

Florida Power & Light Company, P.O. Box 14000, Juno Beach, FL 33408-0420

Law Department

DATE:

August 1, 2002

PLEASE DELIVER THE FOLLOWING PAGES TO:

NAME:

Agusta Posner

FAX:

850-921-3000

FROM:

Diana Davis, Esquire

TOTAL PAGES: 4 Including this cover sheet).

Special Instructions/Comments

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Scott Schuffer



Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420 Law Department

August 1, 2002

Ms Agusta Posner
Assistant General Counsel
Office of General Counsel
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Marjorie Stoneman Douglas Building
Tallahassee, Florida 32399-3000

VIA: Facsimile and Federal Express

Re:

Florida Power & Light Co. Port Everglades: Power Plant Boiler Chemical Cleaning Waste and a Revision to the FDEP's Order Granting a Permanent Variance from the Definition of a Hazardous Waste to implement the Trivalent Chromium Exclusion

Dear Ms Posner:

The Florida Power & Light Company ("FPL") began its chemical cleaning at the Port Everglades Power Plant ("PPE") Unit 4 on Friday, May 3rd, 2002, as was noticed by FPL by letter to the Florida Department of Environmental Protection ("FDEP"). On Friday afternoon, FPL sampled and analyzed the mother liquor chemical cleaning waste solution for iron levels, which is a measurement of the efficiency of the process and for determining the length of time that the cleaning solution should remain in the boiler. FPL also analyzed the sample for total chromium as an estimate. FPL did not perform the chromium analysis for compliance purposes or to satisfy any other regulatory requirement. The initial estimate of total chromium was 13 ppm.

FPL reported this information to the FDEP by telephone on Friday, May 3rd, 2002, and reported that the chromium totals for the chemical cleaning solution and the rinses, once the solution had been valved to the 16 manifolded frac tancs, would most likely the less than 5 ppm. FDEP suggested sampling the BCCM liquid, the stack emissions during evaporation and sampling the ash despite the low levels of chromium at the point of generation for the BCCM. FDEP suggested that the Order Granting Variance be amended to reflect that this sampling event would satisfy the sampling requirements of the Order. FPL agreed to the sampling and agreed on the amendment of the Order to reflect that the sampling satisfies its requirements. FPL understood that once the analysis of the samples reflected the results that were expected, that the Order would be amended to reflect that FPL has met the substantive requirements of the Order Granting Variance for BCCM sampling, ash sampling, and stack testing. FPL would like to discuss as part of the amendment to the Order, its additional of ligation for tube scale sampling.

FPL amended its BCCM operations slightly based on our conversations with you and Jeffrey Smith of the FDEP Southeast District Office. FPL took a composite sample of the mother liquor chemical cleaning material as it drained from the boiler. FPL sent this sample to E-lab for chromium speciation to determine hexavalent chromium levels. FPL captured 19,000 gallons of the boiler chemical cleaning mother liquor in the first two frac tanks for a total volume of 38,000 gallons. The remaining chemical cleaning material was sent to the remaining 14 frac tanks onsite manifolded together and valved to receive equal amounts of the remaining 20,000 + gallons of chemical cleaning solution and the rinses. The sample results reflected a hexavalent chromium of less than 1ppm in the mother liquor prior to the mixture with the rinses. However, the sample results of the mother liquor reflected an anomaly with regard to the cadmium level. Cadminum has never been an issue in any of FPL's previous being chemical cleanings. After our discussions by telephone of these initial sampling results, FPL followed the standard procedures for flowing the boiler chemical cleaning material into all of the 16 frac tanks in equal volumes to establish the point of generation. FPL flowed the first two frac tanks through the remaining 14

Ms.Posner Letter August 1, 2002 page 2

frac tanks until all 16 frac tanks contained equal volumes. Upon the completion of the chemical cleaning process and at the point of generation, the BCCM had very low cadmium levels and less than 5ppm total chromium.

FPL evaporated all of the BCCM in PPE Unit 4, pursuant to the Variance. FPL notified the District Office that the stack testing crew, METCO Environmental from Texas, was on site and stack tested during evaporation May 29, 2002, of the boiler chemical cleaning material. FPL sampled the fuel oil the same day. As FDEP District staff observed on site, FPL took ash samples on Monday, May 20th.

