

Bioassays of

Florida Power & Light Company-
Martin Power Plant

Martin County

NPDES #FL0030988

Sampled July 18, 2005

November 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Florida Power & Light Company - Martin Power Plant, 5 miles Northwest of Indiantown off SR 710, Indiantown, Martin County, Florida, NPDES #FL0030988. Effluent samples for this facility were collected on July 18, 2005.

Introduction

The Florida Power and Light Company-Martin Power Plant is an electric power generating plant with a total generating capacity (when construction is complete) of approximately 4,300 megawatts. The sampling point for this investigation was Outfall D-003 (EFF-6), an intermittent discharge of cooling pond seepage and surface runoff. The facility has no design flow. The average monthly flow at Outfall D-003 from August 2004 through July 2005 was 0.175 million gallons per day. The existing generating facility currently consists of five operating units: Units 1 and 2 are oil-fired conventional units (with natural gas backup) with a net capacity of 1,600 megawatts; Units 3 and 4 are 400 megawatt combined cycle (CC) units which are currently fueled by natural gas and use No. 2 fuel oil as a backup fuel with the potential ultimate fuel supply to be provided by an onsite coal gasification facility; and Unit 8 is a 1,100 megawatt four-on-one combined cycle unit. Units 5 and 6, which have not been constructed, are planned as 400 megawatt combined cycle units.

Wastewater from the facility is discharged into a 2,751.9 hectare (6,800 acre) cooling pond whose water level is regulated by South Florida Water Management District. The cooling pond receives treated effluent from the on-site Industrial Wastewater Treatment Plant, treated effluent from two on-site Sanitary Wastewater Treatment Plants, cooling pond seepage, treated low-volume wastewater (reject water from the Reverse Osmosis Unit, treated boiler blow down, and lab wastes), treated water from on-site oil/water separators, groundwater from the Floridian aquifer (make-up), and re-circulated cooling water.

Effluent from this facility leaves the cooling pond via surface water and groundwater discharge. There are three surface water discharges: 1) an intermittent discharge of overflow from the cooling pond through Outfall D-001 located approximately at Latitude, 27º 00’ 15” N, Longitude 80º 35’ 00” W, to an intake/discharge canal then to the St. Lucie Canal, a Class III freshwater; 2) an intermittent discharge of cooling pond seepage and surface runoff through Outfall D-002 located approximately at Latitude, 27º 00’ 15” N, Longitude 80º 35’ 00” W, via point sources discharges thence to the cooling pond intake/discharge canal thence to St. Lucie Canal, a Class III freshwater; 3) an intermittent discharge of cooling pond seepage and surface runoff through Outfall D-003 located approximately at Latitude, 27º 02’ 45” N, Longitude 80º 36’ 15” W, to the L-65 Canal via Barley Barber Swamp and the North Perimeter Ditch, a Class III freshwater. Disposal to groundwater is an intermittent discharge via the unlined sludge drying pond. This discharge is to Class G-II groundwater. Effluent from the cooling pond is not chlorinated.

The facility is not operating under any Administrative or Consent Orders. The facility has no mixing zones; however, the facility has a variance for total recoverable iron with a daily maximum of 4.8 mg/L at the D-003 discharge point. The facility has no toxicity requirements (facility information provided by Terry Davis of FDEP Southeast District, Bala Nira of FDEP Tallahassee, and Willie Welch of FPL Martin Plant).

Methods

Samples were collected from the EFF-6 NPDES sampling point by Terry Davis (FDEP Southeast District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOP’s are available on the web at: http://www.floridadep.org/labs/qa/sops.htm.

The 48-hour acute screening toxicity tests and algal growth potential test were performed following internal DEP SOP’s TA07_01, TA07_02, and TA08_01 through TA08_07. All internal DEP SOP’s are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

The Department uses 48-hour acute screening toxicity test to provide reasonable assurance that the facility does not adversely affect waters of the state.

