

Bioassays of

St. Johns River Power Park

Duval County

NPDES #FL0037869

Sampled July 19, 2004

November 2004

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

St. Johns River Power Park, 11201 New Berlin Rd., Jacksonville, Duval County, Florida, NPDES #FL0037869. Effluent samples for this facility were collected on July 19, 2004.

Introduction

St. Johns River Power Park (SJRPP) is an electric generation facility that consists of two fossil-fuel powered steam-electric generating units (Unit 1 and Unit 2) with a total nominal rating of 1360 MegaWatts. The facility discharge consists of non-contact cooling water, coal pile runoff, solid waste runoff, steam generator blowdown, and industrial and non-industrial stormwater. There is no design flow for the main outfall, D-001. The average flow from July 2003 through June 2004 was 34.1 million gallons per day (MGD), of which approximately 1.3 MGD was wastewater other than cooling tower water blowdown. Condenser water is chlorinated for bio-fouling control and cooled by natural draft cooling towers. Other wastewater includes wastewater from the Coal Pile Runoff Sedimentation Basins and Metal Cleaning Waste Basins, which undergo chemical conditioning, chemical precipitation, gravity thickening, multimedia filtration and neutralization in the central wastewater treatment facility (CWTF). The CWTF effluent (I-006) and cooling tower blowdown (I-051 and I-052) combine and discharge through outfall D-001. The SJRPP draws its makeup water from the discharge canal of the JEA Northside Generating Station (D-010). SJRPP's outfall D-001 discharges back to the JEA Northside Generating Stations discharge canal, which then discharges to the Class III marine waters of the St. Johns River (facility information provided by Jeremy RiCharde of FDEP Northeast District office).

Methods

Bioassay samples were collected from the D-001 NPDES sampling point by Joe Jordan, Sandra Marquez, and Eesa Ali (FDEP Northeast District office) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. Additional water chemistry samples were taken from Internal Outfall I-006 and Intake D-010. 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_03,TA07_04, 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. While the 48-hour acute screening toxicity test does not reflect the permit required conditions, the Department uses it to provide reasonable assurance that the facility does not adversely affect waters of the state.

Toxicity Test Results

Tests were performed July 20-22, 2004.

Americamysis bahia 48-hr acute screening bioassay – sample at 48 hours — LC_{50} > 100%, 0%* mortality in 100%

Menidia beryllina 48-hr acute screening bioassay – sample at 48 hours — LC_{50} > 100%, 0%* mortality in 100%

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 58.8 mg dry wt/L of *Dunaliella tertiolecta.* Raschke and Shultz found that AGP values above 10.0 mg dry weight/L represent a “problem” threshold for marine receiving waters, implying nutrient enrichment (personal communication with Ron Raschke USEPA Region 4 1987). The analytical chemistry suggests that the effluent is both nitrogen and phosphorus-limited.

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine and total ammonia were not detected in the bioassay sample in the laboratory. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.036 mg/L. The calculated unionized ammonia concentration was 0.003 mg/L.

In samples from outfall D-001, atrazine was detected; aluminum and copper were detected at levels that comply with Class III Marine water quality standards (62-302, F.A.C.). Lead was detected between the laboratory minimum quantitation limit (MDL) and practical quanititation limit (PQL). Levels of iron (700 µg/L) and nickel (9.9 µg/L) exceeded their respective Class III Marine water quality criteria of 300 µg/L (62-302.530(39), F.A.C.) and 8.3 µg/L (62-302.530(45), F.A.C.).

Aluminum, iron, and nickel were detected in samples from Intake D-010, at levels that comply with Class III Marine water quality standards (62-302, F.A.C.).

In samples from internal outfall I-006, aluminum, copper, nickel, selenium, and zinc were detected at levels that complied with effluent limits, and cadmium was detected between the MDL and PQL.

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 samples collected from D-001 for this facility on July 19, 2004, did not show acute toxicity to either test species during the 48-hour acute bioassays. The effluent AGP result exceeded the "problem” threshold for marine receiving waters. Concentrations of iron and nickel at outfall D-001 and exceeded Class III Marine water quality criteria. The concentration of copper at internal outfall I-006 exceeded the Class III Marine water quality criterion, but not the permit limit.

