

Effluent Quality Assessment

Stormwater Treatment Area 3/4

Palm Beach and Broward Counties

NPDES #FL0300195

Sampled March 10, 2008

August 2008

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Stormwater Treatment Area 3/4, Palm Beach and Broward County, Florida, NPDES #FL0300195. Effluent samples for this facility were collected on March 10, 2008.

Introduction

Stormwater Treatment Area 3/4 (STA 3/4) is a facility designed to remove phosphorus from Everglades Agricultural Area runoff through uptake by marsh (aquatic and submerged) vegetation. STA 3/4 is located immediately east of and adjacent to Holey Land Wildlife Management Area, west of the North New River Canal, and immediately north of and adjacent to Water Conservation Area (WCA) 3A. STA 3/4 consists of three parallel treatment paths flowing from north to south that provides an effective treatment area of 6,695 hectares (16,544 acres). STA 3/4 is designed to treat approximately 645,222 acre-feet of runoff annually. The mean flow from March 1, 2007, through February 29, 2008, was less than 200,000 acre-feet. The treatment cells are designed to have an operational depth of between 0.15 m (6 inches) and 1.37 m (4.5 feet) to encourage colonization and continued viability by wetland plants and maximize uptake and removal of phosphorus from water passing through the cells. Long-term storage of the phosphorus is expected to be provided by peat accretion in STA 3/4. The treated water from STA 3/4 is discharged into the L-5 Borrow Canal from the G-376 A-F, G-379 A-E and G-381 A-F structures, and subsequently discharged via the S-7 and S-8 pump stations into the Miami and North New River Canals and ultimately into the Class III freshwaters of the WCA-2A and WCA-3A.

The facility has two Administrative Orders (AO); AO-007-EV and AO-008-EO, which were issued to address dissolved oxygen and total phosphorus concerns. The facility has no mixing zones. A review of Discharge Monitoring Report (DMR) data for the past year did not reveal any violations of permit conditions. (Facility information provided by Patrick Pierson and Terry Davis of FDEP Southeast District, Annet Forkink, Doreen Irwin, Stacey Feken and Kenneth Weaver of FDEP Tallahassee).

Methods

Samples were collected from the EFF-1 NPDES sampling point (located at the G-376B structure) for Outfall D-001 by Terry Davis (FDEP Southeast District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOPs are available on the web at: http://www.floridadep.org/labs/qa/sops.htm.

See Appendix A for the completed chain of custody form.

The 48-hour screening toxicity tests and algal growth potential test were performed following internal DEP SOPs TA07_01, TA07_02, and TA08_01 through TA08_09. All internal DEP SOPs are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

Toxicity Test Results

Tests were performed March 11 - 13, 2008.

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

Cyprinella leedsi 48-hour 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 B for bioassay bench sheets. See Appendix C for results of the last 20 standard reference toxicant (SRT) tests and the bench sheets and statistical analyses of the SRT tests that correspond to these facility tests. See Appendix D for test organism receipts.

*NOTE: In a 48-hour acute screening test of 100% effluent, mortality of <20% provides confidence 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% indicates low to moderate levels of toxicity, and further action may be required. Mortality of >50% indicates 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 0.324 (I)** mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Shultz (1987) found that AGP values above 5.0 mg dry weight/L represent a "problem" threshold for fresh receiving waters, implying nutrient enrichment. The analytical chemistry suggests that the effluent is phosphorus-limited. The predicted AGP based on total phosphorus concentrations was 32.3 (±20%) mg dry wt/L (Table 1; Miller et al. 1978). Differences greater than an order of magnitude between actual and predicted AGP values are considered sufficient evidence to warrant follow up testing with the algal growth inhibition bioassay. True algal growth inhibition can only be determined by performing an actual algal growth inhibition test. Should algal growth inhibition be suspected, the district should request that the algal growth inhibition test be performed as a follow-up to the inspection.

** I – Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

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 0.051 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 dissolved oxygen (DO) concentration (4.2 mg/L) as measured in the field was greater than the single sample site specific alternative criterion for DO (3.84 mg/L) (derived as a function of time of measurement and temperature of sample). This "single point measurement is consistent with a conclusion that the STA 3/4 discharge is in compliance with the SSAC, although we can not conclusively say so without more data". (Kenneth Weaver FDEP Tallahassee).

Arsenic and atrazine were detected in the effluent at levels that comply with Class III fresh water quality criteria (62-302.530, F.A.C.) and (62-302.200, F.A.C.). Ametryn and Simazine were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL). The concentration (0.075 mg/L) of total phosphorus (TP) was less than the TP annual average of 0.1332 mg/L. Orthophosphate was not detected in the sample.

See Table 2 for results of analytes detected in the effluent, and corresponding limits. See Appendix E for a complete list of chemical analyses performed. See Appendix F for laboratory instruments used for bioassay parameters.

Conclusion

The effluent sample collected from the EFF-1 NPDES sampling point for Outfall D-001 for this facility on March 10, 2008, was not acutely toxic to either test species during the 48-hour acute screening bioassays. The effluent AGP result was less than the "problem" threshold for fresh receiving waters. Effluent water quality measurements did not exceed any applicable water quality standards or violate any permit conditions.

Literature Cited

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

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

Table 1. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total phosphorus (TP) limitation of the freshwater species *Pseudokirchneriella subcapitata,* and ratios of nitrogen to phosphorus for samples collected from the Stormwater Treatment Area 3/4 Outfall D-001 on March 10, 2008.

Stormwater Treatment Area 3/4			
Location	AGP (measured)	Predicted AGP (TP) ± 20%	Total N:P ratio
Effluent	0.324 I	32.3 ± 6.5	26.9

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

Table 2. Effluent limits, Class III Freshwater Criteria and chemical data for samples collected from Stormwater Treatment Area 3/4 on March 10, 2008.

Stormwater Treatment Area 3/4 NPDES# FL0300195	Class III Criteria	Effluent Limits	Effluent	
Organic Constituents (µg/L)				
Ametryn	-	-	0.096	I
Atrazine	-	-	1.8	
Simazine	-	-	0.08	I
Metals (µg/L unless otherwise noted)				
Aluminum	-	-	60	U
Arsenic	≤ 50	-	2.2	
Cadmium	≤ 0.7 b	-	0.02	U
Calcium (mg/L)	-	-	90.9	
Chromium-III	≤ 238.9 b	-	1	U
Copper	≤ 27.0 b	-	0.5	U
Iron	≤ 1,000	-	30	U
Lead	≤ 15.5 b	-	0.2	U
Magnesium (mg/L)	-	-	29.2	
Nickel	≤ 149.5 b	-	0.25	U
Selenium	≤ 5.0	-	0.5	U
Silver	≤ 0.07	-	0.025	U
Zinc	≤ 344.0 b	-	5	U
Nutrients (mg/L)				
Ortho-phosphate	-	-	0.004	U
Total Phosphorus	-	-	0.075	
Total Ammonia	-	-	0.051	
Un-ionized Ammonia	≤ 0.02 s	-	≤ 0.02	c
Nitrate and Nitrite	-	-	0.014 F	
Total Kjeldahl Nitrogen	-	-	2	
Organic Nitrogen	-	-	1.949	c
Total Nitrogen	-	-	2.014	c
General Physical and Chemical Parameters				
Dissolved Oxygen (mg/L)	≥ 5.0	3.84 €	4.2	¥
pH (SU)	6.0 - 8.5	6.0 - 8.5 s	6.9	
Conductivity (µmhos/cm)	≤ 1,275	-	920	
Temperature °C	-	-	19.5	
Sample Depth (m)	-	-	0.1	
Chlorophyll a (µg/L)	-	-	1.7	I
Phaeophytin (µg/L)	-	-	0.75	
Total Residual Chlorine (mg/L)	≤ 0.01	-	0.03	U£
Flow (acre-feet year)	-	≤ 645,222 a	< 200,000	a
Hardness (mg $CaCO_3$)	-	-	347.22	c

Value exceeds the Class III Water Quality Criteria or permit limits

a - Annual average

b - Value is calculated based on hardness

c - Value is calculated

s - Single sample

F - Analyte was detected in both sample and field blank

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 method detection limit

£ - Analyses performed in bioassay laboratory

€ - Site specific alternative criterion at time of sampling.