For your review, FPL is enclosing the sampling and analysis results for the following:

- Boiler Chemical Cleaning liquid waste samples: TCLP and hexavalent chromium from U.S. Biosystems and FPL Central Lab
- 2. Stack Test Results from Metco Environmental
- 3. Ash results from E Labs
- 4. Fuel oil results from FPL Central Lab

The BCCM samples were less than 1 ppm hexavalent chromium. The stack testing sample results indicates that less than detection on all samples except one, which was at the method detection level. The ash sample test results indicate that hexavalent chromium is not an issue.

FPL is also enclosing a diagram demonstrating where in the boiler that the chemical cleaning material is injected for evaporation and a description of the method used for introduction of the BCCM into the boiler for evaporation. FPL will fo ward to you as soon as it is available; the approximate boiler temperature during evaporation at various locations within the boiler, the approximate residence time of the chemicals within the boiler; and the amount of excess oxygen during evaporation. These will confirm compliance with the Order Granting Variance.

The Southeast District Office personnel are very experienced in FPL procedures and processes for the boiler chemical cleaning and evaporation having observed on-site the boiler chemical cleaning plant tour at the Rivera Power Plant, the Martin Power Plant chemical cleaning and the Port Everglades chemical cleaning; and having participated in the subsequent analysis of FPL's submittals of site and sampling data. Based on the District Office's on-site experience observing three FPL events and the demonstration required by the Variance, FPL requests a determination that no further stack testing is required to satisfy the requirements of the Order Granting Variance.

FPL would like to discuss the sampling and analysis results enclosed and the remaining requirements for implementing the Order at the meeting next week in Sarasota. Thank you for your assistance in implementing the Order Granting Variance.

Sincerely.

Diana Davis
Attorney for

The Florida Power & Light Company

(561) 691-71:27

1-856 P.003/004 F-570

981 189 199

Attachments
/dld
cc:
Satish N. Kastury
Jeffrey A. Smith
Kathy Winston
Vivek S. Kamath
Dave Knutson
Rudy Sanchez

August 6, 2002

Ms Agusta Posner Assistant General Counsel Office of General Counsel Florida Department of Environmental Protection 3900 Commonwealth Boulevard Marjorie Stoneman Douglas Building Tallahassee, Florida 32399-3000

VIA: Personal Delivery

Re:

Florida Power & Light (FPL) Co. Port Everglades Power Plant Boiler Chemical Cleaning Waste and a Revision to the FDEP's Order Granting a Permanent Variance from the Definition of a Hazardous Waste to implement the Trivalent Chromium Exclusion – Follow up items

Dear Ms Posner:

As a follow up to the letter dated August 1, 2002, FPL is enclosing a diagram demonstrating the approximate boiler temperature during evaporation at various locations within the boiler; the approximate residence time of the chemicals within the boiler; and the amount of excess oxygen during evaporation.

If you have any questions, please contact Diana Davis at 561-691-7127.

Sincerely,

Sheila M. Wilkinson

PGD Leader I

Florida Power & Light Company

(561) 694-3703

Florida Power & Light - PPE 4 Diagram Showing Temperatures & Residence Times

Gas **Temperatures**

By Zone (Degrees F)

1, 3200

2, 2265

3. 2040

4. 1965

5. 1860

6.1860

7.1790

8. 1265

9.1820

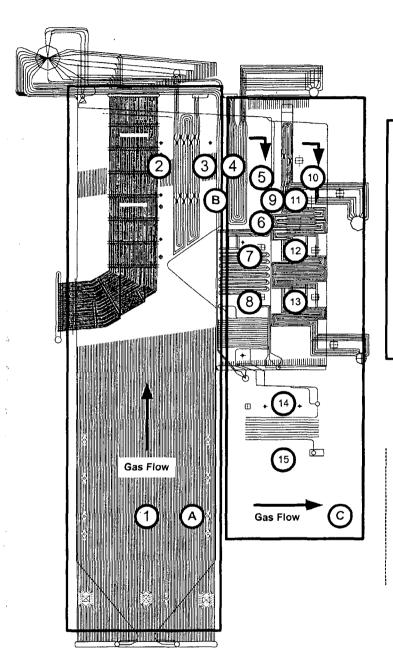
10.1650

11. 1545 12. 1250

13.940 14.805

15.620

16.320



Residence Time

Furnace Zone (Blue Outline) 2.02 seconds Point A to Point B

HRA Zone (Purple Outline) 2.25 seconds Point B to Point C

After Air Pre-heater

16

Note: Pollution Control Equipment and Stack not shown on diagram. Point 16 above is considered to be the air pre-heater outlet temperature and inlet temperature to the dust collectors.

