	8	1.33	1.15
0300	TD	5.84 / 5.92	3.67 / 3.59	8	1.33	1.10
0400	T.D.	5.73 / 5.93	3.43 / 3.72	8	1.33	1.05
0500	T.D.	5.91 / 5.94	3.64 / 3.51	6	1.33	1
0600	Vam	5.90 / 5.93	3.12 / 3.10	6	1.33	1.05
0700	Vam	5.84 / 5.93	2.75 / 2.80	6	1.33	1.05
0800	Vam	5.86 / 5.91	2.68 / 2.73	6	1.32	1.15
0900	Vam	5.82 / 5.89	2.64 / 2.70	7	1.32	1.10
1000	Vam	5.85 / 5.90	2.65 / 2.70	7	1.32	1.15
1100	Vam	5.84 / 5.89	2.63 / 2.69	8	1.33	1.15
1200	Vam	5.86 / 5.91	2.59 / 2.64	8	1.34	1.15
1300	Vam	5.85 / 5.88	2.60 / 2.66	8	1.335	1.15
1400	Vam	5.89 / 5.88	2.62 / 2.68	8	1.34	1.25
1500	Vam	5.84 / 5.86	2.64 / 2.68	8	1.35	1.25
1600	Vam	5.85 / 5.89	2.63 / 2.68	8	1.34	1.15
1700	Vam	5.80 / 5.85	2.62 / 2.67	8	1.35	1.20
1800	T.D.	5.73 / 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.	5.96 / 5.9	3.72 / 3.71	9	1.35	1.20
2200	T.D.	5.91 / 5.94	3.76 / 3.74	8	1.34	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: 8.14.95 TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	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.	5.75 / 5.93	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	5.81 / 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 pH	QUENCHER pH	INJECTION RATE (% flow of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	Vam	5.91 / 5.88	3.40 / 3.42	7	1.35	1.00
0100	Vam	5.80 / 5.86	3.44 / 3.39	8	1.35	1.25
0200	Vam	5.84 / 5.89	3.45 / 3.49	8	1.35	1.20
0300	Vam	5.86 / 5.93	3.45 / 3.40	8	1.35	1.20
0400	Vam	5.89 / 5.92	3.48 / 3.43	8	1.34	1.15
0500	Vam	5.85 / 5.88	3.49 / 3.43	8	1.34	1.10
0600	CS	5.85 / 5.88	3.50 / 3.44	8	1.33	1.10
0700	CS	5.89 / 5.90	3.50 / 3.45	8	1.33	1.10
0800	CS	5.86 / 5.88	3.52 / 3.46	6	1.34	1.10
0900	CS	5.87 / 5.89	3.05 / 3.06	8	1.34	1.20
1000	CS	5.92 / 5.87	3.02 / 3.01	8	1.34	1.15
1100	CS	5.97 / 5.86	2.96 / 2.99	8	1.34	1.15
1200	CS	5.88 / 5.87	2.94 / 3.00	9	1.34	1.15
1300	CS	5.85 / 5.86	3.01 / 3.06	8	1.33	1.15
1400	CS	5.85 / 5.86	3.02 / 3.08	8	1.33	1.20
1500	CS	5.82 / 5.82	3.02 / 3.07	8	1.34	1.15
1600	CS	5.86 / 5.84	3.04 / 3.08	9	1.33	1.20
1700	CS	5.85 / 5.84	3.00 / 3.02	9	1.34	1.20
1800	Vam	5.81 / 5.87	3.24 / 3.25	9	1.325	1.20
1900	Vam	5.77 / 5.84	2.69 / 2.76	9	1.33	1.20
2000	Vam	5.88 / 5.94	3.05 / 3.09	9	1.33	1.20
2100	Vam	5.89 / 5.86	3.32 / 3.31	9	1.325	1.15
2200	Vam	5.96 / 5.85	3.32 / 3.32	9	1.33	1.15
2300	Vam	5.88 / 5.86	3.37 / 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: B