Table 1. Algal growth potential (AGP) of Dunaliella tertiolecta, *and nutrient ratios for samples collected from St. Johns River Power Park on July 19, 2004.*

Location	AGP (measured)	Inorganic N:P ratio	Total N:P ratio
Final Effluent D-001	58.8	13.05	10.77

Table 2. Effluent limits, Class III Criteria and chemical data for samples collected from St. Johns River Power Park on July 19, 2004.

St. Johns River Power Park	Class III Marine Stds	Effluent Limits D-001	Intake Limits D-010	Effluent Limits I-006	Final Effluent D-001	Intake D-010	Internal Outfall I-006
Organic Constituents (µg/L)							
Atrazine	-	-	-	-	0.24	-	-
Metals (µg/L unless otherwise noted)							
Aluminum	≤ 1500	-	Report	-	920	389	268
Arsenic	≤ 50	-	Report	-	18 U	18 U	18 U
Cadmium	≤ 9.3	-	-	-	0.25 U	0.25 U	0.81 I
Calcium (mg/L)	-	-	-	-	424	270	762
Chromium-III	-	-	Report	-	6 U	6 U	6 U
Copper	≤ 3.7	-	Report	≤ 1,000	1.8 AJ	0.98 I	6.31
Iron	≤ 300	-	Report	≤ 1,000	700	290	30 U
Lead	≤ 8.5	-	Report	-	0.78 I	0.5 U	0.5 U
Magnesium (mg/L)	-	-	-	-	1090	799	185
Mercury	≤ 0.025	-	Report	-	-	-	-
Nickel	≤ 8.3	-	Report	-	9.9 A	0.66	140
Selenium	≤ 71	-	Report	-	21 U	21 U	296
Silver	-	-	Report	≤ 6.4	0.1 U	0.1 U	0.1 U
Zinc	≤ 86	-	Report	-	9 U	9 U	67
Nutrients (mg/L)							
Ortho-phosphate	-	-	-	-	0.11	-	-
Total Phosphorus	-	-	-	-	0.13	-	-
Ammonia	-	-	-	-	0.036	-	-
Unionized Ammonia	-	-	-	-	0.003 c	-	-
Nitrate+Nitrite	-	-	-	-	1.4	-	-
Total Kjeldahl Nitrogen	-	-	-	-	0.96	-	-
Organic Nitrogen	-	-	-	-	0.92 c	-	-
Total Nitrogen	-	-	-	-	2.34 c	-	-
General Physical and Chemical Parameters							
Dissolved Oxygen (mg/L)	≥ 4 s	-	-	-	6.5	5	7.4
pH (S.U.)	6.5 - 8.5 s	6.5 - 8.5 s	-	6.0 - 9.0 s	7.9	7.6	7.4
Conductivity (µS/cm)	-	-	Report	-	46,020	35,600	6,285
Flow		-	Report	Report	-	-	-
Total Suspended Solids (mg/L)		-	-	≤ 50	-	-	-
Temperature (C)	-	≤ 35.56	-	-	32.5	38.8	29
Oil and Grease (mg/l)	≤ 5	-	-	≤ 15	0.69 U	-	0.69 U
Total Residual Oxidants (mg/L)	-	≤ 0.01	-	-	-	-	-
Total Residual Chlorine (mg/L) (lab)	≤ 0.01	-	-	-	< 0.03 U	-	-
AGP (mg DryWt/L)	-	-	-	-	58.8 A	-	-

Value exceeds Class III Marine Water Quality Criteria (62-302, F.A.C.) and/or effluent limits. (shading where criteria/limits apply)

c - calculated value

A - Value reported is the mean of two or more determinations

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

s - Single sample

FDEP Biology Section - Acute
Bioassay Bench Sheets

Facility: JEA St. Johns River Power Park (WW)
Address: 11201 New Berlin Road
City: Jacksonville County: Duval
Contact/District: Jeremy Richard / NED
NPDES Permit #: FL0037869
LIMS Job #: TLH-2004-07-20-02 LIMS Sample #: ~~787880~~ 787880 D.N.

