

Bioassays of

Atlantic Dry Dock WWTF

Duval County

NPDES #FL0040592

Sampled April 25, 2005

July 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Atlantic Dry Dock Wastewater Treatment Facility, 8500 Heckscher Drive, Jacksonville, Duval County, Florida, NPDES #FL0040592. Effluent samples for this facility were collected on April 25, 2005.

Introduction

The Atlantic Dry Dock Wastewater Treatment Facility is an extended-aeration domestic wastewater treatment facility. The facility has a design flow of 0.06 million gallons per day (MGD). The annual average flow for the previous year was 0.0046 MGD (May 2004 – April 2005). The treatment facility consists of an influent unit and surge tank for flow equalization, seven aeration tanks, two secondary clarifiers, two aerobic digesters and three ultraviolet (UV) disinfection units. The facility has chlorination and dechlorination equipment available for backup disinfection. Treated effluent is discharged to the Class III marine waters of the St. Johns River through Outfall D-001 (approximate location latitude 30º22'12" N, longitude 81º27'36" W) which is approximately 100 feet in length and discharges at a depth of 6 cm (0.2 feet). Domestic residuals are transported to American Water Services, Inc., for further treatment and final disposal. There are no toxicity requirements or mixing zones for this facility.

Prior to the separation of the facility's Domestic and Industrial permits (November, 2001), there were permit violations of copper and zinc. There were also violations of TSS, pH and fecal coliforms during 2003. The Discharge Monitoring Reports for January through December 2004 show that the effluent water quality has improved during the past year. The quality (i.e. pH and salinity) and quantity of the influent flow varies greatly due to numerous ships discharging domestic wastewater as well as saltwater (as bilge water, cleaning water, etc.) into the treatment system. The facility is also permitted to discharge stormwater through eleven (11) stormwater outfalls.

At the time of sampling, the effluent was being chlorinated with chlorine tablets and dechlorinated with an inadequate quantity of sodium bisulfite tablets. The conductivity of the effluent was higher than expected due to waste discharged into the facility by a ship (facility information provided by Kathleen Gerard of FDEP Northeast District).

Methods

Samples were collected from the EFD-1 NPDES sampling point by Tom Kallemeyn (FDEP Northeast 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 the 48-hour acute screening tests to provide reasonable assurance that the facility does not adversely affect waters of the state.

The salinity of the sample collected for the bioassay tests was 3.3 parts per thousand (ppth). Per SOP TA 07_13, the salinity of two aliquots of the sample was adjusted by the addition of artificial sea salts (Forty Fathoms®) to approximately 9.3 ppth for the mysid (*Americamysis bahia*) test and approximately 4.3 ppth for the fish (*Menidia beryllina*) test, respectively. Artificial seawater (ASW) controls were prepared by diluting 20 ppth ASW to the appropriate test salinity. Salt-added controls were prepared by adding artificial sea salts to ASW, which had been diluted with well water in order to match the salinity of the original sample. The purpose of the salt-added controls was to ensure that any observed toxicity in the effluent tests could not be attributed to the sea salt addition. There was no toxicity observed in the salt-added controls. The sample of effluent for the AGP test was salinity adjusted from 3.3 ppth to 7 ppth to meet the salinity requirement of the test species per SOP TA08_01.

Toxicity Test Results

Tests were performed April 26-28, 2005.

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

The bioassay sample was 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 245 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 nitrogen - limited.

See Table 1 for AGP results.

Chemistry Results

The total residual chlorine (TRC) concentration (0.63 mg/L) detected in the effluent at the time of sample collection and the TRC concentration (0.15 mg/L) detected in the unaltered bioassay sample in the FDEP Biology Laboratory both exceeded the Class III marine surface water criterion for TRC of ≤ 0.01 mg/L (62-302.530(19), F.A.C.). The TRC concentrations in the salinity-adjusted bioassay samples were ≤ 0.03 mg/L. Total ammonia was not detected in the bioassay sample in the laboratory. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.092 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, iron, and zinc were detected in the effluent at levels that comply with Class III marine water quality criteria. The effluent copper concentration (39.5 µg/L) and the effluent nickel concentration (43.8 µg/L) exceeded their respective Class III marine water quality criteria of ≤ 3.7 µg/L for copper (62-302.530(24), F.A.C.) and ≤ 8.3 µg/L for nickel (62-302.530(45), F.A.C.).