¥ - Measured value is in compliance with permited criteria.

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2008-03-10-42
Everglades STA 3/4

Requester: Jennifer Paris
Field Report Prepared By: Terry L. Davis

Customer: SE-DIST
Project ID: FYI5
PMAS: 1143

Collected By: Terry L Davis
Sampling Agency: SE Dist.
Send Final Report To ~~Todd Brown~~ T Davis

Lab ID *
Location: STA-3/4-G376B
Field ID: 5I-STA-1
Matrix (Include type e.g. Salt, Fresh, etc): water, fresh
Temp (C): 19.53
pH: 6.90
Latitude: o ' "
Longitude: o ' "

Comp: X Grab
Collection (begin) Date: 3/10/08 Time: 1100 Eastern Central
Collection (end) Date: Time: Eastern Central
Bottle Group(s)**: A
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L): 4.6%
Storet Station Number:
Sample Depth: X m .01 / ft
Salinity (PPTh):
Sp Conductance (umho/cm): 920
NPDES Number:
Comments:

Lab ID *
Location: Blank
Field ID: 5I-STA-2
Matrix (Include type e.g. Salt, Fresh, etc): water, d. i.
Temp (C):
pH:
Latitude: o ' "
Longitude: o ' "

Comp: X Grab
Collection (begin) Date: 3/10/08 Time: 1120 Eastern Central
Collection (end) Date: Time: Eastern Central
Bottle Group(s)**: B
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:
Sample Depth: X m .001 / ft
Salinity (PPTh):
Sp Conductance (umho/cm):
NPDES Number:
Comments:

Lab ID *
Location:
Field ID:
Matrix (Include type e.g. Salt, Fresh, etc):
Temp (C):
pH:
Latitude: o ' "
Longitude: o ' "

Comp: Grab
Collection (begin) Date: Time: Eastern Central
Collection (end) Date: Time: Eastern Central
Bottle Group(s)**:
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:
Sample Depth: m / ft
Salinity (PPTh):
Sp Conductance (umho/cm):
NPDES Number:
Comments:

Lab ID *
Location:
Field ID:
Matrix (Include type e.g. Salt, Fresh, etc):
Temp (C):
pH:
Latitude: o ' "
Longitude: o ' "

Comp: Grab
Collection (begin) Date: Time: Eastern Central
Collection (end) Date: Time: Eastern Central
Bottle Group(s)**:
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:
Sample Depth: m / ft
Salinity (PPTh):
Sp Conductance (umho/cm):
NPDES Number:
Comments: 2 bottles rec'd in Tox (J.D) 10:10 3.11.08

Relinquished By:	Date/Time	Shipping Method	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
T Davis	3/11/08 1400	D H L	Tahmotra Ebrahim	03/11/08 8:55				

* Shaded Areas for Lab use only

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

LS/ 3/11/08 10:05am
WBNA 2 samples

FDEP Biology Laboratory - Acute Screen Bioassay Bench Sheets

Facility: Everglades STA-3/4

Address: Stormwater Treatment Area 3/4 (STA-3/4 Project)

City: W. Palm Beach **County:** Palm Beach, Broward

Contact/District: Jerry Davis / SouthEast

NPDES Permit #: FL 0300195

LIMS Job #: TLH-2008-03-11-51 **LIMS Sample #:** 087877

Lims Data Entry: 3-25-08 MF Data Entry Verification: BA 3-25-08

Sample Collection: Date: 3/10/08 Time: 11:00

Hold Time Start: Date: 3/10/08 Time: 11:00

Comments:
Test 1-LC50 = >100%; mortality = ~~100~~ 0% MF
Test 2-LC50 = >100%; mortality = 0% MF 3-31-08

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

Test Type: Screen
(Static) / Static Renewal / Flow-through
Test Duration: (48) 96 Hours.

Test 1 validation: **Test 1:** SOP TA 07_01
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Test 2 validation: **Test 2:** SOP TA 07_02
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Initial sample handling:
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: ____

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)

Light Intensity : 50 - 100 ft. candles
Photoperiod : 16 light 8 dark
Temperature Range °C:
Incubator # 2 min. 25.6 max. 26.4 mean 26.0
Incubator # ____ min. ____ max. ____ mean ____
Room B246 min. 23.8 max. 25.1 mean 24.5

Investigators' Signatures
James Daniel
Bruce Alcott
Marshall Faircloth

Loretta C. Wolfe
REVIEWER

Water Quality Parameters	20% DMW	Moderately Hard Water/ (Well Water)	Salt Water ASW NSW Test 1	Salt Water ASW NSW Test 2	Other:	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl_2 (mg/L):	N/A	N/A	N/A	N/A		—	Not measured		MF
Lab Total Residual Cl_2 (mg/L):	<0.03	<0.03				<0.03	HACH	JD	BA
Alkalinity (mg/L as $CaCO_3$):	87	150				267	HACH	BA	MF
Hardness (mg/L as $CaCO_3$):	84	150				329	HACH	BA	MF
Total Ammonia (mg/L as N):	<0.017	<0.017				<0.017	DENVER	MF	BA
Salinity (ppth):	<1	<1				<1	YSI (Mettler)	JD	BA

V 1.4 9/12/05

[redacted]

Appendix B. (continued)

FDEP Biology Laboratory - Bioassay Survival Bench Sheet

LIMS Sample #: 1087877 **Test #:** 1/2 **SOP#:TA 07** 01 **Test Started:** Date 3/11/08 Time: 12:45
Organism/Batch/Age: C. dubia /10-08/<24 hours **Test Ended:** Date 3/13/08 Time: 11:15
Chamber/Test Volume: 30 / 20 ml **Diluent/ Batch:** DMW / 3/10/08
Food/Batch: YCT 22607 **P.sub** 1-31-08 **Artemia 0hr** — **24hr** — **48hr** — **72hr** — **Artemia Lot#** —
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	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			
Loaded/Verified by: [initials] / JD		Checked by:	[initials]	JD	JD			

m = missing d = dead BR/AR = Before/After Renewal

Comments:

Test Results:
Screening Tests: Report LC50 as >100%, =100%, or <100%.
% mortality in 100% sample: Ø LC50: >100%
If Calculated: 95% CI________ Method________

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

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Appendix B. (continued)

[redacted]