Sample Collection: Date: 7.19.04 Time: 1500
Hold time Start: Date: 7.19.04 Time: 1500

Comments: Permit requirement is for test to be performed @ 30±2ppT salinity. MF 7/22/04

Lims Data Entry: 7/28/04 MF
Data Entry Verification: DN 7/28/04 CAP 7.28.04

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:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No
Test 2 validation:
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 23.-25.0°C
Room B246 24.0-26.0°C
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
Christa A Fiorini
Dilma Michelsen
Marshall Fairbanks
Jack David

Nicole Wetterdt
REVIEWER

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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	—	—	CAP
Lab Total Residual Cl2 (mg/L):			0.03	0.03		<0.03	HACH	JD	MF
Alkalinity (mg/L as $CaCO_3$):			141	141		138	HACH	DN	MF
Hardness (mg/L as $CaCO_3$):			—	—		—	HACH	—	CAP
Total Ammonia (mg/L as N):			<0.068	<0.068		<0.068	DENVER	DN	MF
Salinity (ppt):			~30	~30		31.6	YSI	DN	CAP

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FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 767880 Test #: 1 Test Started: Date 07/20/04 Time: 1350

Organism: A. bahia Test Ended: Date 7/22/04 Time: 1300

Organism Batch: 196 Diluent/ Batch: DN. NSW ~~ASW~~ / ~~34~~

Organism Age: 4 days Food: YCT P. subcapitata (Artemia) 01940425G

Chamber Size 1000 mL Batch:

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	D13	5	5	4 (1D)			
	B	D14	5	5	5			
	C	D15	5	5	5			
	D	D16	5	5	5			
100%	A	D17	5	5	5			
	B	D18	5	5	5			
	C	D19	5	5	5			
	D	D20	5	5	5			
Organisms loaded by: JD		Checked by:	JD	MF	MF			

Loading Verified by: MF (initials)

Comments:

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

Test Results:

% mortality in 100% sample Ø

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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FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 767880 Test #: 2 Test Started: Date 07/20/04 Time: 1400

Organism: M. beryllina Test Ended: Date 07/22/04 Time: 1308

Organism Batch: 23 Diluent/ Batch: NSW1 N/A

Organism Age: 20 12 d/s Food: YCT P. subcapitata (Artemia)

Chamber Size 1000 mL Batch: 019404256

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	#1	5	5	5			
	B	H2	5	5	5			
	C	H3	5	5	5			
	D	H4	5	5	5			
100%	A	H5	5	5	5			
	B	H6	5	5	5			
	C	H7	5	5	5			
	D	H8	5	5	5			
Organisms loaded by: JD		Checked by: (initials)	JD	MF	MF			

Loading Verified by: MF

Comments:

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

Test Results:

% mortality in 100% sample Ø

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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V.1 2/23/04

Bioassay Parameters

LIMS Sample # : 767880 Test # : 1 of 2

TEST SOP: TA07_ 03 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	A			
pH (S.U.)	8.2	7.8	7.9			
Temperature °C	25.4	25.1	24.3			
Dissolved Oxygen mg/L	6.1	5.9	5.8			
Conductivity µmhos (mmhos)	45.8	46.2	46.3			
(initials) Measured by:	CAP	JD	DN			
(initials) Recorded by:	CAP	DN	DN			

Comments:

Concentration 100 %	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	A			
pH (S.U.)	8.2	8.0	7.9			
Temperature °C	25.3	24.7	24.2			
Dissolved Oxygen mg/L	6.2	6.0	5.7			
Conductivity µmhos (mmhos)	45.8	47.5	48.1			
(initials) Measured by:	CAP	JD	DN			
(initials) Recorded by:	CAP	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:

