

Bioassays of

Stormwater Treatment Area (STA) 5

PalmBeach County

NPDES #FL0177954

Sampled July 11, 2005

November 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Stormwater Treatment Area (STA) 5, Everglades, (includes portions of Palm Beach, Broward, and Hendry Counties), Florida, NPDES #FL0177954. Effluent samples for this facility were collected on July 11, 2005.

Introduction

Stormwater Treatment Area (STA) 5 is used to treat stormwater from the C-139 basin prior to discharge to the Everglades Protection Area. The treatment area does not have a design flow. The average monthly flow (discharge) from June 2004 through March 2005 was 129.3 cubic feet per second (CFS). Stormwater treatment consists of nutrient and sediment removal by natural wetland vegetation. Specifically, a 4,118-acre constructed-wetland marsh system (STA-5 Project), consisting of both emergent and submerged wetland vegetation, filters stormwater and provides uptake of nutrients prior to discharge to the Miami Canal, the Rotenberger Wildlife Management Area via the G-344 A-D outflow structures, and the STA-5 discharge canal. The permitted discharge from STA 5 is by gravity to the Miami Canal (Class III Freshwater) through 4 outfall structures (outfall serial numbers D-001, D-002, D-003, and D-004, via the G-344 A-D outflow structures). Discharge structures are located approximately as follows: G-344 A at latitude 26º 27' 30", longitude 80º 53' 01"; G-344 B at latitude 26º 28' 02", longitude 80º 53' 01"; G-344 C at latitude 26º 28' 21", longitude 80º 53' 01"; G-344 D at latitude 26º 28' 50", longitude 80º 53' 01".

STA 5 is operating under Administrative Order (AO) AO-003-EV, which defines start-up, stabilization, and post stabilization tests for total phosphorus. The AO allows for discharges not meeting the 5.0 mg/L limit for dissolved oxygen but requires a monitoring, evaluation, and reporting program for dissolved oxygen and an evaluation of the appropriateness of the existing dissolved oxygen water quality standard in the receiving waters. The facility has not met the post stabilization operation annual flow-weighed average total phosphorus concentration limit of 76 ppb for the past four years. This facility does not have any toxicity requirements (facility information provided by Inger Hansen of FDEP Southeast District).

Methods

Samples were collected from the EFF-4 NPDES sampling point (location for Outfall D-004 at the G-344 D outflow structure) 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 the 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 12 - 14, 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%, 0% 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 5.64 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 co-limited by both nitrogen and phosphorus. The predicted AGP based on inorganic nitrogen and ortho-phosphate concentrations were 0.646 mg dry wt/L and 17.63 mg dry wt/L (±20%) mg dry wt/L, respectively (Table 1; Miller et al. 1978).

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 0.017 mg/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

The effluent’s concentration of dissolved oxygen, estimated at 1.9 mg/L based on a field meter reading of 23.5% saturation at 27.75ºC (100% saturation = 7.87 mg/L at 27.75ºC at sea level), was in violation of the Class III freshwater criterion for dissolved oxygen of ≥5.0 mg/L (62-302.530(31), F.A.C.); however, Administrative Order AO-003-EV allows dissolved oxygen concentrations lower than Class III standards. When measured in the laboratory, the dissolved oxygen concentration of the effluent sample was 4.5 mg/L.

Iron was detected in the effluent at levels that comply with Class III fresh water quality criteria. Aluminum was detected between the laboratory minimum detection limit (MDL) and practical quantitation limit (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 sample collected from Outfall D-004 for this facility on July 11, 2005, was not acutely toxic to either test species during the acute screening 48-hour bioassays. The effluent AGP result exceeded the "problem” threshold for fresh receiving waters. Although the effluent’s concentration of dissolved oxygen was in violation of water quality standards, it was not in violation of the facility’s current Administrative Order.

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) for total soluble nitrogen (TSIN), total nitrogen (TN), ortho phosphate (OP), and total phosphorus (TP) limitation of Pseudokirchneriella subcapitata*, and ratios of nitrogen to phosphorus for the sample collected from Stormwater Treatment Area 5 on July 11, 2005.*

Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (OP) ± 20%	Predicted AGP (TN) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	5.64	0.65 ± 0.13	17.63 ± 3.526	41.8 ± 8.36	30.96 ± 6.192	0.41	15.28

Table 2. Effluent limits, Class III Freshwater Criteria, and chemical data for the samples collected from the Stormwater Treatment Area 5 on July 11, 2005.