FDEP Biology Laboratory - Bioassay Survival Bench Sheet

LIMS Sample #: 1087877 **Test #:** 2/2 **SOP#:TA 07** 02 **Test Started: Date** 3.11.08 **Time:** 11:00
Organism/Batch/Age: C. dubia / 3.11.08 / 130ays **Test Ended: Date** 3.13.08 **Time:** 11:00
Chamber/Test Volume: 1000 / 500 ml **Diluent/ Batch:** Well H2O / 3.10.08
Food/Batch: YCT — **P.sub** — **Artemia 0hr** 42-08 **24hr** — **48hr** — **72hr** — **Artemia Lot#** 28438425 GR
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	D9	5	5	5			
	B	D10	5	5	5			
	C	D11	5	5	5			
	D	D12	5	5	5			
100%	A	D13	5	5	5			
	B	D14	5	5	5			
	C	D15	5	5	5			
	D	D16	5	5	5			
			SD	SD	SD			

Loaded/Verified by: BB / BH Checked by:
m = missing d = dead BR/AR = Before/After Renewal
Test Results:
Screening Tests: Report LC50 as >100%, =100%, or <100%.
% mortality in 100% sample: 0 LC50: >100%
If Calculated: 95% CI_____ Method_____
Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

Comments:

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FDEP Biology Laboratory - Bioassay Parameter Bench Sheet

LIMS Sample # : 1087877 **Test #:** 1 of 2

TEST SOP #: TA07_01 **Test Species:** (*Ceriodaphnia dubia*) *Cyprinella leedsi* *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:_____

Concentration Ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	M		M			
pH (S.U.)	8.0		8.2			
Temperature °C	24.0		24.7			
Dissolved Oxygen mg/L	7.8		7.9			
Conductivity ~~µmhos~~ mmhos	169		183			
(initials) Measured by:	BA		JD			
(initials) Recorded by:	BA		JD			

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	M		M			
pH (S.U.)	7.6		8.8			
Temperature °C	25.5		24.2			
Dissolved Oxygen mg/L	5.4		7.9			
Conductivity ~~µmhos~~ mmhos	913		1022			
(initials) Measured by:	BA		JD			
(initials) Recorded by:	BA		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:

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FDEP Biology Laboratory - Bioassay Parameter Bench Sheet

LIMS Sample # : 1087877 **Test #:** 2 of 2

TEST SOP #: TA07_02 **Test Species:** *Ceriodaphnia dubia* (*Cyprinella leedsi*) *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:_____

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.)	7.8	8.3	8.3			
Temperature °C	25.3	24.0	24.6			
Dissolved Oxygen mg/L	7.9	7.3	7.4			
Conductivity (µmhos) mmhos	272	279	281			
(initials) Measured by:	JD	JD	JD			
(initials) Recorded by:	JD	JD	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.)	7.7	8.4	8.4			
Temperature °C	25.9	24.1	24.7			
Dissolved Oxygen mg/L	5.5	6.8	7.1			
Conductivity (µmhos) mmhos	923	913	919			
(initials) Measured by:	JD	JD	JD			
(initials) Recorded by:	JD	JD	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:

Appendix C. SRT Bench Sheets and Statistical Analysis

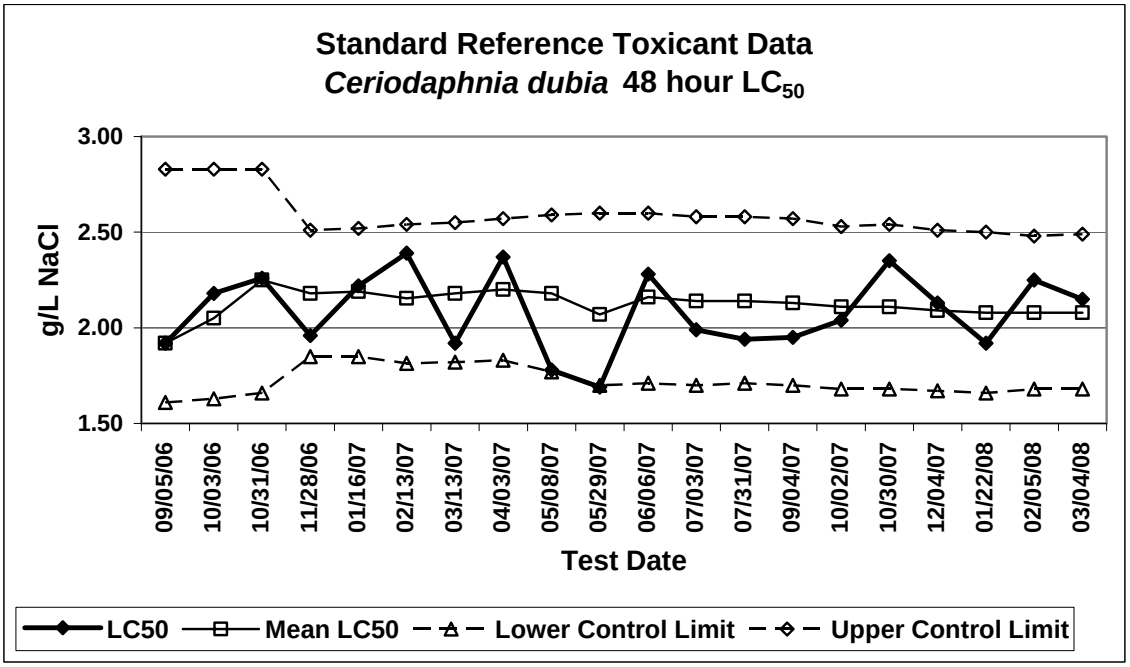
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 48-hour Acute Toxicity
Ceriodaphnia dubia (water flea) - Sodium Chloride (NaCl)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
09/05/06	1.92	1.92	0.30	1.61	2.83
10/03/06	2.18	2.05	0.30	1.63	2.83
10/31/06	2.26	2.25	0.29	1.66	2.83
11/28/06	1.96	2.18	0.17	1.85	2.51
01/16/07	2.22	2.19	0.17	1.85	2.52
02/13/07	2.39	2.16	0.17	1.82	2.54
03/13/07	1.92	2.18	0.18	1.82	2.55
04/03/07	2.37	2.20	0.18	1.83	2.57
05/08/07	1.78	2.18	0.21	1.77	2.59
05/29/07	1.69	2.07	0.23	1.70	2.60
06/06/07	2.28	2.16	0.22	1.71	2.60
07/03/07	1.99	2.14	0.22	1.70	2.58
07/31/07	1.94	2.14	0.22	1.71	2.58
09/04/07	1.95	2.13	0.22	1.70	2.57
10/02/07	2.04	2.11	0.21	1.68	2.53
10/30/07	2.35	2.11	0.21	1.68	2.54
12/04/07	2.13	2.09	0.20	1.67	2.51
01/22/08	1.92	2.08	0.20	1.66	2.50
02/05/08	2.25	2.08	0.20	1.68	2.48
03/04/08	2.15	2.08	0.20	1.68	2.49

Means are of the last 20 SRT tests.
Lower Control Limit = mean - 2 * Std Dev
Upper Control Limit = mean + 2 * Std Dev

CV = 9.66
EPA reference 75th quartile CV = 29%



Appendix C. (continued)