Toxicity Test Results

Tests were performed July 19 - 21, 2005.

Ceriodaphnia dubia 48-hr acute screening bioassay –	LC_{50} > 100%, 0% mortality* in 100% sample at 48 hours
Cyprinella leedsi 48-hr acute screening bioassay –	LC_{50} > 100%, 5% mortality* in 100% sample at 48 hours

The bioassay samples were not acutely toxic to the test organisms.

See Appendix 1 for bioassay bench sheets.

*NOTE: In a 48-hr acute screening test of 100% effluent, mortality of <20% provides reasonable assurance that the effluent meets the acute toxicity criterion of Florida's Surface Water Quality Standards (Rule 62-302.500 (1)(a)4, F.A.C.). Mortality between 20-50% mortality indicates low to moderate levels of toxicity, and further action may be required. Mortality of >50% provides reasonable assurance that the effluent fails to meet the minimum requirement to discharge to waters of the state (Rule 62-4.244(3)(a), F.A.C.)

Algal Growth Potential

The effluent Algal Growth Potential (AGP) was 2.74 mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Shultz (1987) found that AGP values above 5.0 mg dry weight/L represent a "problem" threshold for fresh receiving waters, implying nutrient enrichment. The analytical chemistry suggests that the effluent is phosphorus-limited. The predicted AGP based on ortho-phosphate concentrations was 26.66 (±20%) mg dry wt/L (Table 1; Miller et al. 1978). Differences between actual and predicted AGP values greater than an order of magnitude are considered sufficient evidence to warrant follow up testing with the algal growth inhibition bioassay. True algal growth inhibition can only be determined by performing an actual algal growth inhibition test. Should algal growth inhibition be suspected, the district should request that the algal growth inhibition test be performed as a follow-up to the inspection.

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine was not detected in the bioassay sample in the laboratory. Total ammonia was detected in the bioassay sample in the laboratory at a concentration of 1.46 mg/L. The total ammonia concentration in the sample collected and preserved for chemical analysis was 1.5 mg/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

Aluminum was detected between the laboratory method detection limit (MDL) and practical quantitation limit (PQL). Although the effluent iron concentration (1,470 µg/L) exceeded the Class III freshwater quality criteria of <1,000 µg/L for iron (62-302.530(39), F.A.C.), this concentration did not exceed the permitted iron concentration of 4.8 mg/L.

See Table 2 for results of analytes detected in the effluent, and corresponding limits.

See Appendix 2 for a complete list of chemical analyses performed.

Conclusion

The effluent sample collected from D-003 (D-03D at EFF-6) for this facility on July 18, 2005 was not acutely toxic to either test species during the acute screen 48-hour bioassays. The effluent AGP result was less than the "problem" threshold for fresh receiving waters; however, it was an order of magnitude lower than predicted based on nutrient values, suggesting possible algal growth inhibition. Effluent water quality samples did not exceed any applicable water quality standards or violate any permit conditions.

Literature Cited

Miller, W. E., T. E. Maloney, and J. C. Greene. 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. EPA-600/9-78-018. U. S. EPA, Cincinnati, Ohio. 126 p.

Raschke, R. L. and D. A. Schultz. 1987. The use of the algal growth potential test for data assessment. J. Wat. Poll. Cont. Fed. 59(4): 222-227.

Table 1. Measured and predicted algal growth potential (AGP; mg dry wt/L) of Pseudokirchneriella subcapitata *for ortho phosphate (OP) and total phosphorus (TP) limitation and ratios of nitrogen to phosphorus for the samples collected from Flordia Power & Light Martin Power Plant on July 18, 2005.*

Location	AGP (measured)	Predicted AGP (OP) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	2.74	26.66 ± 5.332	47.3 ± 9.46	24.31	25.52

Table 2. Effluent limits, Class III Freshwater Criteria, and chemical data for samples collected from FPL Martin Power Plant on July 18, 2005.