Stormwater Treatment Area 5 NPDES# FL0177954	Class III Freshwater Stds	Effluent Limits	Effluent Samples
Metals (µg/L unless otherwise noted)			
Aluminum	-	-	15 I
Arsenic	≤ 50	-	4 U
Cadmium	≤ 1.5 b	-	0.05 U
Calcium (mg/L)	-	-	48
Chromium-III	≤ 112.2 b	-	2 U
Copper	≤ 12.3 b	-	0.5 U
Iron	≤ 1,000	-	243
Lead	≤ 4.8 b	-	0.075 U
Magnesium (mg/L)	-	-	4.4
Nickel	≤ 68.5 b	-	2 U
Selenium	≤ 5	-	0.5 U
Silver	≤ 0.07	-	0.025 U
Zinc	≤ 157.4 b	-	3 U
Nutrients (mg/L)			
Ortho-phosphate	-	-	0.041
Total Phosphorus	-	Report	0.072
Ammonia	-	-	0.017 I
Unionized Ammonia	≤ 0.02	-	≤ 0.02
Nitrate+Nitrite	-	-	0.004 U
Total Kjeldahl Nitrogen	-	-	1.1
Organic Nitrogen	-	-	1.08 c
Total Nitrogen	-	-	1.1 c
General Physical and Chemical Parameters			
pH (S.U.)	6.0-8.5 s	6.0-8.5 s	7
Conductivity (umhos/cm)	≤ 1,275	-	398
Dissolved Oxygen (mg/L)	≥ 5.0 s	≥ 5.0 s	1.9 c
Temperature (C)	-	-	27.8
Flow (CFS)	-	Report	-
Hardness (mg/L)	-	-	138 c

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

b - Value is calculated based on hardness

c - Calculated value

s - Single sample

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: Stormwater Treatment Area 5

Address: N/A

City: N/A County: Palm Beach - Broward - Hendry (B)

Contact/District: Terry Davis / SE District

NPDES Permit #: FL~~GS~~ 0177954

LIMS Job #: TLH-2005-07-12-54 LIMS Sample #: 848105

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

Sample Collection: Date: ~~7-12-05~~ 7-11-05 SP Time: 1140

Hold time Start: Date: 7-11-05 Time: 1140

Comments:
(A) correct hardness value for original sample 139 mg/L SP
(B) STA-5 Discharge Structures G-344A-D are in Hendry County.

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 24/-24.9
Room B246: 23.6-24.2
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
Marshall Faircloth
Jason Davis
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	FW/SP	MF
Alkalinity (mg/L as $CaCO_3$):	17	168				154	HACH	SP	MF
Hardness (mg/L as $CaCO_3$):	85	132				~~145~~ 139	HACH	SP	MF
Total Ammonia (mg/L as N):	<0.017	<0.017				<0.017	DENVER	DN	SP
Salinity (ppth):	<1	<1				<1	YSI Mettler	MF	SP

V.1.0 7/1/05

Page 1 of 1

Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 848105 Test #: 1 Test Started: Date 7-12-05 Time: 1600

Organism: C. dubia Test Ended: Date 7-14-05 Time: 1230

Organism Batch: 23-05 Diluent/ Batch: DMW / 21-05

Organism Age: <24 hrs 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

			Test Hour					
Concentration	Replicate	Chamber #	0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	A	5	5	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:	[redacted]	TN	DN			

Loading verified at 0 hours by: DN (initials)

Comments:

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).

Page 000002 v1.2 3/8/05

Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet
Survival

LIMS Sample #: 848105 Test #: 2 Test Started: Date 7 12 05 Time: 1615
Organism: C. leedsi Test Ended: Date 7-14-05 Time: 1300
Organism Batch: 20-05 Diluent/ Batch: W... / NA
Organism Age: 6 days Food: YCT *P. subcapitata* *Artemia* (circled)
Chamber Size 1000 mL Batch: ___ ___ 35138425GR
Test Volume 500 mL Feeding: Prior to test (circled) 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	D1	5	5	5			
	B	D2	5	5	5			
	C	D3	5	5	5			
	D	D4	5	5	5			
100%	A	D5	5	5	5			
	B	D6	5	5	5			
	C	D7	5	5	5			
	D	D8	5	5	5			
Organisms loaded by: JD Loading verified at 0 hours by: EP		Checked by: (initials)	[redacted]	JD	JD			

Comments:

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).