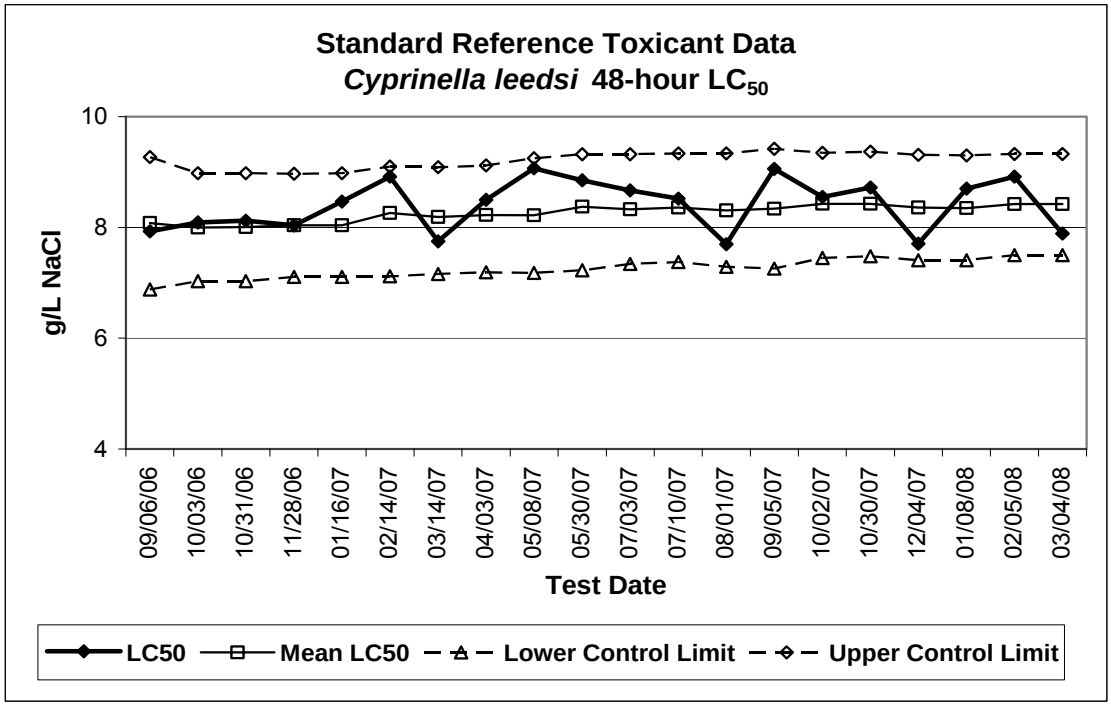
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 48-hour Acute Toxicity
Cyprinella leedsi (bannerfin shiner) - Sodium Chloride (NaCl)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
09/06/06	7.93	8.08	0.60	6.88	9.27
10/03/06	8.09	8.00	0.49	7.03	8.98
10/31/06	8.12	8.01	0.49	7.03	8.98
11/28/06	8.04	8.04	0.46	7.11	8.97
01/16/07	8.47	8.04	0.20	7.11	8.98
02/14/07	8.92	8.26	0.37	7.12	9.10
03/14/07	7.75	8.19	0.39	7.16	9.09
04/03/07	8.50	8.23	0.38	7.19	9.12
05/08/07	9.07	8.22	0.52	7.18	9.25
05/30/07	8.85	8.37	0.46	7.23	9.32
07/03/07	8.67	8.33	0.50	7.34	9.32
07/10/07	8.52	8.36	0.49	7.38	9.34
08/01/07	7.7	8.31	0.51	7.29	9.34
09/05/07	9.06	8.34	0.54	7.26	9.42
10/02/07	8.55	8.43	0.47	7.45	9.35
10/30/07	8.72	8.43	0.47	7.48	9.37
12/04/07	7.71	8.36	0.47	7.41	9.31
01/08/08	8.7	8.35	0.47	7.41	9.30
02/05/08	8.92	8.42	0.46	7.50	9.33
03/04/08	7.89	8.42	0.46	7.50	9.33

Means are of the last 20 SRT tests.
Lower Confidence Limit = mean - 2 * Std Dev
Upper Confidence Limit = mean + 2 * Std Dev

CV = 5.45
EPA reference 75th quartile CV = 19%



Appendix C. (continued)

FDEP Biology Laboratory - Acute SRT Bench Sheet

Method from EPA-821-R-02-012

Test Organism: *Americamysis bahia* Method 2007.0; *Menidia beryllina* Method 2006.0; *Hyalella azteca* Method 100.1 EPA-600-R-99-064; ~~*Ceriodaphnia dubia* Method 2002.0~~; *Cyprinella leedsi* Method 2000.0; *Pimephales promelas* Method 2000.0; Other: _____

Test Type: 48 hour non-renewal / (96) hour renewal

Test Page 1 of 2

Diluent/ Batch #: DMW / 2.25.08

Toxicant/ Batch#: NaCl / 3309

Test Beginning: Date: 3.4.08 Time: 13:50

Test Ending: Date: 3-8-08 Time: 12:15

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	SD
Alkalinity (mg/L as $CaCO_3$):	96	Hach	BA
Hardness (mg.L as $CaCO_3$):	84	Hach	BA
Total Ammonia (mg/L as N):	<0.017	Denver	BA
Salinity (ppth):	21	Mettler	BA

Organism Batch #/ Age: 9-08 / <24hrs

Feeding: Prior to test / Prior to renewal / Daily

Food: (YCT) (P.subcapitata) Artemia: Lot # —

Food Batch: 7-26-07 / 1-31-08 0hr —24hr —48hr —72hr —

Chamber size: 30 mL

Test volume: 20 mL per replicate

Conc. (0) µg/L mg/L	Rep.	Chamber #	Number Live (0 hr) 48 hr	(24 hr) 72 hr	(48 hr) 96 hr	pH (SU) (0 hr) 48 hr	(24 hr) 72 hr	(48 hr) 96 hr	Temperature (°C) (0 hr) 48 hr	(24 hr) 72 hr	(48 hr) 96 hr	D.O. (mg/L) (0 hr) 48 hr	(24 hr) 72 hr	(48 hr) 96 hr	Uncorrected Conductivity µmhos/cm (mmhos/cm) (0 hr) 48 hr	(24 hr) 72 hr	(48 hr) 96 hr
Control	A	A	5	5	5	7.9		8.0	24.0		24.0	7.9		7.3	0.173		0.175
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	5												
1.5	A	A	5	5	5	7.9		7.9	24.0		24.0	7.8		7.3	3.02		3.00
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	5												
2.0	A	A	5	5	3 2D	8.0		7.9	24.0		24.0	7.7		6.7	3.98		3.91
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	4 1D												
~~3.0~~ BA 2.5	A	A	5	3 2D	0 3D	8.0		7.9	24.0		24.0	7.4		7.0	4.85		4.86
	B	B	5	4 1D	0 4D												
	C	C	5	4 1D	0 4D												
	D	D	5	4 1D	0 4D												
3.0	A	A	5	2 3D	0 2D	8.0		8.0	24.0		24.0	7.5		7.0	5.84		5.85
	B	B	5	1 4D	0 1D												
	C	C	5	0 5D	—												
	D	D	5	0 5D	—												
4.0	A	A	5	0 5D	—	8.1	7.9	—	24.0	24.1	—	7.7	7.9	—	7.61	7.66	—
	B	B	5	0 5D	—												
	C	C	5	0 5D	—												
	D	D	5	0 5D	—												
	A																
	B																
	C																
	D																
Loaded / measured by:			BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA
Recorded by:			BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA	BA