FPL Martin Power Plant NPDES# FL0030988	Class III Freshwater Stds	Effluent Limits	Effluent Samples
Metals (µg/L unless otherwise noted)			
Aluminum	-	≤ 0.05	17 I
Arsenic	≤ 50	≤ 50	4 U
Cadmium	≤ 2.8 b	≤ 2.8 b	0.5 U
Calcium (mg/L)	-	-	102
Chromium-III	≤ 218.6 b	≤ 218.6 b	2 U
Copper	≤ 24.6 b	≤ 24.6 b	5 U
Iron	≤ 1,000	≤ 4,800	1,470
Lead	≤ 13.5 b	≤ 13.5 b	2.1 U
Magnesium (mg/L)	-	-	13.8
Mercury	≤ 0.012	≤ 0.012	0.12 U
Nickel	≤ 136.4 b	-	2 U
Selenium	≤ 5	≤ 5	1.4 I
Silver	≤ 0.07	-	0.025 U
Zinc	≤ 313.8 b	≤ 313.8 b	3 U
Nutrients (mg/L)			
Ortho-phosphate	-	Report	0.062
Total Phosphorus	-	Report	0.11
Ammonia	-	Report	1.5
Unionized Ammonia	≤ 0.02 s	≤ 0.02 s	≤ 0.02
Nitrate+Nitrite	-	Report	0.007 I
Total Kjeldahl Nitrogen	-	-	2.8
Organic Nitrogen	-	-	1.3 c
Total Nitrogen	-	Report	2.81 c
General Physical and Chemical Parameters			
pH (S.U.)	6.0-8.5 s	6.0-8.5 s	6.9
Dissolved Oxygen (mg/L)	≥ 5.0 s	≥ 5.0 s	7.3 c
Conductivity (umhos/cm)	≤ 1,275	≤ 1,275	1,056
Temperature (C)	-	≤ 33.3	26.1
Total Suspended Solids (mg/L)	-	100	4 U
Total Dissolved Solids (mg/L)	-	Report	-
Turbidity (NTU)	≤ 29 t	Report	20
Oil and Grease (mg/L)	≤ 5	≤ 5	1.7 UJ
Flow (MGD)	-	Report	0.175 a
Hardness (mg/L)	-	Report	311.5 c
Alkalinity (mg/)	≥ 20	-	296
Sodium (mg/L)	-	Report	77
Chloride (mg/L)	-	Report	120
Sulfate (mg/L)	-	Report	6.7

Value exceeds the Class III Fresh/Marine Water Quality Criteria (62-302, F.A.C.) and/or Effluent Limits

a - Annual average

b - Value is calculated based on hardness

c - Calculated value

s - Single sample

t - Shall not exceed 29 NTUs above background

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J - Estimated value

U - Material analyzed for but not detected; value reported is the minimum detection limit

FDEP Biology Section - Acute Bioassay Bench Sheets

Facility: FPL – Martin Power Plant

Address: 5 miles Northwest of Indiantown off SR 710

City: Indiantown County: Martin

Contact/District: Terry Davis / SED

NPDES Permit #: FL 0030988

LIMS Job #: TLH-2005-07-19-03 LIMS Sample #: 849741

Lims Data Entry: 7-22-05-MF Data Entry Verification: DN. 7/22/05

Sample Collection: Date: 7-18-05 Time: 11:27

Hold time Start: Date: 7-18-05 Time: 11:27

Comments:
(A) Moderately Hard Water not used SP

Instructions (for below): Circle appropriate wording. If yes is circled complete blanks.