Page 000003 v1.2 3/8/05

Appendix 1. Bench Sheets (continued)

Biomass Parameters

LIMS Sample # : 94805 **Test # :** 1 **of** 2

TEST SOP: TA07 01 **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			
pH (S.U.)	8.1		8.1			
Temperature °C	24.6		24.6			
Dissolved Oxygen mg/L	8.2		7.9			
Conductivity µmhos mmhos	835		1946			
(initials) Measured by:	DN		DN			
(initials) Recorded by:	SB		SB			

Comments:

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	24.6		24.6			
Dissolved Oxygen mg/L	8.3		8.0			
Conductivity µmhos mmhos	3160		4485			
(initials) Measured by:	DN		DN			
(initials) Recorded by:	SB		SB			

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:

v1.1 2/24/04

Bioassay Parameters

LIMS Sample # : 848105 **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.)	7.9	8.3	8.4			
Temperature °C	24.4	24.3	24.5			
Dissolved Oxygen mg/L	8.8	7.7	7.5			
Conductivity ~~µmhos~~ mmhos	265 ~~0.265~~ sr	300	310			
(initials) Measured by:	JD	JD	JD			
(initials) Recorded by:	JD	BS	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.)	7.5	8.2	8.4			
Temperature °C	25.2	24.2	24.7			
Dissolved Oxygen mg/L	5.2	7.7	7.7			
Conductivity ~~µmhos~~ mmhos	370 ~~0.370~~ sr	395	410			
(initials) Measured by:	JD	JD	JD			
(initials) Recorded by:	JD	BS	JD			

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 Stormwater Treatment Area Outfall D-004, sampled on July 11, 2005.

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:40	51-STA-1	Bio-AGP/LimNut	Algal Growth Potential	5.64	mg DryWt/L	A	0.3	0.9
7/11/2005 11:40	51-STA-1	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
7/11/2005 11:40	51-STA-1	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
7/11/2005 11:40	51-STA-1	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
7/11/2005 11:40	51-STA-1	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	LC50	L		
7/11/2005 11:40	51-STA-1	BNA-Water	1,2,4-Trichlorobenzene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	1,2-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	1,3-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	1,4-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2,4,6-Trichlorophenol	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2,4-Dichlorophenol	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	190
7/11/2005 11:40	51-STA-1	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	58
7/11/2005 11:40	51-STA-1	BNA-Water	2,4-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2,6-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2-Chloronaphthalene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2-Chlorophenol	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
7/11/2005 11:40	51-STA-1	BNA-Water	2-Nitrophenol	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
7/11/2005 11:40	51-STA-1	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	4-Bromophenyl phenyl ether	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	4-Chloro-3-methylphenol	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.8
7/11/2005 11:40	51-STA-1	BNA-Water	4-Nitrophenol	15	ug/L	U	15	58
7/11/2005 11:40	51-STA-1	BNA-Water	Acenaphthene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Acenaphthylene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Anthracene	0.97	ug/L	U	0.97	3.9