V.1 2/24/04

Bioassay Parameters

LIMS Sample # : 767880 **Test # :** 2 **of** 2

TEST SOP: TA07_ 04 **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	A			
pH (S.U.)	8.2	8.0	6.0			
Temperature °C	25.4	24.7	25.2			
Dissolved Oxygen mg/L	6.1	6.1	6.0	6 [illegible]		
Conductivity ~~µmhos~~ mmhos	44.1	45.5	47.8			
(initials) Measured by:	CAP	JB	DN			
(initials) Recorded by:	CAP	DN	DN			

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	A			
pH (S.U.)	8.2	8.1	7.9			
Temperature °C	25.3	24.7	24.6			
Dissolved Oxygen mg/L	6.3	6.1	6.1			
Conductivity ~~µmhos~~ mmhos	47.2	47.2	48.8			
(initials) Measured by:	CAP	JB	DN			
(initials) Recorded by:	CAP	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:



V.1 2/24/04

Appendix 2. Chemical Analyses performed on the effluent from the St. Johns River Power Park, sampled on July 19, 2004.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
7/19/2004 15:00	FINAL EFFLUENT D-001	Bio-AGP/LimNut	Algal Growth Potential	58.8	mg DryWt/L	A	0.1	0.3
7/19/2004 15:00	FINAL EFFLUENT D-001	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	1.7	ug/L	U	1.7	5.1
7/19/2004 15:00	FINAL EFFLUENT D-001	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	1.7	ug/L	U	1.7	5.1
7/19/2004 15:00	FINAL EFFLUENT D-001	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
7/19/2004 15:00	FINAL EFFLUENT D-001	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	L		
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	1,2,4-Trichlorobenzene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	1,2-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	1,3-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	1,4-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2,4,6-Trichlorophenol	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2,4-Dichlorophenol	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	190
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2,4-Dinitrophenol	15	ug/L	UJ	15	58
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2,4-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2,6-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2-Chloronaphthalene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2-Chlorophenol	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	2-Nitrophenol	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4-Bromophenyl phenyl ether	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4-Chloro-3-methylphenol	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	4-Nitrophenol	15	ug/L	U	15	58
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Acenaphthene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Acenaphthylene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Anthracene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Benzidine	97	ug/L	U	97	390
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Benzo(a)anthracene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Benzo(a)pyrene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Benzo(b)fluoranthene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Benzo(g,h,i)perylene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Benzo(k)fluoranthene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Bis(2-chloroethoxy)methane	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Bis(2-chloroethyl)ether	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	58
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Butyl benzyl phthalate	4.9	ug/L	U	4.9	19
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Chrysene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Di-n-butyl phthalate	4.9	ug/L	U	4.9	19

7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Di-n-octyl phthalate	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Dibenzo(a,h)anthracene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Diethyl phthalate	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Dimethyl phthalate	49	ug/L	U	49	190
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Endosulfan I	3.9	ug/L	U	3.9	16
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Endosulfan II	3.9	ug/L	U	3.9	16
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Endrin aldehyde	3.9	ug/L	U	3.9	16
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Fluoranthene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Fluorene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Hexachlorobenzene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Indeno(1,2,3-cd)pyrene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Isophorone	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Naphthalene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Phenanthrene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Phenol	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	Pyrene	0.97	ug/L	U	0.97	3.9
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.8
7/19/2004 15:00	FINAL EFFLUENT D-001	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.8
7/19/2004 15:45	EQUIP BLANK	BNA-Water	1,2,4-Trichlorobenzene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	1,2-Dichlorobenzene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	1,3-Dichlorobenzene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	1,4-Dichlorobenzene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2,4,6-Trichlorophenol	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2,4-Dichlorophenol	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2,4-Dimethylphenol	50	ug/L	U	50	200
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2,4-Dinitrophenol	15	ug/L	UJ	15	59
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2,4-Dinitrotoluene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2,6-Dinitrotoluene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2-Chloronaphthalene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2-Chlorophenol	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	3	ug/L	U	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	2-Nitrophenol	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	3,3'-Dichlorobenzidine	40	ug/L	U	40	160