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

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

DATE: 8-17-95 TOWER: E

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% time of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	Vam	5.85 / 5.84	3.48 / 3.44	10	1.31	1.15
0100	Vam	5.91 / 5.89	3.64 / 3.58	10	1.31	1.15
0200	Vam	5.93 / 5.87	3.57 / 3.53	10	1.31	1.10
0300	Vam	5.86 / 5.89	3.62 / 3.58	10	1.31	1.10
0400	Vam	5.90 / 5.91	3.65 / 3.59	11	1.31	1.00
0500	Vam	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	1.31	1.20
2100	T.D.	5.92 / 5.94	3.96 / 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: 7.18.95 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.	5.55 / 5.55	3.96 / 3.75	12	1.31	1.10
0100	T.D.	5.94 / 5.94	3.87 / 3.79	13	1.30	1.10
0200	T.D.	5.93 / 5.97	3.79 / 3.81	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 / 3.80	12	1.30	1.10
0600	LJA	594 / 595	378 / 371	12	1.29	1.10
0700	LJA	593 / 594	333 / 332	12	1.295	1.20
0800	LJA	597 / 596	3.80 / 3.78	12	1.29	1.20
0900	LJA	596 / 597	3.86 / 3.79	12	1.28	1.20
1000	LJA	591 / 594	378 / 372	14	1.28	1.20
1100	LJA	594 / 595	379 / 372	14	1.028	1.20
1200	LJA	594 / 596	384 / 376	14	1.295	1.20
1300	LJA	590 / 593	390 / 381	16	1.295	1.25
1400	LJA	595 / 594	3.92 / 3.84	16	1.29	1.25
1500	LJA	595 / 595	396 / 387	16	1.29	1.25
1600	LJA	596 / 596	404 / 394	17	1.29	1.25
1700	LJA	598 / 598	413 / 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	4.07 / 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.	5.98 / 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: 7·19·95 TOWER: B

TIME	INITIALS	ABSORBER pH	QUENCHER pH	INJECTION RATE (% Open of reagent feed valve)	MIX RATIO (Density)	PRESSURE DROP ACROSS TOWER
0000	T.D.	5.97 / 5.96	4.08 / 3.96	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	DJM	597 / 596	426 / 412	21	1.27	1.25
0700	DJM	596 / 596	3.33 / 3.31	21	1.26	1.25
0800	DJM	598 / 595	410 / 3.99	21	1.27	1.28
0900	DJM	602 / 597	426 / 414	21	1.27	1.25
1000	DJM	601 / 598	433 / 4.20	20	1.27	1.25
1100	DJM	598 / 599	4.35 / 4.22	20	1.275	1.25
1200	DJM	598 / 598	442 / 428	20	1.27	1.25
1300	DJM	596 / 596	434 / 421	20	1.27	1.25
1400	DJM	597 / 595	439 / 425	20	1.27	1.25
1500	DJM	596 / 594	433 / 419	20	1.29	1.20
1600	DJM	596 / 594	438 / 424	20	1.32	1.25
1700	DJM	597 / 596	445 / 431	21	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	3.11 / 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	T.D.	6.07 / 6.08	4.27 / 4.16	7	1.29	1.10

ATTACHMENT H

SJRO LC 95 053

March 17, 1995

st. johns river POWER PARK

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 the 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

Cappy MacPherson

Notary Public,
State of Florida at Large.

My Commission Expires:

VERA JANE LIKENS
NOTARY PUBLIC, STATE OF FLORIDA
My Comm. Expires June 1, 1996
BONDED THRU TROY FAIN INSURANCE, INC.

DA 444

The applicant, St. Johns River Power Park, 1
New Berlin Road, Jacksonville, Florida 3225
submitted a request on December 28, 1994, and sup
plementary material on February 7, 1995, to the
Department's Siting Coordination Section for auth
orization to conduct pollutant emissions tests on
SJRPP's Unit #1 boiler while firing a blend of
petroleum coke and coal. The performance tests
pollutant emissions will be conducted at base
conditions (firing 100% coal only) and while firi
blend of petroleum coke and coal. Petroleum c
will be blended at a maximum of 30 percent
weight, with coal during the trial performa
tests. SJRPP's Unit #1 was certified under
Certification No. PA 91-13, and Federal const
tion permit, No. PSD-FL-910, and is now curre
permitted to fire petroleum coke in accordance w
the referenced Site Certification and permit.