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:40	51-STA-1	BNA-Water	Benzidine	97	ug/L	U	97	390
7/11/2005 11:40	51-STA-1	BNA-Water	Benzo(a)anthracene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Benzo(a)pyrene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Benzo(b)fluoranthene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Benzo(g,h,i)perylene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Benzo(k)fluoranthene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Bis(2-chloroethoxy)methane	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Bis(2-chloroethyl)ether	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
7/11/2005 11:40	51-STA-1	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	58
7/11/2005 11:40	51-STA-1	BNA-Water	Butyl benzyl phthalate	4.9	ug/L	U	4.9	19
7/11/2005 11:40	51-STA-1	BNA-Water	Chrysene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Dibenzo(a,h)anthracene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Diethyl phthalate	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Dimethyl phthalate	49	ug/L	U	49	190
7/11/2005 11:40	51-STA-1	BNA-Water	Di-n-butyl phthalate	4.9	ug/L	U	4.9	19
7/11/2005 11:40	51-STA-1	BNA-Water	Di-n-octyl phthalate	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Endosulfan I	3.9	ug/L	U	3.9	16
7/11/2005 11:40	51-STA-1	BNA-Water	Endosulfan II	3.9	ug/L	U	3.9	16
7/11/2005 11:40	51-STA-1	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Endrin aldehyde	3.9	ug/L	U	3.9	16
7/11/2005 11:40	51-STA-1	BNA-Water	Fluoranthene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Fluorene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.8
7/11/2005 11:40	51-STA-1	BNA-Water	Hexachlorobenzene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
7/11/2005 11:40	51-STA-1	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	12
7/11/2005 11:40	51-STA-1	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:40	51-STA-1	BNA-Water	Indeno(1,2,3-cd)pyrene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Isophorone	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Naphthalene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.8
7/11/2005 11:40	51-STA-1	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.8
7/11/2005 11:40	51-STA-1	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.8
7/11/2005 11:40	51-STA-1	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
7/11/2005 11:40	51-STA-1	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
7/11/2005 11:40	51-STA-1	BNA-Water	Phenanthrene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Phenol	0.97	ug/L	U	0.97	3.9
7/11/2005 11:40	51-STA-1	BNA-Water	Pyrene	0.97	ug/L	U	0.97	3.9
7/11/2005 11:55	Blank	BNA-Water	1,2,4-Trichlorobenzene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	1,2-Dichlorobenzene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	1,3-Dichlorobenzene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	1,4-Dichlorobenzene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2,4,6-Trichlorophenol	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2,4-Dichlorophenol	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2,4-Dimethylphenol	56	ug/L	U	56	220
7/11/2005 11:55	Blank	BNA-Water	2,4-Dinitrophenol	17	ug/L	U	17	67
7/11/2005 11:55	Blank	BNA-Water	2,4-Dinitrotoluene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2,6-Dinitrotoluene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2-Chloronaphthalene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2-Chlorophenol	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	2-Methyl-4,6-dinitrophenol	3.4	ug/L	U	3.4	13
7/11/2005 11:55	Blank	BNA-Water	2-Nitrophenol	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	3,3'-Dichlorobenzidine	45	ug/L	U	45	180
7/11/2005 11:55	Blank	BNA-Water	4,4'-DDD	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	4,4'-DDE	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	4,4'-DDT	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	4-Bromophenyl phenyl ether	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	4-Chloro-3-methylphenol	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	4-Chlorophenyl phenyl ether	2.2	ug/L	U	2.2	9
7/11/2005 11:55	Blank	BNA-Water	4-Nitrophenol	17	ug/L	U	17	67

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:55	Blank	BNA-Water	Acenaphthene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Acenaphthylene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Aldrin	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	alpha-BHC	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Anthracene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Benzidine	110	ug/L	U	110	450
7/11/2005 11:55	Blank	BNA-Water	Benzo(a)anthracene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Benzo(a)pyrene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Benzo(b)fluoranthene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Benzo(g,h,i)perylene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Benzo(k)fluoranthene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	beta-BHC	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Bis(2-chloroethoxy)methane	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Bis(2-chloroethyl)ether	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Bis(2-chloroisopropyl)ether	3.4	ug/L	U	3.4	13
7/11/2005 11:55	Blank	BNA-Water	Bis(2-ethylhexyl)phthalate	120	ug/L		17	67
7/11/2005 11:55	Blank	BNA-Water	Butyl benzyl phthalate	5.6	ug/L	U	5.6	22
7/11/2005 11:55	Blank	BNA-Water	Chrysene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	delta-BHC	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Dibenzo(a,h)anthracene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Dieldrin	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Diethyl phthalate	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Dimethyl phthalate	56	ug/L	U	56	220
7/11/2005 11:55	Blank	BNA-Water	Di-n-butyl phthalate	5.6	ug/L	U	5.6	22
7/11/2005 11:55	Blank	BNA-Water	Di-n-octyl phthalate	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Endosulfan I	4.5	ug/L	U	4.5	18
7/11/2005 11:55	Blank	BNA-Water	Endosulfan II	4.5	ug/L	U	4.5	18
7/11/2005 11:55	Blank	BNA-Water	Endosulfan sulfate	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Endrin	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Endrin aldehyde	4.5	ug/L	U	4.5	18
7/11/2005 11:55	Blank	BNA-Water	Fluoranthene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Fluorene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	gamma-BHC	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Heptachlor	1.7	ug/L	U	1.7	6.7