7/19/2004 15:45	EQUIP BLANK	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	4-Bromophenyl phenyl ether	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	4-Chloro-3-methylphenol	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	4-Chlorophenyl phenyl ether	2	ug/L	U	2	7.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	4-Nitrophenol	15	ug/L	U	15	59
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Acenaphthene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Acenaphthylene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Anthracene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Benzidine	99	ug/L	U	99	400
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Benzo(a)anthracene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Benzo(a)pyrene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Benzo(b)fluoranthene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Benzo(g,h,i)perylene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Benzo(k)fluoranthene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Bis(2-chloroethoxy)methane	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Bis(2-chloroethyl)ether	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	3	ug/L	U	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	59
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Butyl benzyl phthalate	5	ug/L	U	5	20
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Chrysene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Di-n-butyl phthalate	5	ug/L	U	5	20
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Di-n-octyl phthalate	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Dibenzo(a,h)anthracene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Diethyl phthalate	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Dimethyl phthalate	50	ug/L	U	50	200
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Endosulfan I	4	ug/L	U	4	16
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Endosulfan II	4	ug/L	U	4	16
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Endrin aldehyde	4	ug/L	U	4	16
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Fluoranthene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Fluorene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Hexachlorobenzene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Hexachlorobutadiene	3	ug/L	U	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Hexachlorocyclopentadiene	3	ug/L	UJ	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Hexachloroethane	3	ug/L	U	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Isophorone	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	N-Nitrosodi-n-propylamine	2	ug/L	U	2	7.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	N-Nitrosodimethylamine	2	ug/L	U	2	7.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	N-Nitrosodiphenylamine	3	ug/L	U	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Naphthalene	0.99	ug/L	U	0.99	4

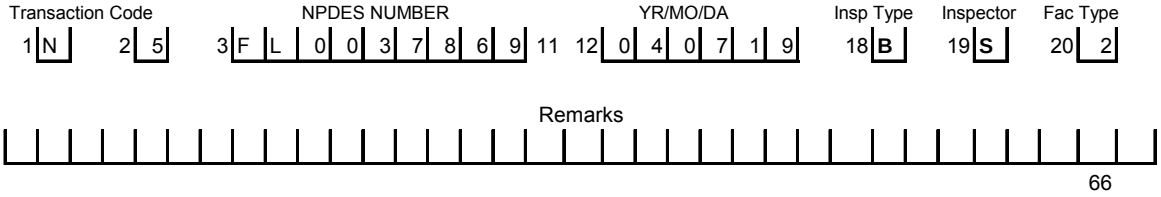
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Nitrobenzene	2	ug/L	U	2	7.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Pentachlorophenol	3	ug/L	U	3	12
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Phenanthrene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Phenol	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	Pyrene	0.99	ug/L	U	0.99	4
7/19/2004 15:45	EQUIP BLANK	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.9
7/19/2004 15:45	EQUIP BLANK	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.9
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Atrazine	0.24	ug/L		0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Azinphos Methyl	0.05	ug/L	U	0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Diazinon	0.05	ug/L	UJ	0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Fonofos	0.1	ug/L	UJ	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Naled	0.8	ug/L	UJ	0.8	3.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Parathion Ethyl	0.15	ug/L	UJ	0.15	0.6
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
7/19/2004 15:00	FINAL EFFLUENT D-001	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
7/19/2004 15:45	EQUIP BLANK	GC-Water	Alachlor	0.64	ug/L	U	0.64	2.6
7/19/2004 15:45	EQUIP BLANK	GC-Water	Ametryn	0.053	ug/L	U	0.053	0.21
7/19/2004 15:45	EQUIP BLANK	GC-Water	Atrazine	0.053	ug/L	U	0.053	0.21
7/19/2004 15:45	EQUIP BLANK	GC-Water	Azinphos Methyl	0.053	ug/L	U	0.053	0.21
7/19/2004 15:45	EQUIP BLANK	GC-Water	Bromacil	0.21	ug/L	U	0.21	0.85
7/19/2004 15:45	EQUIP BLANK	GC-Water	Butylate	0.21	ug/L	U	0.21	0.85
7/19/2004 15:45	EQUIP BLANK	GC-Water	Chlorpyrifos Ethyl	0.053	ug/L	U	0.053	0.21
7/19/2004 15:45	EQUIP BLANK	GC-Water	Chlorpyrifos Methyl	0.11	ug/L	U	0.11	0.43
7/19/2004 15:45	EQUIP BLANK	GC-Water	Diazinon	0.053	ug/L	UJ	0.053	0.213
7/19/2004 15:45	EQUIP BLANK	GC-Water	Ethion	0.053	ug/L	U	0.053	0.21
7/19/2004 15:45	EQUIP BLANK	GC-Water	Ethoprop	0.11	ug/L	U	0.11	0.43
7/19/2004 15:45	EQUIP BLANK	GC-Water	Fenamiphos	0.21	ug/L	U	0.21	0.85
7/19/2004 15:45	EQUIP BLANK	GC-Water	Fonofos	0.11	ug/L	UJ	0.106	0.426