Test Type: (Screening) Definitive
(Static) Static Renewal / Flow-through
Test Duration: (48) 96 Hours
Light Intensity : 50 - 100 ft. candles
Photoperiod : 16 hours light 8 hours dark
Initial sample handling:

Test 1 validation: Test 1: SOP TA07_01
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Test 2 validation: Test 2: SOP TA07_02
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

pH adjustment : yes (no) Initial pH NaOH N HCl N Drops mL Final pH
Aeration : yes (no) Initial DO: mg/L Final DO: mg/L Duration: minutes Rate: - bubbles/min
Salinity adjusted (Test 1): yes (no) Initial Salinity: Final Salinity: Salts Hypersaline brine
Salinity adjusted (Test 2): yes (no) Initial Salinity: Final Salinity: Salts Hypersaline brine
Dechlorination: yes (no) mL of 0.025N Sodium thiosulfate per liter of sample. Final TRC

Temperature Range °C
Incubator # 3 Range 257-267
Room B246: 239-243
Waterbath: N/A

Sample Validation:
Temperature: Shipped ≤6°C (Yes) No Hand Delivered: Cooling (received °C < collected °C) Yes No
Holding Time: ≤36 Hours (Yes) No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures
Jason Pinchard
Dana McCallister
Eric Ezzi
Marshall Fleischer
James Daniels
Nicole Wellendorf
REVIEWER

Water Quality Parameters	20% DMW	Well Water	Salt Water ASW NSW Test 1	Salt Water ASW NSW Test 2	Moderately Hard Water	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	N/A	N/A	N/A	N/A	N/A	not measured		-	SP
Lab Total Residual Cl2 (mg/L):	<0.03	<0.03			<	<0.03	HACH	SP	MF
Alkalinity (mg/L as $CaCO_3$):	95	153			(A)	332	HACH	DN	SP
Hardness (mg/L as $CaCO_3$):	103	139				313	HACH	DN	SP
Total Ammonia (mg/L as N):	<0.017	<0.017			<0.017	1.46	DENVER	MF	SP
Salinity (ppth):	<1	<1				<1	YSI Mettler	JD/DN	SP

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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 849741 Test #: 1 Test Started: Date 7-19-05 Time: 1400

Organism: C. dubia Test Ended: Date 7-21-05 Time: 1345

Organism Batch: 25-05 Diluent/ Batch: DMW / 21-05

Organism Age: <24 hr Food: (YCT) P. subcapitata Artemia

Chamber Size 30 mL Batch: 3-05 2-05

Test Volume 20 mL Feeding: (Prior to test) - Prior to renewal - Daily

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	A	5	(A) 4 → 5 DN	5			
	B	B	5	5	5			
	C	C	5	5	5			
	D	D	5	5	5			
100%	A	A	5	5	5			
	B	B	5	5	5			
	C	C	5	5	5			
	D	D	5	5	5			
Organisms loaded by: SP		Checked by: (initials)		DN	DN			

Loading verified at 0 hours by: SW

Comments: (A) Miscounted, 5th C. dubia found in control. - D.N. 7/20/05.

m = missing d = dead BR = before renewal AR = after renewal

Test Results:

% mortality in 100% sample 0

LC_{50}: >100 If Calculated: 95% CI____ Method:____

Screening Tests: Report LC50 as >100%, =100%, or <100%.

Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 849741 Test #: 2 Test Started: Date 7-19-05 Time: 1330

Organism: C. leedsi Test Ended: Date 7-21-05 Time: 1315

Organism Batch: 21-05 Diluent/ Batch: Well / NA

Organism Age: 10 days Food: YCT *P. subcapitata* Artemia

Chamber Size 1000 mL Batch: 3-05 2-05 3513842SGR

Test Volume 500 mL Feeding: Prior to test Prior to renewal - Daily

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	B9	5	5	4 1D			
	B	B10	5	5	4 1D			
	C	B11	5	5	5			
	D	B12	5	5	5			
100%	A	B13	5	5	5			
	B	B14	5	5	5			
	C	B15	5	4 1D	4			
	D	B16	5	5	5			
Organisms loaded by: JD		Checked by:	[redacted]	DN	JD			

Loading verified at 0 hours by: SP (initials)

Comments:

m = missing d = dead BR = before renewal AR = after renewal

Test Results:

% mortality in 100% sample 5

LC_{50}: >100 If Calculated: 95% CI____ Method:____

Screening Tests: Report LC50 as >100%, =100%, or <100%.

Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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Bioassay Parameters

LIMS Sample # : 849741 **Test # :** 1 **of** 2

TEST SOP: TA07_ 01 **Test Species:** (*Ceriodaphnia dubia*) *Cyprinella leedsi* *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:_____

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Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A		B			
pH (S.U.)	8.2		8.1			
Temperature °C	24.2	~~23.7~~	23.7			
Dissolved Oxygen mg/L	7.7		7.6			
Conductivity (µmhos) mmhos	175		205			
(initials) Measured by:	~~DN~~		DN			
(initials) Recorded by:	~~DN~~		DN			

Comments: Entry error, 48 hr. parameters entered in 24 hr cell. DN. 7/21/05

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A		B			
pH (S.U.)	7.5		8.5			
Temperature °C	24.5	~~24~~	24.0			
Dissolved Oxygen mg/L	6.8		7.8			
Conductivity (µmhos) mmhos	960		945			
(initials) Measured by:	~~DN~~		DN			
(initials) Recorded by:	~~DN~~		DN			

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

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Bioassay Parameters

LIMS Sample # : 849741 **Test # :** 2 of 2

TEST SOP: TA07_ 02 **Test Species:** *Ceriodaphnia dubia* (*Cyprinella leedsi*) *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:_____

V.1 2/24/04

Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.0	8.3	8.4			
Temperature °C	24.9	24.8	24.6			
Dissolved Oxygen mg/L	8.0	7.6	7.4			
Conductivity (µmhos) mmhos	270	293	295			
(initials) Measured by:	JD	DN/SR	JD			
(initials) Recorded by:	JD	SR	JD			

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	7.4	8.3	8.5			
Temperature °C	24.8	24.7	24.2			
Dissolved Oxygen mg/L	~~8.0~~ 6.2	7.7	7.4			
Conductivity (µmhos) mmhos	985	1008	1005			
(initials) Measured by:	JD	DN/SR	JD			
(initials) Recorded by:	JD	SR	JD			

Comments: @ transcription error JD.

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

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Appendix 2. Chemical Analyses performed on the effluent from the Florida Power & Light Martin Power Plant Outfall D-003, sampled on July 18, 2005.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 11:27	D-003	Bio-AGP/LimNut	Algal Growth Potential	2.74	mg DryWt/L		0.3	0.9
7/18/2005 11:27	D-003	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	1.2	ug/L	I	0.85	2.6
7/18/2005 11:27	D-003	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.021	ug/L	J	0.85	2.6
7/18/2005 11:27	D-003	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
7/18/2005 11:27	D-003	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	LC50	L		
7/18/2005 11:27	D-003	BNA-Water	1,2,4-Trichlorobenzene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	1,2-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	1,3-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	1,4-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2,4,6-Trichlorophenol	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2,4-Dichlorophenol	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	190
7/18/2005 11:27	D-003	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	58
7/18/2005 11:27	D-003	BNA-Water	2,4-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2,6-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2-Chloronaphthalene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2-Chlorophenol	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
7/18/2005 11:27	D-003	BNA-Water	2-Nitrophenol	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
7/18/2005 11:27	D-003	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	4-Bromophenyl phenyl ether	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	4-Chloro-3-methylphenol	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.8
7/18/2005 11:27	D-003	BNA-Water	4-Nitrophenol	15	ug/L	U	15	58
7/18/2005 11:27	D-003	BNA-Water	Acenaphthene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Acenaphthylene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Anthracene	0.97	ug/L	U	0.97	3.9