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:55	Blank	BNA-Water	Heptachlor epoxide	1.7	ug/L	U	1.7	6.7
7/11/2005 11:55	Blank	BNA-Water	Hexachlorobenzene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Hexachlorobutadiene	3.4	ug/L	U	3.4	13
7/11/2005 11:55	Blank	BNA-Water	Hexachlorocyclopentadiene	3.4	ug/L	UJ	3.4	13
7/11/2005 11:55	Blank	BNA-Water	Hexachloroethane	3.4	ug/L	U	3.4	13
7/11/2005 11:55	Blank	BNA-Water	Indeno(1,2,3-cd)pyrene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Isophorone	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Naphthalene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Nitrobenzene	2.2	ug/L	U	2.2	9
7/11/2005 11:55	Blank	BNA-Water	N-Nitrosodimethylamine	2.2	ug/L	U	2.2	9
7/11/2005 11:55	Blank	BNA-Water	N-Nitrosodi-n-propylamine	2.2	ug/L	U	2.2	9
7/11/2005 11:55	Blank	BNA-Water	N-Nitrosodiphenylamine	3.4	ug/L	U	3.4	13
7/11/2005 11:55	Blank	BNA-Water	Pentachlorophenol	3.4	ug/L	U	3.4	13
7/11/2005 11:55	Blank	BNA-Water	Phenanthrene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Phenol	1.1	ug/L	U	1.1	4.5
7/11/2005 11:55	Blank	BNA-Water	Pyrene	1.1	ug/L	U	1.1	4.5
7/11/2005 11:40	51-STA-1	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.3
7/11/2005 11:40	51-STA-1	GC-Water	Ametryn	0.049	ug/L	U	0.049	0.2
7/11/2005 11:40	51-STA-1	GC-Water	Atrazine	0.049	ug/L	U	0.049	0.2
7/11/2005 11:40	51-STA-1	GC-Water	Azinphos Methyl	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
7/11/2005 11:40	51-STA-1	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
7/11/2005 11:40	51-STA-1	GC-Water	Chlorpyrifos Ethyl	0.049	ug/L	U	0.049	0.2
7/11/2005 11:40	51-STA-1	GC-Water	Chlorpyrifos Methyl	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Diazinon	0.049	ug/L	U	0.049	0.2
7/11/2005 11:40	51-STA-1	GC-Water	Ethion	0.049	ug/L	U	0.049	0.2
7/11/2005 11:40	51-STA-1	GC-Water	Ethoprop	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
7/11/2005 11:40	51-STA-1	GC-Water	Fonofos	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Hexazinone	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
7/11/2005 11:40	51-STA-1	GC-Water	Metalaxyl	0.24	ug/L	UJ	0.24	0.96
7/11/2005 11:40	51-STA-1	GC-Water	Metolachlor	0.49	ug/L	U	0.49	2
7/11/2005 11:40	51-STA-1	GC-Water	Metribuzin	0.097	ug/L	U	0.097	0.39