7/19/2004 15:45	EQUIP BLANK	GC-Water	Hexazinone	0.11	ug/L	U	0.11	0.43
7/19/2004 15:45	EQUIP BLANK	GC-Water	Malathion	0.16	ug/L	U	0.16	0.64
7/19/2004 15:45	EQUIP BLANK	GC-Water	Metalaxyl	0.27	ug/L	U	0.27	1.1
7/19/2004 15:45	EQUIP BLANK	GC-Water	Metolachlor	0.53	ug/L	U	0.53	2.1
7/19/2004 15:45	EQUIP BLANK	GC-Water	Metribuzin	0.11	ug/L	U	0.11	0.43
7/19/2004 15:45	EQUIP BLANK	GC-Water	Mevinphos	0.21	ug/L	U	0.21	0.85
7/19/2004 15:45	EQUIP BLANK	GC-Water	Naled	0.85	ug/L	UJ	0.851	3.4
7/19/2004 15:45	EQUIP BLANK	GC-Water	Norflurazon	0.11	ug/L	U	0.11	0.43
7/19/2004 15:45	EQUIP BLANK	GC-Water	Parathion Ethyl	0.16	ug/L	UJ	0.159	0.638
7/19/2004 15:45	EQUIP BLANK	GC-Water	Parathion Methyl	0.11	ug/L	U	0.11	0.43
7/19/2004 15:45	EQUIP BLANK	GC-Water	Phorate	0.053	ug/L	U	0.053	0.21
7/19/2004 15:45	EQUIP BLANK	GC-Water	Prometryn	0.16	ug/L	U	0.16	0.64
7/19/2004 15:45	EQUIP BLANK	GC-Water	Simazine	0.053	ug/L	U	0.053	0.21
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Aluminum	268	ug/L		25	100
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Arsenic	18	ug/L	U	18	72
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Cadmium	0.81	ug/L	I	0.25	1
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Calcium	762	mg/L		0.2	0.8
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Chromium	6	ug/L	U	6	24
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Copper	6.31	ug/L		0.25	1
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Iron	30	ug/L	U	30	120
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Lead	0.5	ug/L	U	0.5	2
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Magnesium	185	mg/L		0.06	0.24
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Nickel	140	ug/L		0.5	2
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Selenium	296	ug/L		21	84
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Silver	0.1	ug/L	U	0.1	0.4
7/19/2004 13:35	INTERNAL OUTFALL I-006	Metals-Water	Zinc	67	ug/L		12	48
7/19/2004 14:55	INTAKE D-010	Metals-Water	Aluminum	389	ug/L		15	60
7/19/2004 14:55	INTAKE D-010	Metals-Water	Arsenic	18	ug/L	U	18	72
7/19/2004 14:55	INTAKE D-010	Metals-Water	Cadmium	0.25	ug/L	U	0.25	1
7/19/2004 14:55	INTAKE D-010	Metals-Water	Calcium	270	mg/L		0.15	0.6
7/19/2004 14:55	INTAKE D-010	Metals-Water	Chromium	6	ug/L	U	6	24
7/19/2004 14:55	INTAKE D-010	Metals-Water	Copper	0.98	ug/L	I	0.25	1
7/19/2004 14:55	INTAKE D-010	Metals-Water	Iron	290	ug/L		30	120
7/19/2004 14:55	INTAKE D-010	Metals-Water	Lead	0.5	ug/L	U	0.5	2
7/19/2004 14:55	INTAKE D-010	Metals-Water	Magnesium	799	mg/L		0.2	0.8
7/19/2004 14:55	INTAKE D-010	Metals-Water	Nickel	0.66	ug/L		0.1	0.4
7/19/2004 14:55	INTAKE D-010	Metals-Water	Selenium	21	ug/L	U	21	84
7/19/2004 14:55	INTAKE D-010	Metals-Water	Silver	0.1	ug/L	U	0.1	0.4
7/19/2004 14:55	INTAKE D-010	Metals-Water	Zinc	9	ug/L	U	9	36
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Aluminum	920	ug/L		100	400
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Arsenic	18	ug/L	U	18	72
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Cadmium	0.25	ug/L	U	0.25	1
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Calcium	424	mg/L		0.15	0.6
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Chromium	6	ug/L	U	6	24
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Copper	1.8	ug/L	AJ	0.25	1
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Iron	700	ug/L		30	120
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Lead	0.78	ug/L	I	0.5	2
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Magnesium	1090	mg/L		0.4	1.6