Investigators' Signatures

Bruce Atchison

James Davis

Loretta A. Wolfe

REVIEWER

Concentrations prepared by: BA

Loading verified by: SD

Light Intensity: 50-100 Ft. candles

Photoperiod: 16 hours Light / 8 hours dark

Temperature Range °C:

Incubator # 2 min. 25.9 max. 26.6 mean 26.3

Incubator # ___ min. _____ max. _____ mean _____

Room B246 min. 24.2 max. 25.6 mean 24.9

000043

PAGE

Comments:

Statistics: Method: Spearman-Karber

(48)/ 96 hour LC_{50}: 2.15

95% Confidence Interval: lower 2.07 upper 2.24

revised 08/24/06 SP

Appendix C. (continued)

FDEP Biology Laboratory - Acute SRT Bench Sheet

Test Organism: *Americamysis bahia* Method 2007.0; *Menidia beryllina* Method 2006.0; *Hyalella azteca* Method 100.1 EPA-600-R-99-064; **Ceriodaphnia dubia** Method 2002.0; *Cyprinella leedsi* Method 2000.0; *Pimephales promelas* Method 2000.0; Other: _____

Method from EPA-821-R-02-012
Test Type: 48 hour non-renewal / (96) hour renewal
Test Page 2 of 2

Diluent/ Batch #: DMW / 225.08
Toxicant/ Batch#: NaCl / 3209

Test Beginning: Date: 3.4.08 Time: 13:50
Test Ending: Date: 3.8.08 Time: 12:15

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	0.03	Hach	JO
Alkalinity (mg/L as $CaCO_3$):	96	Hach	BA
Hardness (mg.L as $CaCO_3$):	84	Hach	BA
Total Ammonia (mg/L as N):	<0.01	Denver	BA
Salinity (ppth):	<1	Mettler	BA

Organism Batch #/ Age: 9-08 / <24hrs
Feeding: (Prior to test) (Prior to renewal) / Daily
Food: (YCT) (P.subcapitata) Artemia: Lot #_____
Food Batch: 7.24.07 / 1.31.08 0hr — 24hr - 48hr - 72hr -
Chamber size: 30 mL
Test volume: 20 mL per replicate

Conc. (A) µg/L mg/L	Rep.	Chamber #	Number Live 0 hr (48 hr)	24 hr (72 hr)	48 hr (96 hr)	pH (SU) 0 hr (48 hr)	24 hr (72 hr)	48 hr (96 hr)	Temperature (°C) 0 hr (48 hr)	24 hr (72 hr)	48 hr (96 hr)	D.O. (mg/L) 0 hr (48 hr)	24 hr (72 hr)	48 hr (96 hr)	Uncorrected Conductivity µmhos/cm (mmhos/cm) 0 hr (48 hr)	24 hr (72 hr)	48 hr (96 hr)
Control	A	A	5	5	5	7.8		7.8	21.0		24.0	7.7		7.5	0.16		0.174
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	5												
1.5	A	A	5	5	5	7.8		7.8	24.0		24.0	7.6		7.6	2.89		3.1
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	5												
2.0	A	A	3	2 1D	1 1D	7.8		7.9	24.1		24.0	7.4		7.3	3.80		4.1
	B	B	5	3 2D	3												
	C	C	5	4 3D 1D	2 2D												
	D	D	4	3 1D	2 1D												
2.5	A	A	-	-	-	7.9		-	24.1		—	7.3		-	4.71		—
	B	B	-	-	-												
	C	C	-	-	-												
	D	D	-	-	-												
3.0	A	A	-	-	-	—		—	—		—	—		-	—		—
	B	B	-	-	-												
	C	C	-	-	-												
	D	D	-	-	-												
4.0	A	A	-	-	-	—		—	—		—	-		—	—		—
	B	B	-	-	-												
	C	C	-	-	-												
	D	D	-	-	-												
	A																
	B																
	C																
	D																
Loaded / measured by:			BA	BA	BA	BA		BA	BA		BA	BA		BA	BA		BA
Recorded by:			BA	BA	BA	BA		BA	BA		BA	BA		BA	BA		BA

Investigators' Signatures
Bryce Adams
James Beach
Loretta C. Wolfe
REVIEWER

Concentrations prepared by: BA
Loading verified by: JD
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min 25.4 max 26.0 mean 26.3
Incubator # ___ min ___ max ___ mean ___
Room B246 min 24.2 max 25.6 mean 24.9

Comments:

Statistics: BA Method: Spearman-Karber
48 (96) hour LC_{50}: 1.46 1.92
95% Confidence Interval: lower 1.81 upper 2.03

000044

Appendix C. (continued)

FDEP Biology Laboratory - Acute SRT Bench Sheet

Test Organism: *Americamysis bahia* Method 2007.0 | *Menidia beryllina* Method 2006.0 | *Hyalella azteca* Method 100.1 EPA-600-R-99-064
Ceriodaphnia dubia Method 2002.0 | *Cyprinella leedsi* Method 2000.0 | *Pimephales promelas* Method 2000.0 | Other: _____

Method from EPA-821-R-02-012
Test Type: 48 hour non-renewal / (96) hour renewal
Test Page 1 of 2

Diluent/ Batch #: Well / 13308
Toxicant/ Batch#: NaCl / 13208

Test Beginning: Date: 3-4-08 Time: 1115
Test Ending: Date: 3-8-08 Time: 1210

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	20.03	Hach	JD
Alkalinity (mg/L as $CaCO_3$):	148	Hach	BA
Hardness (mg.L as $CaCO_3$):	142	Hach	BA
Total Ammonia (mg/L as N):	20.017	Denver	BA
Salinity (ppth):	<1	Mettler	BA