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 sampling point EFD-1 for this facility on April 25, 2005, were not acutely toxic to either test species during the 48-hour bioassays. The effluent AGP result

exceeded the problem threshold for marine waters. Copper, nickel, and total residual chlorine concentrations exceeded their respective Class III marine water quality criteria.

Literature Cited

Maloney, T. E., W. E. Miller, and D. T. Specht. 1974. The Marine Algal Assay Procedure: Bottle Test. National Environmental Research Center Office of Research and Development. U. S. EPA, Corvallis, Oregon. 43 p.

Table 1. Algal growth potential (AGP) of Dunaliella tertiolecta *and ratios of Nitrogen to Phosphorus for a sample collected from Atlantic Dry Dock WWTP on April 25, 2005.*

Location	AGP (mg dry weight/L)	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	245	1.59	1.76

Table 2. Effluent limits, Class III Marine Criteria, and chemical data for samples collected from Atlantic Dry Dock WWTF on April 25, 2005.

Atlantic Dry Dock WWTF NPDES # FL0040592	Class III Marine Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
None Detected	-	-	-
Metals (µg/L unless otherwise noted)			
Aluminum	≤ 1,500	-	27
Arsenic	≤ 50	-	6 U
Cadmium	≤ 9.3	-	0.37 U
Calcium (mg/L)	-	-	95.2
Chromium-III	-	-	2 U
Copper	≤ 3.7	-	39.5
Iron	≤ 300	-	97
Lead	≤ 8.5	-	0.37 U
Magnesium (mg/L)	-	-	121
Nickel	≤ 8.3	-	43.8
Selenium	≤ 71	-	2.5 U
Silver	≤ 2.3	-	0.13 U
Zinc	≤ 86	-	76
Nutrients (mg/L)			
Ortho-phosphate	-	Report	3.2
Total Phosphorus	-	Report	3.8 A
Ammonia	-	Report	0.092
Unionized Ammonia	-	Report	0 c
Nitrate+Nitrite	-	Report	5
Total Kjeldahl Nitrogen	-	Report	1.7 A
Organic Nitrogen	-	Report	1.61 c
Total Nitrogen	-	Report	6.7 c
General Physical and Chemical Parameters			
Dissolved Oxygen (mg/L)	≥ 4	≥ 5	8.1
pH (S.U.)	6.5-8.5	6.5-8.5	7.5
Conductivity (umhos/cm)	-	-	6,246
Temperature (C)	-	-	21.4
CBOD, 5 day (mg/L)	-	60 s	1.5 I
Hardness (mg/L)	-	-	736 c
TSS (mg/L)	-	60 s	4 U
Total residual chlorine (mg/L)	≤0.01	≤0.01	0.63

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

c - calculated value

s - Single sample

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

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

FDEP Biology Section - Acute
Bioassay Bench Sheets

Facility: Atlantic Dry Dock WWTF

Address: 8502 McKenna Drive

City: Jacksonville County: Duval

Contact/District: Kathleen Gerard / Northeast

NPDES Permit #: FL 0040592

LIMS Job #: ~~831382~~ TLH-2005-04-26-45 LIMS Sample #: 831382

Sample Collection: Date: 4/25/05 Time: 10:50

Hold time Start: Date: 4-25-05 Time: 1050

Comments: Sample salinity increased from ~3.3 to ~4.3 ppth (parts per thousand) by the addition of forty fathoms® seasalts for the Mendidia beryllina test. Sample salinity adjusted to ~9.3 ppth by the addition of forty fathoms® seasalts in the Americamysis bahia test. Salt controls prepared by diluting Artificial Seawater to the original sample salinity (~3.3 ppth) then salting same as test aliquots. MF 4-27-05

Sample expected as freshwater, however, prior to sampling, a ship had discharged saltwater/bilgewater into the WWTF - email from J. Martin NED MF 4-27-05