PLANT: MANUFACTURED BY: ONFIGURATION: DESIGN CONDITIONS: REPAIR HISTORY:

PORT EVERGLADES UNIT 4 FOSTER WHEELER 1967 SERVICE DATE FRONT WALL FIRE UNIT 2400 PSIG AT 1000F AND 1000F REHEAT NORMAL ROUTINE & PERIODIC MAINTENANCE

Florida Power & Light - Port Everglades Unit 4

Amount of Excess Oxygen in Boiler

During BCCM Evaporation

The evaporation of the Boiler Chemical Cleaning Material (BCCM) for the Port Everglades Unit 4 chemical cleaning took place starting May 16, 2002 and concluded on May 30, 2002. During this time, the evaporation usually began about 9:00 - 10:00 AM and ended around 6:00 - 7:00 PM, depending on unit conditions. In addition we had several days where material was not evaporated due to unit or other issues (i.e. evaporation was suspended during the Memorial Day Weekend).

Data from the plant's Distributed Control System (DCS) was collected and reviewed to determine the average percent dry excess oxygen during the evaporation process.

Final calculations indicate the average dry excess O₂ was 2.96% during evaporation.



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August 1, 2002

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Ms.Posner Letter August 1, 2002 page 2

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- Stack Test Results from Metco Environmental 2.
- Ash results from E Labs 3.
- Fuel oil results from FPL Central Lab 4.

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Diana Davis Attorney for

The Florida Power & Light Company

(561) 691-7127

Attachments
/dld
cc:
Satish N. Kastury
Jeffrey A. Smith
Kathy Winston
Vivek S. Kamath
Dave Knutson
Rudy Sanchez

Summary Narrative - PPE Unit 4 BCCW Data Gathering & Analytical Results

In compliance with the State of Florida Department of Environmental Protection ("FDEP") Order Granting Variance from the toxicity characteristic definition of hazardous waste for the boiler chemical cleaning material (BCCM),

- Item number three of this order, was addressed by letter to the Department dated April 1, 2002. In this letter, the Florida Power & Light ("FPL") notified the FDEP of the intent to perform the boiler chemical cleaning at this facility. A copy of the BCCM waste analysis plan (WAP) as well as the Hexavalent Chromium Analysis Plan for Stack Emission & Ash Sample (also part of item number six of the order) were submitted with this correspondence for FDEP review.
- Item number four of this order, was addressed by letter to the Southeast District Office of the FDEP dated April 18, 2002. In this letter, FPL notified the FDEP representative of this Office, Mr. Jeffrey Smith, of the opportunity to split samples for the hexavalent chromium testing of the BCCM. At this time, a second copy of the waste plans mentioned above was submitted for final comments. The FDEP declined the opportunity to split samples and FPL received no other comments from the FDEP.
- In accordance with the WAP submitted, liquid BCCM samples from frac tanks 1, 4, 7, 10, 13 and 16 were analyzed. FPL Central Lab analyzed the samples for TCLP metals and US Biosystems Lab analyzed the samples for hexavalent chromium. Results show values for TCLP metals less than the regulatory level (Attachment 1) and <1 PPM hexavalent chromium (Attachment 2) in the BCCW for all six frac tanks.
 - TCLP & hexavalent chromium results of the BCCM were verbally shared with the local agency as soon as they were obtained from the laboratory.
- Item number five, subset IV, stipulates the testing of chlorine concentrations in fuel oil. A fuel oil sample was collected on May 29, 2002, when approximately 50% of the boiler chemical cleaning had been evaporated. The total chlorine concentration in the fuel oil, analyzed at the FPL Central Lab, was < 300 PPM (Attachment 3). The total chlorine concentration for BCCM, analyzed at US Biosystem, was <50 PPM for frac tank number one and <100 PPM for the composite drain sample (Attachment 4). FPL continues to test the BCCM because matrix issues associated with the BCCM have prevented the laboratory to reach the 40 PPM detection level. FPL is currently in the process of trying matrix interference reduction within the capabilities of the approved method without compromising the integrity of the results.</p>
- Item number five, subset V, stipulates the testing of sulfur concentration in fuel oil. The total sulfur concentration, analyzed at the FPL Central Lab, was > 0.7% (Attachment 3).
- Item number five, subset VI, stipulates the testing of pH of BCCM. Mike D'Orazio of FPL tested the pH on site. A table summarizing the pH results is attached (Attachment 5).
- Item number six of the order was addressed by submitting the Hexavalent Chromium Plan for Stack
 Emission & Ash Sample for Boiler Chemical Cleaning of Unit 4. This was done by letter dated April
 1, 2002 as mentioned above under the first bullet of this summary. FPL would like to discuss its
 additional obligation for tube scale sampling.