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 11:27	D-003	BNA-Water	Benzidine	97	ug/L	U	97	390
7/18/2005 11:27	D-003	BNA-Water	Benzo(a)anthracene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Benzo(a)pyrene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Benzo(b)fluoranthene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Benzo(g,h,i)perylene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Benzo(k)fluoranthene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Bis(2-chloroethoxy)methane	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Bis(2-chloroethyl)ether	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
7/18/2005 11:27	D-003	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	58
7/18/2005 11:27	D-003	BNA-Water	Butyl benzyl phthalate	4.9	ug/L	U	4.9	19
7/18/2005 11:27	D-003	BNA-Water	Chrysene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Dibenzo(a,h)anthracene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Diethyl phthalate	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Dimethyl phthalate	49	ug/L	U	49	190
7/18/2005 11:27	D-003	BNA-Water	Di-n-butyl phthalate	4.9	ug/L	U	4.9	19
7/18/2005 11:27	D-003	BNA-Water	Di-n-octyl phthalate	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Endosulfan I	3.9	ug/L	U	3.9	16
7/18/2005 11:27	D-003	BNA-Water	Endosulfan II	3.9	ug/L	U	3.9	16
7/18/2005 11:27	D-003	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Endrin aldehyde	3.9	ug/L	U	3.9	16
7/18/2005 11:27	D-003	BNA-Water	Fluoranthene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Fluorene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.8
7/18/2005 11:27	D-003	BNA-Water	Hexachlorobenzene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
7/18/2005 11:27	D-003	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 11:27	D-003	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
7/18/2005 11:27	D-003	BNA-Water	Indeno(1,2,3-cd)pyrene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Isophorone	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Naphthalene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.8
7/18/2005 11:27	D-003	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.8
7/18/2005 11:27	D-003	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.8
7/18/2005 11:27	D-003	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
7/18/2005 11:27	D-003	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
7/18/2005 11:27	D-003	BNA-Water	Phenanthrene	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Phenol	0.97	ug/L	U	0.97	3.9
7/18/2005 11:27	D-003	BNA-Water	Pyrene	0.97	ug/L	U	0.97	3.9
7/18/2005 10:55	Blank	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
7/18/2005 10:55	Blank	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
7/18/2005 10:55	Blank	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
7/18/2005 10:55	Blank	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 10:55	Blank	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
7/18/2005 10:55	Blank	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Benzidine	95	ug/L	U	95	380
7/18/2005 10:55	Blank	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	Bis(2-ethylhexyl)phthalate	28	ug/L	I	14	57
7/18/2005 10:55	Blank	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
7/18/2005 10:55	Blank	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Diethyl phthalate	0.96	ug/L	I	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
7/18/2005 10:55	Blank	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
7/18/2005 10:55	Blank	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
7/18/2005 10:55	Blank	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
7/18/2005 10:55	Blank	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
7/18/2005 10:55	Blank	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 10:55	Blank	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
7/18/2005 10:55	Blank	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
7/18/2005 10:55	Blank	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
7/18/2005 10:55	Blank	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
7/18/2005 10:55	Blank	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
7/18/2005 10:55	Blank	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
7/18/2005 10:55	Blank	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
7/18/2005 11:27	D-003	GC-Water	Alachlor	0.6	ug/L	UJ	0.6	2.4
7/18/2005 11:27	D-003	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
7/18/2005 11:27	D-003	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
7/18/2005 11:27	D-003	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8
7/18/2005 11:27	D-003	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
7/18/2005 11:27	D-003	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
7/18/2005 11:27	D-003	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
7/18/2005 11:27	D-003	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
7/18/2005 11:27	D-003	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
7/18/2005 11:27	D-003	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
7/18/2005 11:27	D-003	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
7/18/2005 11:27	D-003	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
7/18/2005 11:27	D-003	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
7/18/2005 11:27	D-003	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
7/18/2005 11:27	D-003	GC-Water	Malathion	0.15	ug/L	UJ	0.15	0.6