Total Residual chlorine of salinity adjusted sample was <0.03 mg/L MF 4/13/05

Lims Data Entry: 4-29-05 MF Data Entry Verification: 4-29-05 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:
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: ~3.3 Final Salinity: 9.3 (Salts) Hypersaline brine

Salinity adjusted (Test 2) (yes) no Initial Salinity: ~3.3 Final Salinity: 4.3 (Salts) Hypersaline brine

Dechlorination: yes (no) mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC

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)

Temperature Range °C

Incubator # 2 Range 24.1-25.2

Room B246: 23.2-23.7

Waterbath: N/A

Investigators' Signatures

Deanna McQuillen

Sarah Pritchard

James Daniel

Marshall Faircloth

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	0.63	—	TK-NED	MF
Lab Total Residual Cl2 (mg/L):			<0.03	<0.03		0.15	HACH	SP/DN	MF
Alkalinity (mg/L as $CaCO_3$):			156	167		290	HACH	[illegible]	MF
Hardness (mg/L as $CaCO_3$):			NA	NA		NA	HACH	—	MF
Total Ammonia (mg/L as N):			<0.017	<0.017		<0.017	DENVER	MF	SP
Salinity (ppth):			~9.3	~4.3		3.34	YSI Mettler	MF	SP

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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet
Survival

LIMS Sample #: 831382 Test #: 1 | Test Started: Date 4-26-05 Time: 1500
Organism: A.bahia | Test Ended: Date 4-28-05 Time: 1315
Organism Batch: 9-05 | Diluent/ Batch: ASW / 4-05
Organism Age: 3days | Food: YCT *P. subcapitata* (*Artemia* circled) 35138425GR
Chamber Size 1000 mL | Batch: ___ ___
Test Volume 500 mL | Feeding: Prior to test (circled) - Prior to renewal - Daily (circled)

Concentration	Replicate	Chamber #	Test Hour: 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	D1	5	5	5			
	B	D2	5	5	5			
	C	D3	5	5	5			
	D	D4	5	5	5			
Salt CTRL	A	D5	5	5	5			
	B	D6	5	5	5			
	C	D7	5	5	5			
	D	D8	5	5	5			
100%	A	D9	5	5	5			
	B	D10	5	5	5			
	C	D11	5	5	5			
	D	D12	5	5	5			
Organisms loaded by: JJ		Checked by: (initials)		JJ	JJ			

Loading verified at 0 hours by: SP

Comments: See page 89 for salinity adjustment information. MF 4-26-05

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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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet
Survival

LIMS Sample #: 831352 Test #: 2 Test Started: Date 4-26-05 Time: 1430
Organism: M. beryllina Test Ended: Date 4-28-05 Time: 1300
Organism Batch: 8-05 Diluent/ Batch: ASW / 4-05
Organism Age: 11 days Food: YCT *P. subcapitata* Artemia 351336425GR
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	C13	10 (A)	10	10			
	B	C14	10	10	10			
	C	C15	10	10	10			
	D	C16	10	10	10			
Salt CTRL	A	C21	10	10	10			
	B	C22	10	10	10			
	C	C23	10	10	10			
	D	C24	10	10	10			
100%	A	C17	10	10	10			
	B	C18	10	10	10			
	C	C19	10	10	10			
	D	C20	10	10	10			

Organisms loaded by: JS Checked by: [redacted] JH JD
Loading verified at 0 hours by: SH (initials)

Comments: (A) 10 organisms were loaded per replicate rather than 5. Decision made not to change loading to organisms by attempting to remove them after see Page 89 for salinity adjustment information. JH 4-26-05

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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Appendix 1. Bench Sheets (continued)

Bioassay Parameters

LIMS Sample #: 83382 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	C			
pH (S.U.)	8.4	8.3	8.1			
Temperature °C	24.0	24.0	24.5			
Dissolved Oxygen mg/L	7.0	7.3	5.7			
Conductivity µmhos mmhos	15.9	16.4	17.3			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	DN	DN			