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:40	51-STA-1	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
7/11/2005 11:40	51-STA-1	GC-Water	Naled	0.78	ug/L	U	0.78	3.1
7/11/2005 11:40	51-STA-1	GC-Water	Norflurazon	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
7/11/2005 11:40	51-STA-1	GC-Water	Parathion Methyl	0.097	ug/L	U	0.097	0.39
7/11/2005 11:40	51-STA-1	GC-Water	Phorate	0.049	ug/L	U	0.049	0.2
7/11/2005 11:40	51-STA-1	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
7/11/2005 11:40	51-STA-1	GC-Water	Simazine	0.049	ug/L	U	0.049	0.2
7/11/2005 11:55	Blank	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.3
7/11/2005 11:55	Blank	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
7/11/2005 11:55	Blank	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
7/11/2005 11:55	Blank	GC-Water	Azinphos Methyl	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
7/11/2005 11:55	Blank	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
7/11/2005 11:55	Blank	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
7/11/2005 11:55	Blank	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
7/11/2005 11:55	Blank	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
7/11/2005 11:55	Blank	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
7/11/2005 11:55	Blank	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
7/11/2005 11:55	Blank	GC-Water	Metalaxyl	0.24	ug/L	UJ	0.24	0.96
7/11/2005 11:55	Blank	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
7/11/2005 11:55	Blank	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
7/11/2005 11:55	Blank	GC-Water	Naled	0.76	ug/L	U	0.76	3
7/11/2005 11:55	Blank	GC-Water	Norflurazon	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
7/11/2005 11:55	Blank	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
7/11/2005 11:55	Blank	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
7/11/2005 11:55	Blank	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
7/11/2005 11:55	Blank	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:40	51-STA-1	Metals-Water	Aluminum	15	ug/L	I	5	20
7/11/2005 11:40	51-STA-1	Metals-Water	Arsenic	4	ug/L	U	4	16
7/11/2005 11:40	51-STA-1	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
7/11/2005 11:40	51-STA-1	Metals-Water	Calcium	48	mg/L		0.05	0.2
7/11/2005 11:40	51-STA-1	Metals-Water	Chromium	2	ug/L	U	2	8
7/11/2005 11:40	51-STA-1	Metals-Water	Copper	0.5	ug/L	U	0.5	2
7/11/2005 11:40	51-STA-1	Metals-Water	Iron	243	ug/L		10	40
7/11/2005 11:40	51-STA-1	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
7/11/2005 11:40	51-STA-1	Metals-Water	Magnesium	4.4	mg/L		0.01	0.04
7/11/2005 11:40	51-STA-1	Metals-Water	Nickel	2	ug/L	U	2	8
7/11/2005 11:40	51-STA-1	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
7/11/2005 11:40	51-STA-1	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
7/11/2005 11:40	51-STA-1	Metals-Water	Zinc	3	ug/L	U	3	12
7/11/2005 11:55	Blank	Metals-Water	Aluminum	5	ug/L	U	5	20
7/11/2005 11:55	Blank	Metals-Water	Arsenic	4	ug/L	U	4	16
7/11/2005 11:55	Blank	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
7/11/2005 11:55	Blank	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
7/11/2005 11:55	Blank	Metals-Water	Chromium	2	ug/L	U	2	8
7/11/2005 11:55	Blank	Metals-Water	Copper	0.5	ug/L	U	0.5	2
7/11/2005 11:55	Blank	Metals-Water	Iron	10	ug/L	U	10	40
7/11/2005 11:55	Blank	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
7/11/2005 11:55	Blank	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
7/11/2005 11:55	Blank	Metals-Water	Nickel	2	ug/L	U	2	8
7/11/2005 11:55	Blank	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
7/11/2005 11:55	Blank	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
7/11/2005 11:55	Blank	Metals-Water	Zinc	3	ug/L	U	3	12
7/11/2005 11:40	51-STA-1	Nutrients-Liquid	Ammonia-N	0.017	mg N/L	I	0.01	0.02
7/11/2005 11:40	51-STA-1	Nutrients-Liquid	Kjeldahl Nitrogen	1.1	mg N/L		0.06	0.2
7/11/2005 11:40	51-STA-1	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
7/11/2005 11:40	51-STA-1	Nutrients-Liquid	O-Phosphate-P	0.041	mg P/L		0.004	0.01
7/11/2005 11:40	51-STA-1	Nutrients-Liquid	Total-P	0.072	mg P/L		0.02	0.06
7/11/2005 11:55	Blank	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
7/11/2005 11:55	Blank	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
7/11/2005 11:55	Blank	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
7/11/2005 11:55	Blank	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
7/11/2005 11:55	Blank	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06

The Bioassay of Stormwater Treatment Area 5 effluent sampled on July 11, 2005, NPDES #FL0177954.

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 1 7 7 9 5 4 11	12 0 5 0 7 1 1	18 **B**	19 **S**	20 2

Remarks

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The Priority Pollutants Analysis of Stormwater Treatment Area 5 effluent sampled on July 11, 2005, NPDES #FL0177954.

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 1 7 7 9 5 4 11	12 0 5 0 7 1 1	18 **X**	19 **S**	20 2

Remarks

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Biological Analyses of Stormwater Treatment Area 5 effluent sampled on July 11, 2005, NPDES #FL0177954.

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 1 7 7 9 5 4 11	12 0 5 0 7 1 1	18 **S**	19 **S**	20 2

Remarks

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