METCO Environmental performed stack emission test on May 17, 2002. The hexavalent chromium testing was done using EPA method 0061. Triplicate analysis was performed. The results show <0.001 PPM hexavalent chromium in the sample (Attachment 6).

E-Lab analyzed the ash sample collected on May 20, 2002 for hexavalent chromium as stipulated in the sampling plan. The results show non-detectable amounts of hexavalent chromium (Attachment 7).

The laboratory submitted QA/QC data. The data is within acceptable limits except for the matrix spike recovery of the ash sample. The lab fortified blank for the analyses recovered within limits. E-Lab considers this to be normal based on the type of testing.

This summary is intended to supplement and aid in the review of the laboratory analysis results. All final reports are submitted as attachments and shall be used as confirmation of the final values reported by the individual laboratories.

• Item number five, subset (i), is addressed by submittal of document titled "Evaporation Mechanism Description for BCCM (Port Everglades Unit 4 – Spring 2002)" (Attachment 8). This document describes the mechanism for introducing BCCM into the boiler including the quantity, feed rate, the area of the boiler into which BCCM is introduced, the manner of introduction, the temperature of the injection zone and other relevant information.

State of Florida Certification Numbers

Environmental Chemistry: E56078 CompQAP/QA Manual #: 920041

Customer Address Port Everglades Plant

Report of Analyses For: Port Everglades Plant - PPE Unit 4 Eq Blank 1

Lab Sample #	Field Sample #	Parameter	Sample Collection Date	Analysis Date	EPA Method	Result / Units	Qual.	MDL
02-PPE-05-0044		TCLP Metals: Arsenic	05/13/02 07:30 PM	05/13/02	6010	<0.05 MG/L	U	0.05
02-PPE-05-0044		TCLP Metals: Barium	05/13/02 07:30 PM	05/13/02	:6010	<0.05 MG/L	U	0.05
02-PPE-05-0044		TCLP Metals: Cadmium	05/13/02 07:30 PM	05/13/02	6010	<0.01 MG/L	U	0.01
02-PPE-05-0044		TCLP Metals: Chromium	05/13/02 07:30 PM	05/13/02	6010	<0.01 MG/L	U	0.01
02-PPE-05-0044		TCLP Metals: Lead	05/13/02 07:30 PM	05/13/02	6010	<0.05 MG/L	U	0.05
02-PPE-05-0044		TCLP Metals: Mercury	05/13/02 07:30 PM	05/14/02	7470	<0.003 MG/L	E,U	0.003
02-PPE-05-0044		TCLP Metals: Selenium	05/13/02 07:30 PM	05/13/02	6010	<0.01 MG/L	U	0.01
02-PPE-05-0044		TCLP Metals: Silver	05/13/02 07:30 PM	05/13/02	6010	<0.05 MG/L	U	0.05

Susie Adams, Sharon Verrett Samples Analyzed By:

Samples Approved By:

Result Comments: U - Analyzed but not detected.; E - Elevated method detection limit (MDL) due to sample dilution.