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 11:27	D-003	GC-Water	Metalaxyl	0.25	ug/L	UJ	0.25	1
7/18/2005 11:27	D-003	GC-Water	Metolachlor	0.5	ug/L	UJ	0.5	2
7/18/2005 11:27	D-003	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
7/18/2005 11:27	D-003	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
7/18/2005 11:27	D-003	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
7/18/2005 11:27	D-003	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
7/18/2005 11:27	D-003	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
7/18/2005 11:27	D-003	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
7/18/2005 11:27	D-003	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
7/18/2005 11:27	D-003	GC-Water	Prometryn	0.15	ug/L	UJ	0.15	0.6
7/18/2005 11:27	D-003	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
7/18/2005 10:55	Blank	GC-Water	Alachlor	0.57	ug/L	UJ	0.57	2.3
7/18/2005 10:55	Blank	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
7/18/2005 10:55	Blank	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
7/18/2005 10:55	Blank	GC-Water	Azinphos Methyl	0.19	ug/L	U	0.19	0.76
7/18/2005 10:55	Blank	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
7/18/2005 10:55	Blank	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
7/18/2005 10:55	Blank	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
7/18/2005 10:55	Blank	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
7/18/2005 10:55	Blank	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
7/18/2005 10:55	Blank	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
7/18/2005 10:55	Blank	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
7/18/2005 10:55	Blank	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
7/18/2005 10:55	Blank	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
7/18/2005 10:55	Blank	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
7/18/2005 10:55	Blank	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
7/18/2005 10:55	Blank	GC-Water	Metalaxyl	0.24	ug/L	UJ	0.24	0.96
7/18/2005 10:55	Blank	GC-Water	Metolachlor	0.48	ug/L	UJ	0.48	1.9
7/18/2005 10:55	Blank	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
7/18/2005 10:55	Blank	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
7/18/2005 10:55	Blank	GC-Water	Naled	0.76	ug/L	U	0.76	3
7/18/2005 10:55	Blank	GC-Water	Norflurazon	0.14	ug/L	U	0.14	0.56
7/18/2005 10:55	Blank	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 10:55	Blank	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
7/18/2005 10:55	Blank	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
7/18/2005 10:55	Blank	GC-Water	Prometryn	0.14	ug/L	UJ	0.14	0.56
7/18/2005 10:55	Blank	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
7/18/2005 11:27	D-003	Mercury-Water	Mercury	0.12	ug/L	U	0.12	0.5
7/18/2005 10:55	Blank	Mercury-Water	Mercury	0.12	ug/L	U	0.12	0.5
7/18/2005 11:27	D-003	Metals-Water	Aluminum	17	ug/L	I	5	20
7/18/2005 11:27	D-003	Metals-Water	Arsenic	4	ug/L	U	4	16
7/18/2005 11:27	D-003	Metals-Water	Cadmium	0.5	ug/L	U	0.5	2
7/18/2005 11:27	D-003	Metals-Water	Calcium	102	mg/L		0.05	0.2
7/18/2005 11:27	D-003	Metals-Water	Chromium	2	ug/L	U	2	8
7/18/2005 11:27	D-003	Metals-Water	Copper	5	ug/L	U	5	20
7/18/2005 11:27	D-003	Metals-Water	Iron	1.47E+03	ug/L		10	40
7/18/2005 11:27	D-003	Metals-Water	Lead	2.1	ug/L	U	2.1	8.4
7/18/2005 11:27	D-003	Metals-Water	Magnesium	13.8	mg/L		0.01	0.04
7/18/2005 11:27	D-003	Metals-Water	Nickel	2	ug/L	U	2	8
7/18/2005 11:27	D-003	Metals-Water	Selenium	1.4	ug/L	I	0.5	2
7/18/2005 11:27	D-003	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
7/18/2005 11:27	D-003	Metals-Water	Sodium	77	mg/L		0.4	1.6
7/18/2005 11:27	D-003	Metals-Water	Zinc	3	ug/L	U	3	12
7/18/2005 10:55	Blank	Metals-Water	Aluminum	5	ug/L	U	5	20
7/18/2005 10:55	Blank	Metals-Water	Arsenic	4	ug/L	U	4	16
7/18/2005 10:55	Blank	Metals-Water	Cadmium	0.5	ug/L	U	0.5	2
7/18/2005 10:55	Blank	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
7/18/2005 10:55	Blank	Metals-Water	Chromium	2	ug/L	U	2	8
7/18/2005 10:55	Blank	Metals-Water	Copper	5	ug/L	U	5	20
7/18/2005 10:55	Blank	Metals-Water	Iron	10	ug/L	U	10	40
7/18/2005 10:55	Blank	Metals-Water	Lead	2.1	ug/L	U	2.1	8.4
7/18/2005 10:55	Blank	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
7/18/2005 10:55	Blank	Metals-Water	Nickel	2	ug/L	U	2	8
7/18/2005 10:55	Blank	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
7/18/2005 10:55	Blank	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
7/18/2005 10:55	Blank	Metals-Water	Sodium	0.4	mg/L	U	0.4	1.6