Organism Batch #/ Age: 34.08 / 13dy
Feeding: Prior to test / Prior to renewal / Daily
Food: YCT *P.subcapitata* Artemia: Lot # 384384 6R
Food Batch: — — 0hr 39-08 24hr — 48hr 42-08 72hr —
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. (%) µg/L mg/L	Rep.	Chamber #	Number Live 0 hr / 24 hr / 48 hr	pH (SU) 0 hr / 24 hr / 48 hr	Temperature (°C) 0 hr / 24 hr / 48 hr	D.O. (mg/L) 0 hr / 24 hr / 48 hr	Uncorrected Conductivity µmhos/cm (mmhos/cm) 0 hr / 24 hr / 48 hr
			48 hr / 72 hr / 96 hr	48 hr / 72 hr / 96 hr	48 hr / 72 hr / 96 hr	48 hr / 72 hr / 96 hr	48 hr / 72 hr / 96 hr
Control	A	B1	10 / 10 / 10	7.8 / / 8.2	24.0 / / 24.3	7.8 / / 6.9	0.279 / / 0.277
	B	B2	10 / 10 / 10	/ 8.1 /	/ 24.1 /	/ 7.1 /	/ 0.285 /
	C						
	D						
6	A	B3	10 / 9(10) / 9	7.8 / / 8.1	24.3 / / 24.7	7.7 / / 6.6	11.3 / / 10.6
	B	B4	10 / 10 / 10	/ 8.0 /	/ 24.4 /	/ 6.6 /	/ 11.0 /
	C						
	D						
7	A	B5	10 / 9(10) / 8(10)	7.8 / / 8.1	24.8 / / 24.6	7.7 / / 6.6	13.4 / / 12.7
	B	B6	10 / 10 / 10	/ 8.0 /	/ 24.6 /	/ 6.6 /	/ 12.9 /
	C						
	D						
8	A	B7	10 / 5(10) / 4(10)	7.8 / / 8.1	25.0 / / 24.6	7.7 / / 6.6	14.9 / / 14.1
	B	B8	10 / 3(10) / 5(10)	/ 8.0 /	/ 24.5 /	/ 6.5 /	/ 14.3 /
	C						
	D						
9	A	B9	10 / 2(10) / 1(10)	7.8 / / 8.1	25.0 / / 24.7	7.6 / / 6.8	16.2 / / 15.6
	B	B10	10 / 2(10) / 1(10)	/ 8.0 /	/ 24.5 /	/ 6.4 /	/ 15.6 /
	C						
	D						
10	A	B11	10 / 0(10) / —	7.8 / / -	25.2 / / -	7.6 / / —	18.2 / / —
	B	B12	10 / 0(10) / —	/ 8.0 /	/ 24.5 /	/ 6.2 /	/ 17.5 /
	C						
	D						
	A						
	B						
	C						
	D						
Loaded / measured by:			JD / JD / JD	BA / JD / JD	BA / JD / JD	BA / JD / JD	BA / JD / JD
Recorded by:			JD / JD / JD	BA / JD / JD	BA / JD / JD	BA / JD / JD	BA / JD / JD

Investigators' Signatures
James Daugh
Bill Adams
Loretta C. Wolfe
REVIEWER

Concentrations prepared by: BA JD
Loading verified by: BA JD
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 25.9 max. 26.6 mean 26.3
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.2 max. 25.6 mean 24.9

Comments:

Statistics: Method: Spearman-Karber
48 / 96 hour LC_{50}: 7.89
95% Confidence Interval: lower 7.57 upper 8.22

PAGE
revised 08/24/06 SP

Appendix C. (continued)

FDEP Biology Laboratory - Acute SRT Bench Sheet

Test Organism: *Americamysis bahia* Method 2007.0 | *Menidia beryllina* Method 2006.0 | *Hyalella azteca* Method 100.1 EPA-600-R-99-064
Ceriodaphnia dubia Method 2002.0 | *Cyprinella leedsi* Method 2000.0 | *Pimephales promelas* Method 2000.0 | Other: _____

Method from EPA-821-R-02-012
Test Type: 48 hour non-renewal / (96) hour renewal
Test Page 2 of 2

Diluent/ Batch #: Well / 3.3.08
Toxicant/ Batch#: NaCl / 3.3.08

Test Beginning: Date: 3.4.08 Time: 1115
Test Ending: Date: 3-8-08 Time: 1200

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	~~6.03~~	Hach	JD
Alkalinity (mg/L as $CaCO_3$):	148	Hach	BA
Hardness (mg.L as $CaCO_3$):	412	Hach	BA
Total Ammonia (mg/L as N):	<0.07	Denver	BA
Salinity (ppth):	21	Mettler	BA

TRC (JD) = <0.05

Organism Batch #/ Age: 34.08 / 13 day(s)
Feeding: Prior to last / Prior to renewal / Daily
Food: YCT *P.subcapitata* Artemia: Lot # 3843946R
Food Batch: _____ _____
Chamber size: 1000 mL
Test volume: 500 mL per replicate

0hr 3-5-08 24hr — 48hr 3-7-08 72hr —

Conc.			Number Live			pH (SU)			Temperature (° C)			D.O. (mg/L)			Uncorrected Conductivity µmhos/cm (mmhos/cm)		
(%) µg/L mg/L	Rep.	Chamber #	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr
			(48) hr	(72) hr	(96) hr	(48) hr	(72) hr	(96) hr	(48) hr	(72) hr	(96) hr	(48) hr	(72) hr	(96) hr	(48) hr	(72) hr	(96) hr
Control	A	B1	10	10	10	8.1		8.0	24.5		24.0	7.4		6.5	0.301		0.291
	B	B2	10	10	10		8.1			24.4			6.2			0.295	
	C																
	D																
6	A	B3	9	9	8 D	8.0		8.0	24.2		24.0	7.0		6.3	10.9		†††
	B	B4	10	9 D	8		8.0			24.4			5.5			12.6	11.4 D
	C																
	D																
7	A	B5	8	7 D	7	8.0		7.9	24.0		24.0	7.0		6.1	12.3		13.2
	B	B6	10	10	10		8.0			24.5			5.8			13.6	
	C																
	D																
8	A	B7	4	3 D	3	8.0		8.0	24.0		24.0	7.2		6.2	14.5		15.0
	B	B8	5	2 D	2		7.9			24.7			5.9			15.3	
	C																
	D																
9	A	B9	1	1	1	8.0		8.0	24.0		24.0	7.3		6.4	15.7		16.3
	B	B10	1	1	1		7.9			24.5			6.0			16.5	
	C																
	D																
10	A	B11	—	—	—	—		—	—		—	—		—	—		—
	B	B12	—	—	—		—			—			—			—	
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			JD	JD	BA	JD	JD	BA	JD	JD	BA	JD	JD	BA	JD	JD	BA
Recorded by:			JD	JD	BA	JD	JD	BA	JD	JD	BA	JD	JD	BA	JD	JD	BA

Investigators' Signatures
James Daniels
Dale Ahl
Loretta C. Wolfe
REVIEWER

Concentrations prepared by: BA/JD
Loading verified by: BA
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 25.9 max. 26.6 mean 26.3
Incubator # ___ min. _____ max. _____ mean _____
Room B246 min. 24.2 max. 25.6 mean 24.9

000046

Comments:

Statistics: Method: Spearman-Karber
48 (96) hour LC_{50}: 7.57
95% Confidence Interval: lower 7.29 upper 7.86

Appendix C. (continued)

***Ceriodaphnia dubia* Acute Standard Reference Toxicant Test**

DATE: 3-4-08 DURATION: 48 hr TOXICANT : NaCl
SPECIES: *Ceriodaphnia dubia*

RAW DATA: Concentration (g/L)	Number Exposed	Mortalities
.00	20	0
1.50	20	0
2.00	20	3
2.50	20	20
3.00	20	20
4.00	20	20

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: **LC50: 2.15**
95% LOWER CONFIDENCE: 2.07
95% UPPER CONFIDENCE: 2.24

***Cyprinella leedsi* Acute Standard Reference Toxicant Test**

DATE: 3-4-08 DURATION: 48 hr TOXICANT : NaCl
SPECIES: *Cyprinella leedsi*

RAW DATA: Concentration (g/L)	Number Exposed	Mortalities
.00	20	0
6.00	20	1
7.00	20	2
8.00	20	11
9.00	20	18
10.00	20	20

SPEARMAN-KARBER TRIM: 5.00%

SPEARMAN-KARBER ESTIMATES: **LC50: 7.89**
95% LOWER CONFIDENCE: 7.57
95% UPPER CONFIDENCE: 8.22

Appendix D. Test Organism Receipt(s)

MBL Aquaculture
4569 Samuel Street
Sarasota, Florida 34233
TEL: (800) 889-0384
FAX: (941) 922-3874
EMAIL: sales@mblaquaculture.com
WEB: www.MBLAquaculture.com

NELAC Accredited

Organism Shipment Record

State of Florida Aquaculture Certificate Number AQ0668007

Date: 3/3/08

Shipped to: FDEP

P.O. No: N/A

Species	Quantity	Age	Brood Number	Temperature	Salinity
Mysidopsis bahia	~~150~~				
Menidia beryllina	150	12 DAYS	SS080220	25°C	20‰
Cyprinella leedsi	150	12 DAYS	CL080220	25°C	
Pimephales promelas	150	6 DAYS	FM080226	25°C	

Packed by: AJ

Shipped Via: FedEx

Notes: _____

Thank you for your order.