Sample Comments: **Parameter Comments:**

K Pascale PPE/PPE; Dave Fawcett GPA/JB; Sheila Wilkinson GPA/JB Routing:

State of Florida Certification Numbers **Environmental Chemistry: E56078** CompQAP/QA Manual #: 920041

Customer Address Port Everglades Plant

Report of Analyses For: Port Everglades Plant - PPE Unit 4 Eq Blank 2

Lab Sample #	Field Sample #	Parameter	Sample Collection Date	Analysis Date	EPA Method	Result / Units	Qual.	MDL
02-PPE-05-0047		TCLP Metals: Arsenic	05/13/02 08:20 PM	05/13/02	6010	<0.05 MG/L	U	.0.05
02-PPE-05-0047		TCLP Metals: Barium	05/13/02 08:20 PM	05/13/02	6010	<0.05 MG/L	U	0.05
02-PPE-05-0047		TCLP Metals: Cadmium	05/13/02 08:20 PM	05/13/02	6010	<0.01 MG/L	Ų	0.01
02-PPE-05-0047		TCLP Metals: Chromium	05/13/02 08:20 PM	05/13/02	6010	<0.01 MG/L	U	0.01
02-PPE-05-0047		TCLP Metals: Lead	05/13/02 08:20 PM	05/13/02	6010	<0.05 MG/L	U	0.05
02-PPE-05-0047		TCLP Metals: Mercury	05/13/02 08:20 PM	05/14/02	7470	<0.003 MG/L	E,U	0.003
02-PPE-05-0047		TCLP Metals: Selenium	05/13/02 08:20 PM	05/13/02	6010	<0.01 MG/L	U	0.01
02-PPE-05-0047		TCLP Metals: Silver	05/13/02 08:20 PM	05/13/02	6010	<0.05 MG/L	U	0.05

Samples Analyzed By:

Susie Adams, Sharon Verrett

Samples Approved By:

U - Analyzed but not detected.; E - Elevated method detection limit (MDL) due to sample dilution. Result Comments:

Sample Comments: **Parameter Comments:**

K Pascale PPE/PPE; Dave Fawcett GPA/JB; Sheila Wilkinson GPA/JB Routing:

State of Florida Certification Numbers

Environmental Chemistry: E56078 CompQAP/QA Manual #: 920041 Customer Address
Port Everglades Plant

Report of Analyses For: Port Everglades Plant - PPE Unit 4 Frac Tank 1

Lab Sample #	Field Sample #	Parameter	Sample Collection Date	Analysis Date	EPA Method	Result / Units	Qual.	MDL
02-PPE-05-0026	-	TCLP Metals: Arsenic	05/13/02 06:35 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0026	;	TCLP Metals: Barium	05/13/02 06:35 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0026		TCLP Metals: Cadmium	05/13/02 06:35 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
02-PPE-05-0026	•	TCLP Metals: Chromium	05/13/02 06:35 PM	05/13/02	6010	3.4 MG/L	E	0.50
02-PPE-05-0026	:	TCLP Metals: Lead	05/13/02 06:35 PM	.05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0026		TCLP Metals: Mercury	05/13/02 06:35 PM	05/14/02	7470	0.004 MG/L	E	0.003
02-PPE-05-0026	;	TCLP Metals: Selenium	05/13/02 06:35 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
02-PPE-05-0026	•	TCLP Metals: Silver	05/13/02 06:35 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5

Samples Analyzed By: Su

Susie Adams, Sharon Verrett

Samples Approved By:

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Result Comments:

E - Elevated method detection limit (MDL) due to sample dilution.; U - Analyzed but not detected.

Sample Comments: Parameter Comments:

Routing:

K Pascale PPE/PPE; Dave Fawcett GPA/JB; Sheila Wilkinson GPA/JB

State of Florida Certification Numbers Environmental Chemistry: E56078 CompQAP/QA Manual #: 920041 Customer Address
Port Everglades Plant