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.)	7.9	8.2	8.3			
Temperature °C	24.1	25.4	24.0			
Dissolved Oxygen mg/L	7.0	6.5	5.5			
Conductivity µmhos mmhos	16.1	16.8	16.7			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	DN	DN			

Comments:

Concentration Salt CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.3	8.2	8.0			
Temperature °C	24.0	25.8	24.5			
Dissolved Oxygen mg/L	7.2	6.6	5.0			
Conductivity µmhos mmhos	16.1	16.7	17.5			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	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:

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Bioassay Parameters

LIMS Sample # : 831382 **Test # :** 2 **of** 2

TEST SOP: TA07_ 04 **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	C			
pH (S.U.)	8.5	8.2	8.1			
Temperature °C	24.0	24.0	24.1			
Dissolved Oxygen mg/L	7.4	7.0	5.4			
Conductivity µmhos (mmhos)	7.53	8.52	8.45			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	DN	DN			

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.)	7.9	8.2	8.3			
Temperature °C	24.0	24.1	24.4			
Dissolved Oxygen mg/L	7.5	6.5	5.6			
Conductivity µmhos (mmhos)	7.94	8.65	8.79			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	DN	DN			

Comments:

Concentration Salt CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.2	8.1	8.1			
Temperature °C	24.0	24.3	24.5			
Dissolved Oxygen mg/L	7.4	6.8	5.7			
Conductivity µmhos (mmhos)	7.87	8.56	8.74			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	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:

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Appendix 2. Chemical Analyses performed on the effluent from the Atlantic Dry Dock WWTP EFD-1, sampled on April 25, 2005.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:20	ATLANTIC EFFLUENT	Bio-AGP/LimNut	Algal Growth Potential	245	mg DryWt/L	AL	0.3	0.9
4/25/2005 10:20	ATLANTIC EFFLUENT	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.5	mg/L	I		
4/25/2005 10:20	ATLANTIC EFFLUENT	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
4/25/2005 10:20	ATLANTIC EFFLUENT	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
4/25/2005 10:20	ATLANTIC EFFLUENT	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
4/25/2005 10:20	ATLANTIC EFFLUENT	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	L		
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	UJ	38	150
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8

Appendix 2. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11

Appendix 2. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	1,2,4-Trichlorobenzene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	1,2-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	1,3-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	1,4-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2,4,6-Trichlorophenol	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2,4-Dichlorophenol	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	58
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2,4-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2,6-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2-Chloronaphthalene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2-Chlorophenol	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	2-Nitrophenol	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	UJ	38	150
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4-Bromophenyl phenyl ether	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4-Chloro-3-methylphenol	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.7
4/25/2005 10:50	EQUIP BLANK	BNA-Water	4-Nitrophenol	14	ug/L	U	14	58
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Acenaphthene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Acenaphthylene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Anthracene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Benzidine	96	ug/L	U	96	380
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Benzo(a)anthracene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Benzo(a)pyrene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Benzo(b)fluoranthene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Benzo(g,h,i)perylene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Benzo(k)fluoranthene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Bis(2-chloroethoxy)methane	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Bis(2-chloroethyl)ether	0.96	ug/L	U	0.96	3.8

Appendix 2. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	58
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Chrysene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Dibenzo(a,h)anthracene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Diethyl phthalate	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Di-n-octyl phthalate	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Fluoranthene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Fluorene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Hexachlorobenzene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Isophorone	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Naphthalene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.7
4/25/2005 10:50	EQUIP BLANK	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.7
4/25/2005 10:50	EQUIP BLANK	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.7
4/25/2005 10:50	EQUIP BLANK	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Phenanthrene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Phenol	0.96	ug/L	U	0.96	3.8
4/25/2005 10:50	EQUIP BLANK	BNA-Water	Pyrene	0.96	ug/L	U	0.96	3.8
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2