Appendix D. Test Organism Receipt(s)

MBL Aquaculture
4569 Samuel Street
Sarasota, Florida 34233
TEL: (800) 889-0384
FAX: (941) 922-3874
EMAIL: sales@mblaquaculture.com
WEB: www.MBLAquaculture.com

NELAC Accredited

Organism Shipment Record

State of Florida Aquaculture Certificate Number AQ0668007

Date: 3/10/08

Shipped to: FDEP

P.O. No: N/A

Species	Quantity	Age	Brood Number	Temperature	Salinity
Mysidopsis bahia	150	4DAYS	MS080306	25°C	20 ‰
Menidia beryllina					
Cyprinella leedsi	100	12days	CL080227	25°C	
Pimephales promelas					

Packed by:

Shipped Via: FedEx

Notes:

Thank you for your order.

Appendix E. Chemical Analyses performed on the effluent from the Stormwater Treatment Area 3/4 Outfall D-001, sampled on March 10, 2008.

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:00	Effluent	AGP/LN	Algal Growth Potential	0.324	I	mg DryWt/L		
3/10/2008 11:00	Effluent	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.75		ug/L	0.24	0.71
3/10/2008 11:00	Effluent	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	1.7	I	ug/L	0.55	1.7
3/10/2008 11:00	Effluent	Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	L	LC50		
3/10/2008 11:00	Effluent	Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	L	LC50		
3/10/2008 11:00	Effluent	Metals	Magnesium	29.2		mg/L	0.04	0.16
3/10/2008 11:00	Effluent	Metals	Calcium	90.9		mg/L	0.075	0.3
3/10/2008 11:00	Effluent	Metals	Arsenic	2.2		ug/L	0.5	2
3/10/2008 11:00	Effluent	Metals	Silver	0.025	U	ug/L	0.025	0.1
3/10/2008 11:00	Effluent	Metals	Iron	30	U	ug/L	30	120
3/10/2008 11:00	Effluent	Metals	Selenium	0.5	U	ug/L	0.5	2
3/10/2008 11:00	Effluent	Metals	Copper	0.5	U	ug/L	0.5	2
3/10/2008 11:00	Effluent	Metals	Zinc	5	U	ug/L	5	20
3/10/2008 11:00	Effluent	Metals	Aluminum	60	U	ug/L	60	240
3/10/2008 11:00	Effluent	Metals	Lead	0.2	U	ug/L	0.2	0.8
3/10/2008 11:00	Effluent	Metals	Cadmium	0.02	U	ug/L	0.02	0.08
3/10/2008 11:00	Effluent	Metals	Chromium	1	U	ug/L	1	4
3/10/2008 11:00	Effluent	Metals	Nickel	0.25	U	ug/L	0.25	1
3/10/2008 11:00	Effluent	Nutrients	Kjeldahl Nitrogen	2		mg N/L	0.08	0.2
3/10/2008 11:00	Effluent	Nutrients	Total-P	0.075		mg P/L	0.02	0.06
3/10/2008 11:00	Effluent	Nutrients	NO2NO3-N	0.014		mg N/L	0.004	0.01
3/10/2008 11:00	Effluent	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
3/10/2008 11:00	Effluent	Nutrients	Ammonia-N	0.051		mg N/L	0.01	0.02
3/10/2008 11:00	Effluent	Pesticides	Diazinon	0.048	U	ug/L	0.048	0.19
3/10/2008 11:00	Effluent	Pesticides	Metribuzin	0.095	U	ug/L	0.095	0.38
3/10/2008 11:00	Effluent	Pesticides	Hexazinone	0.095	U	ug/L	0.095	0.38
3/10/2008 11:00	Effluent	Pesticides	Alachlor	0.57	UJ	ug/L	0.57	2.3
3/10/2008 11:00	Effluent	Pesticides	Ethion	0.048	U	ug/L	0.048	0.19
3/10/2008 11:00	Effluent	Pesticides	Fonofos	0.095	U	ug/L	0.095	0.38
3/10/2008 11:00	Effluent	Pesticides	Fenamiphos	0.19	U	ug/L	0.19	0.76
3/10/2008 11:00	Effluent	Pesticides	Chlorpyrifos Methyl	0.095	U	ug/L	0.095	0.38
3/10/2008 11:00	Effluent	Pesticides	Parathion Methyl	0.095	U	ug/L	0.095	0.38
3/10/2008 11:00	Effluent	Pesticides	Ametryn	0.096	I	ug/L	0.048	0.19

Appendix E. (continued)

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:00	Effluent	Pesticides	Chlorpyrifos Ethyl	0.048	U	ug/L	0.048	0.19
3/10/2008 11:00	Effluent	Pesticides	Simazine	0.08	I	ug/L	0.048	0.19
3/10/2008 11:00	Effluent	Pesticides	Ethoprop	0.095	U	ug/L	0.095	0.38
3/10/2008 11:00	Effluent	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
3/10/2008 11:00	Effluent	Pesticides	Atrazine	1.8		ug/L	0.048	0.19
3/10/2008 11:00	Effluent	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
3/10/2008 11:00	Effluent	Pesticides	Naled	0.76	U	ug/L	0.76	3
3/10/2008 11:00	Effluent	Pesticides	Phorate	0.048	U	ug/L	0.048	0.19
3/10/2008 11:00	Effluent	Pesticides	Metolachlor	0.48	UJ	ug/L	0.48	1.9
3/10/2008 11:00	Effluent	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
3/10/2008 11:00	Effluent	Pesticides	Azinphos Methyl	0.19	U	ug/L	0.19	0.76
3/10/2008 11:00	Effluent	Pesticides	Metalaxyl	0.24	U	ug/L	0.24	0.96
3/10/2008 11:00	Effluent	Pesticides	Prometryn	0.14	U	ug/L	0.14	0.56
3/10/2008 11:00	Effluent	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56
3/10/2008 11:00	Effluent	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
3/10/2008 11:00	Effluent	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2-Chlorophenol	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	3,3'-Dichlorobenzidine	41	UJ	ug/L	41	160
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4,4'-DDE	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Acenaphthene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Acenaphthylene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Benzidine	100	U	ug/L	100	410
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Benzo(k)fluoranthene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Dieldrin	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Dimethyl phthalate	10	U	ug/L	10	41
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Endosulfan sulfate	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Phenol	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Pyrene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	alpha-BHC	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	delta-BHC	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	61
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2,6-Dinitrotoluene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2-Nitrophenol	1	UJ	ug/L	1	4.1