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/18/2005 10:55	Blank	Metals-Water	Zinc	4.6	ug/L	I	3	12
7/18/2005 11:27	D-003	Nutrients-Liquid	Alkalinity	296	mg CaCO3/L		0.65	2.5
7/18/2005 11:27	D-003	Nutrients-Liquid	Ammonia-N	1.5	mg N/L		0.1	0.2
7/18/2005 11:27	D-003	Nutrients-Liquid	Chloride	120	mg Cl/L		2	5
7/18/2005 11:27	D-003	Nutrients-Liquid	Kjeldahl Nitrogen	2.8	mg N/L		0.12	0.4
7/18/2005 11:27	D-003	Nutrients-Liquid	NO2NO3-N	0.007	mg N/L	I	0.004	0.01
7/18/2005 11:27	D-003	Nutrients-Liquid	O-Phosphate-P	0.062	mg P/L		0.004	0.01
7/18/2005 11:27	D-003	Nutrients-Liquid	Sulfate	6.7	mg SO4/L		2	5
7/18/2005 11:27	D-003	Nutrients-Liquid	Total-P	0.11	mg P/L		0.02	0.06
7/18/2005 11:27	D-003	Nutrients-Liquid	TSS	4	mg/L	U	4	16
7/18/2005 11:27	D-003	Nutrients-Liquid	Turbidity	20	NTU		0.05	0.05
7/18/2005 10:55	Blank	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
7/18/2005 10:55	Blank	Nutrients-Liquid	Chloride	0.2	mg Cl/L	U	0.2	0.5
7/18/2005 10:55	Blank	Nutrients-Liquid	Kjeldahl Nitrogen	0.12	mg N/L	U	0.12	0.4
7/18/2005 10:55	Blank	Nutrients-Liquid	NO2NO3-N	0.006	mg N/L	I	0.004	0.01
7/18/2005 10:55	Blank	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
7/18/2005 10:55	Blank	Nutrients-Liquid	Sulfate	0.2	mg SO4/L	U	0.2	0.5
7/18/2005 10:55	Blank	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
7/18/2005 11:27	D-003	Overflow	Oil and Grease	1.7	mg/L	UJ		
7/18/2005 10:55	Blank	Overflow	Oil and Grease	1.7	mg/L	U		

The Bioassay of Florida Power & Light Martin Power Plant effluent sampled on July 18, 2005. NPDES #FL0030988.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 3 0 9 8 8 11	12 0 5 0 7 1 8	18 **B**	19 **S**	20 2

Remarks

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The Priority Pollutants Analysis of Florida Power & Light Martin Power Plant effluent sampled on July 18, 2005. NPDES #FL0030988.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 3 0 9 8 8 11	12 0 5 0 7 1 8	18 **X**	19 **S**	20 2

Remarks

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Biological Analyses of Florida Power & Light Martin Power Plant effluent sampled on July 18, 2005. NPDES #FL0030988.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 3 0 9 8 8 11	12 0 5 0 7 1 8	18 **S**	19 **S**	20 2

Remarks

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