Report of Analyses For: Port Everglades Plant - PPE Unit 4 Frac Tank 10

Lab Sample #	Field Sample #	Parameter	Sample Collection Date	Analysis Date	EPA Method	Result / Units	Qual.	WDI
02-PPE-05-0029		TCLP Metals: Arsenic	05/13/02 07:40 PM	05/13/02	6010	<2.5 MG/L	E,U	··2.5
02-PPE-05-0029		TCLP Metals: Barium	05/13/02 07:40 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0029		TCLP Metals: Cadmium	05/13/02 07:40 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
02-PPE-05-0029		TCLP Metals: Chromium	05/13/02 07:40 PM	05/13/02	6010	3.7 MG/L	Ε	0.50
02-PPE-05-0029		TCLP Metals: Lead	05/13/02 07:40 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0029		TCLP Metals: Mercury	05/13/02 07:40 PM	05/14/02	7470	0.004 MG/L	E	0.003
02-PPE-05-0029		TCLP Metals: Selenium	05/13/02 07:40 PM	05/13/02	6010	<0.50 MG/L	£,U	0.50
02-PPE-05-0029		TCLP Metals: Silver	05/13/02 07:40 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5

Samples Analyzed By:

Susie Adams, Sharon Verrett

Samples Approved By:

Timerall

Result Comments:

E - Elevated method detection limit (MDL) due to sample dilution.; U - Analyzed but not detected.

Sample Comments: Parameter Comments:

Routing:

K Pascale PPE/PPE; Dave Fawcett GPA/JB; Sheila Wilkinson GPA/JB

State of Florida Certification Numbers Environmental Chemistry: E56078 CompQAP/QA Manual #: 920041 Customer Address
Port Everglades Plant

Report of Analyses For: Port Everglades Plant - PPE Unit 4 Frac Tank 13

Lab Sample #	Field Sample #	Parameter	Sample Collection Date	Analysis Date	EPA Method	Result / Units	Qual.	MDL
02-PPE-05-0032		TCLP Metals: Arsenic	05/13/02 07:55 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0032	*	TCLP Metals: Barium	05/13/02 07:55 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0032		TCLP Metals: Cadmium	05/13/02 07:55 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
.02-PPE-05-0032		TCLP Metals: Chromium	.05/13/02 07:55 PM	05/13/02	6010	3.7 MG/L	E	:0.50
02-PPE-05-0032		TCLP Metals: Lead	05/13/02 07:55 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0032		TCLP Metals: Mercury	05/13/02 07:55 PM	05/14/02	7470	0.005 MG/L	E	0.003
02-PPE-05-0032		TCLP Metals: Selenium	05/13/02 07:55 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
02-PPE-05-0032		TCLP Metals: Silver	05/13/02 07:55 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5

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Samples Approved By:

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Routing: K Pascale PPE/PPE; Dave Fawcett GPA/JB; Sheila Wilkinson GPA/JB

State of Florida Certification Numbers **Environmental Chemistry: E56078** CompQAP/QA Manual #: 920041

Customer Address Port Everglades Plant

Report of Analyses For: Port Everglades Plant - PPE Unit 4 Frac Tank 16

Lab Sample #	Field Sample #	Parameter	Sample Collection Date	Analysis Date	EPA Method	Result / Units	Qual.	WDL
02-PPE-05-0035	TCL	P Metals: Arsenic	05/13/02 08:10 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0035	ITCL	P Metals: Barium	05/13/02 08:10 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0035	TCL	P Metals: Cadmium	05/13/02 08:10 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
02-PPE-05-0035	TCL	P Metals: Chromium	05/13/02 08:10 PM	05/13/02	6010	3.9 MG/L	Ε	0.50
02-PPE-05-0035	TCL	.P Metals: Lead	05/13/02 08:10 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5
02-PPE-05-0035	TCL	.P Metals: Mercury	05/13/02 08:10 PM	05/14/02	7470	<0.003 MG/L	E,U	0.003
02-PPE-05-0035	TCL	P Metals: Selenium	05/13/02 08:10 PM	05/13/02	6010	<0.50 MG/L	E,U	0.50
02-PPE-05-0035	TCL	P Metals: Silver	05/13/02 08:10 PM	05/13/02	6010	<2.5 MG/L	E,U	2.5

Samples Analyzed By:

Susie Adams, Sharon Verrett

Samples Approved By:

Result Comments:

E - Elevated method detection limit (MDL) due to sample dilution.; U - Analyzed but not detected.

Sample Comments: **Parameter Comments:**

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