Scheduled for a modification and a determination o
Prevention of Significant and/or Nonattainment
Area (NAA) requirements shall be in accordanc
with Chapter 403, Florida Statutes (F.S.); Florid
Administrative Code (F.A.C.) Chapters 62-20
through 62-297 and 62-4; and, Title 40 of the Code o
Federal Regulations (CFR) Parts 52, 60, 61 and 6
(July 1, 1993 version).

At which the performance test results are evaluate
by the Department's Site Certification Section an
affected parties (i.e., Duval County's Regulator
and Environmental Services Department, U.S
EPA, National Park Service, Department's Bureau
of Air Regulation, and etc.) and it is determine
that actual pollutant emissions (baseline at 100
coal vs. a blend of petroleum coke and coal) did no
increase, the Department may issue a modificatio
to the Site Certification, No. PA 91-13, and a
amendment to the Federal Permit, No. PSD-FL
910(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 b
permitted to fire a blend of petroleum coke and coa
in the emissions unit without further PSD and/o
NAA evaluation by the Department's Site Certifica
tion Section and involved agencies/parties. The pro
posed project will occur at the applicant's facilit
located in Jacksonville, Duval County, Florida.

The Department has jurisdiction under Paragraph
403.514(1), F.S. The project is not exempt from Sit
Certification procedures. The Department has de
termined that a Site Certification modification an
at least an amendment to the Federal Permit ar
required to make the proposed activity (permanen
If SJRPP wishes to modify the Conditions of Certifi
cation and amend/modify the Federal Permit to a
short-term (testing) of a blend of petroleum coke an
coal in SJRPP's Unit #1 on a permanent basis,
subsequent proceeding will be announced providin
an opportunity for any affected person to object i
the following manner.

A person whose substantial interests are affecte
by the Department's proposed permitting decisio
may petition for an administrative proceedin
(hearing) in accordance with Section 120.57, F.S
The petition must contain the information set
below and must be filed (received) in the Office o
General Counsel of the Department at 3900 Com
monwealth Boulevard, Tallahassee, Florida 32399-3000, with
fourteen (14) days of publication of this notice. Pet
itioner shall mail a copy of the petition to the appl
cant at the address indicated above at the time o
filing. Failure to file a petition within this time per
iod shall constitute a waiver of any right such perso
may have to request an administrative determinati
(hearing) under Section 120.57 F.S.

The Petition shall contain the following
information:

(a) The name, address, and telephone number o
each petitioner, the applicant's name and address
the Department's Site Certification File Number an
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 pro
posed action;

(c) A statement of how each petitioner's sub
stantial interests are affected by the Department'
action or proposed action;

(d) A statement of the material facts disputed
by petitioner, if any;

(e) A statement of facts which petitioner
wants warrant reversal or modification of the
Department's action or proposed action;

(f) A statement of which rules or statutes pet
itioner contends require reversal or modification o
the Department's action or proposed action; and

(g) A statement of the relief sought by peti
tioner, stating precisely the action petitioner wants
Department to take with respect to the Depart
ment's action or proposed action.

If a petition is filed, the administrative
proceeding (hearing) will be conducted in accordance
with Department's final action may be differ
from the position taken by it in this notice. Persons
whose substantial interests will be affected by any
decision of the Department with regard to the
petitioner's application have the right to petition to
become a party to the proceeding. The petition must
conform to the requirements specified above and be
filed (received) within 14 days of publication of this
notice in the Office of General Counsel of the Depa
rtment of the Department. Failure to petition with
in the allowed time frame constitutes a waiver of
any right such person has to request a hearing un
der Section 120.57, F.S., and to participate as a pa
rty to this proceeding. Any subsequent intervention
will only be at the approval of the presiding office
upon filing of motion pursuant to Rule 28-5.207, F.A.C.

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive
Tallahassee, Florida 32301

Duval County Planning and
Environmental Services Department
421 West Church Street, Suite 4

ATTACHMENT I

CERTIFIED MAIL

st. johns river POWER PARK

SJRO LC 95 137

August 21, 1995

Mr. Steve Pace
RESD
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 (RESD) 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
RESD
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 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:

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

KBN ENGINEERING AND APPLIED SCIENCES, INC.

Gainesville, Florida • Boca Raton, Florida • Jacksonville, Florida • Tampa, Florida • Washington, DC

1-800-333-4KBN