7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Nickel	9.9	ug/L	A	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Selenium	21	ug/L	U	21	84
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Silver	0.1	ug/L	U	0.1	0.4
7/19/2004 15:00	FINAL EFFLUENT D-001	Metals-Water	Zinc	9	ug/L	U	9	36
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Aluminum	34	ug/L	U	34	140
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Arsenic	6	ug/L	U	6	24
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Calcium	0.1	mg/L	U	0.1	0.4
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Copper	0.25	ug/L	U	0.25	1
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Iron	10	ug/L	U	10	40
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Lead	0.05	ug/L	U	0.05	0.2
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Nickel	0.1	ug/L	U	0.1	0.4
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Selenium	7	ug/L	U	7	28
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Silver	0.01	ug/L	U	0.01	0.04
7/19/2004 15:45	EQUIP BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
7/19/2004 15:00	FINAL EFFLUENT D-001	Nutrients-Liquid	Ammonia-N	0.036	mg N/L		0.01	0.02
7/19/2004 15:00	FINAL EFFLUENT D-001	Nutrients-Liquid	Kjeldahl Nitrogen	0.96	mg N/L		0.06	0.2
7/19/2004 15:00	FINAL EFFLUENT D-001	Nutrients-Liquid	NO2NO3-N	1.4	mg N/L		0.008	0.02
7/19/2004 15:00	FINAL EFFLUENT D-001	Nutrients-Liquid	O-Phosphate-P	0.11	mg P/L		0.008	0.02
7/19/2004 15:00	FINAL EFFLUENT D-001	Nutrients-Liquid	Total-P	0.13	mg P/L		0.02	0.06
7/19/2004 15:45	EQUIP BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
7/19/2004 15:45	EQUIP BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
7/19/2004 15:45	EQUIP BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
7/19/2004 15:45	EQUIP BLANK	Nutrients-Liquid	O-Phosphate-P	0.007	mg P/L	I	0.004	0.01
7/19/2004 15:45	EQUIP BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
7/19/2004 13:35	INTERNAL OUTFALL I-006	Overflow	Oil and Grease	0.69	mg/l	U		
7/19/2004 15:00	FINAL EFFLUENT D-001	Overflow	Oil and Grease	0.69	mg/l	U		
7/19/2004 15:45	EQUIP BLANK	Overflow	Oil and Grease	2.4	mg/l	I		

The Bioassay of St. Johns River Power Park effluent sampled on July 19, 2004, NPDES #FL0037869.

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



The Priority Pollutants Analysis for Bioassay of St. Johns River Power Park effluent sampled on July 19, 2004, NPDES #FL0037869.

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