Appendix 2. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Azinphos Methyl	0.05	ug/L	U	0.05	0.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Malathion	0.15	ug/L	UJ	0.15	0.6
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Metolachlor	0.5	ug/L	UJ	0.5	2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Mevinphos	0.34	ug/L	U	0.34	1.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Prometryn	0.15	ug/L	UJ	0.15	0.6
4/25/2005 10:20	ATLANTIC EFFLUENT	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
4/25/2005 10:50	EQUIP BLANK	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.3
4/25/2005 10:50	EQUIP BLANK	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
4/25/2005 10:50	EQUIP BLANK	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
4/25/2005 10:50	EQUIP BLANK	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
4/25/2005 10:50	EQUIP BLANK	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
4/25/2005 10:50	EQUIP BLANK	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96

Appendix 2. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:50	EQUIP BLANK	GC-Water	Metolachlor	0.48	ug/L	UJ	0.48	1.9
4/25/2005 10:50	EQUIP BLANK	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
4/25/2005 10:50	EQUIP BLANK	GC-Water	Naled	0.76	ug/L	U	0.76	3
4/25/2005 10:50	EQUIP BLANK	GC-Water	Norflurazon	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
4/25/2005 10:50	EQUIP BLANK	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
4/25/2005 10:50	EQUIP BLANK	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
4/25/2005 10:50	EQUIP BLANK	GC-Water	Prometryn	0.14	ug/L	UJ	0.14	0.56
4/25/2005 10:50	EQUIP BLANK	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Aluminum	27	ug/L		5	20
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Arsenic	6	ug/L	U	6	24
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Cadmium	0.37	ug/L	U	0.37	1.5
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Calcium	95.2	mg/L		0.075	0.3
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Chromium	2	ug/L	U	2	8
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Copper	39.5	ug/L		2.5	10
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Iron	97	ug/L		10	40
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Lead	0.37	ug/L	U	0.37	1.5
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Magnesium	121	mg/L		0.04	0.16
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Nickel	43.8	ug/L		2	8
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Selenium	2.5	ug/L	U	2.5	10
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Silver	0.13	ug/L	U	0.13	0.5
4/25/2005 10:20	ATLANTIC EFFLUENT	Metals-Water	Zinc	76	ug/L		3	12
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Arsenic	6	ug/L	U	6	24
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Cadmium	0.075	ug/L	U	0.075	0.3
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Calcium	0.075	mg/L	U	0.075	0.3
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Copper	0.5	ug/L	U	0.5	2
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Iron	10	ug/L	U	10	40
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Nickel	2	ug/L	U	2	8
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
4/25/2005 10:50	EQUIP BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
4/25/2005 10:20	ATLANTIC EFFLUENT	Nutrients-Liquid	Ammonia-N	0.092	mg N/L		0.01	0.02
4/25/2005 10:20	ATLANTIC EFFLUENT	Nutrients-Liquid	Kjeldahl Nitrogen	1.7	mg N/L	A	0.12	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	Nutrients-Liquid	NO2NO3-N	5	mg N/L		0.04	0.1

Appendix 2. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
4/25/2005 10:20	ATLANTIC EFFLUENT	Nutrients-Liquid	O-Phosphate-P	3.2	mg P/L		0.16	0.4
4/25/2005 10:20	ATLANTIC EFFLUENT	Nutrients-Liquid	Total-P	3.8	mg P/L	A	0.1	0.3
4/25/2005 10:20	ATLANTIC EFFLUENT	Nutrients-Liquid	TSS	4	mg/L	U	4	16
4/25/2005 10:50	EQUIP BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
4/25/2005 10:50	EQUIP BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
4/25/2005 10:50	EQUIP BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
4/25/2005 10:50	EQUIP BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
4/25/2005 10:50	EQUIP BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06

The Bioassay of Atlantic Dry Dock WWTP effluent sampled on April 25, 2005, NPDES #FL0040592.

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 4 0 5 9 2 11	12 0 5 0 4 2 5	18 B	19 S	20 2

Remarks

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The Bioassay of Atlantic Dry Dock WWTP effluent sampled on April 25, 2005, NPDES #FL0040592.

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 4 0 5 9 2 11	12 0 5 0 4 2 5	18 X	19 S	20 2

Remarks

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The Bioassay of Atlantic Dry Dock WWTP effluent sampled on April 25, 2005, NPDES #FL0040592.

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 4 0 5 9 2 11	12 0 5 0 4 2 5	18 S	19 S	20 2

Remarks

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