Appendix E. (continued)

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	61
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Butyl benzyl phthalate	5.1	U	ug/L	5.1	20
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Dibenzo(a,h)anthracene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Isophorone	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Phenanthrene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	beta-BHC	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Anthracene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Benzo(a)pyrene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Benzo(b)fluoranthene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Endrin	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Hexachlorobutadiene	3.1	U	ug/L	3.1	12
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2,4-Dichlorophenol	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2-Chloronaphthalene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4-Chloro-3-methylphenol	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Benzo(g,h,i)perylene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.1	U	ug/L	3.1	12
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Chrysene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Di-n-butyl phthalate	5.1	U	ug/L	5.1	20
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Endosulfan I	4.1	U	ug/L	4.1	16
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2,4-Dimethylphenol	10	U	ug/L	10	41
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Benzo(a)anthracene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Di-n-octyl phthalate	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Endrin aldehyde	4.1	U	ug/L	4.1	16
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Fluorene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Hexachlorobenzene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	N-Nitrosodimethylamine	2	U	ug/L	2	8.2
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Naphthalene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4,4'-DDT	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2	U	ug/L	2	8.2
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Bis(2-chloroethyl)ether	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Endosulfan II	4.1	U	ug/L	4.1	16
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.1	U	ug/L	3.1	12
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2	U	ug/L	2	8.2

Appendix E. (continued)

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2,4,6-Trichlorophenol	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1	U	ug/L	3.1	12
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4,4'-DDD	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	15	U	ug/L	15	61
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Diethyl phthalate	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Fluoranthene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Hexachloroethane	3.1	U	ug/L	3.1	12
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Nitrobenzene	2	U	ug/L	2	8.2
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Pentachlorophenol	3.1	U	ug/L	3.1	12
3/10/2008 11:00	Effluent	Priority Organic Pollutants	1,2,4-Trichlorobenzene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	2,4-Dinitrotoluene	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	4-Bromophenyl phenyl ether	1	U	ug/L	1	4.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Aldrin	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Heptachlor	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	Heptachlor epoxide	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Priority Organic Pollutants	gamma-BHC	1.5	U	ug/L	1.5	6.1
3/10/2008 11:00	Effluent	Field Parameter	Specific Conductance	920		umhos/cm		
3/10/2008 11:00	Effluent	Field Parameter	Temperature	19.53		C		
3/10/2008 11:00	Effluent	Field Parameter	pH	6.9				
3/10/2008 11:00	Effluent	Field Parameter	Dissolved Oxygen	4.22		mg/L		
3/10/2008 11:00	Effluent	Field Parameter	Sample Depth	0.1		m		
3/10/2008 11:20	Blank	Metals	Chromium	1	U	ug/L	1	4
3/10/2008 11:20	Blank	Metals	Copper	0.5	U	ug/L	0.5	2
3/10/2008 11:20	Blank	Metals	Zinc	5	U	ug/L	5	20
3/10/2008 11:20	Blank	Metals	Selenium	0.5	U	ug/L	0.5	2
3/10/2008 11:20	Blank	Metals	Arsenic	0.5	U	ug/L	0.5	2
3/10/2008 11:20	Blank	Metals	Calcium	0.075	U	mg/L	0.075	0.3
3/10/2008 11:20	Blank	Metals	Magnesium	0.04	U	mg/L	0.04	0.16
3/10/2008 11:20	Blank	Metals	Cadmium	0.02	U	ug/L	0.02	0.08
3/10/2008 11:20	Blank	Metals	Iron	30	U	ug/L	30	120
3/10/2008 11:20	Blank	Metals	Aluminum	60	U	ug/L	60	240
3/10/2008 11:20	Blank	Metals	Lead	0.2	U	ug/L	0.2	0.8
3/10/2008 11:20	Blank	Metals	Nickel	0.25	U	ug/L	0.25	1
3/10/2008 11:20	Blank	Metals	Silver	0.025	U	ug/L	0.025	0.1

Appendix E. (continued)

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:20	Blank	Nutrients	Kjeldahl Nitrogen	0.08	U	mg N/L	0.08	0.2
3/10/2008 11:20	Blank	Nutrients	Total-P	0.02	U	mg P/L	0.02	0.06
3/10/2008 11:20	Blank	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
3/10/2008 11:20	Blank	Nutrients	NO2NO3-N	0.007	I	mg N/L	0.004	0.01
3/10/2008 11:20	Blank	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
3/10/2008 11:20	Blank	Pesticides	Ethion	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Hexazinone	0.096	U	ug/L	0.096	0.38
3/10/2008 11:20	Blank	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56
3/10/2008 11:20	Blank	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
3/10/2008 11:20	Blank	Pesticides	Fenamiphos	0.19	U	ug/L	0.19	0.76
3/10/2008 11:20	Blank	Pesticides	Metalaxyl	0.24	U	ug/L	0.24	0.96
3/10/2008 11:20	Blank	Pesticides	Phorate	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
3/10/2008 11:20	Blank	Pesticides	Metribuzin	0.096	U	ug/L	0.096	0.38
3/10/2008 11:20	Blank	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
3/10/2008 11:20	Blank	Pesticides	Diazinon	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Chlorpyrifos Ethyl	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Prometryn	0.14	U	ug/L	0.14	0.56
3/10/2008 11:20	Blank	Pesticides	Ethoprop	0.096	U	ug/L	0.096	0.38
3/10/2008 11:20	Blank	Pesticides	Azinphos Methyl	0.19	U	ug/L	0.19	0.76
3/10/2008 11:20	Blank	Pesticides	Atrazine	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Ametryn	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Simazine	0.048	U	ug/L	0.048	0.19
3/10/2008 11:20	Blank	Pesticides	Naled	0.77	U	ug/L	0.77	3.1
3/10/2008 11:20	Blank	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
3/10/2008 11:20	Blank	Pesticides	Parathion Methyl	0.096	U	ug/L	0.096	0.38
3/10/2008 11:20	Blank	Pesticides	Fonofos	0.096	U	ug/L	0.096	0.38
3/10/2008 11:20	Blank	Pesticides	Chlorpyrifos Methyl	0.096	U	ug/L	0.096	0.38
3/10/2008 11:20	Blank	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
3/10/2008 11:20	Blank	Pesticides	Metolachlor	0.48	UJ	ug/L	0.48	1.9
3/10/2008 11:20	Blank	Pesticides	Alachlor	0.58	UJ	ug/L	0.58	2.3
3/10/2008 11:20	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L	14	57
3/10/2008 11:20	Blank	Priority Organic Pollutants	4,4'-DDD	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Dimethyl phthalate	9.5	U	ug/L	9.5	38

Appendix E. (continued)

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:20	Blank	Priority Organic Pollutants	Endosulfan I	3.8	U	ug/L	3.8	15
3/10/2008 11:20	Blank	Priority Organic Pollutants	Fluorene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L	2.9	11
3/10/2008 11:20	Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	11
3/10/2008 11:20	Blank	Priority Organic Pollutants	2-Nitrophenol	0.95	UJ	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L	38	150
3/10/2008 11:20	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.6
3/10/2008 11:20	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Dieldrin	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Endrin	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Heptachlor	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.6
3/10/2008 11:20	Blank	Priority Organic Pollutants	Naphthalene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Phenanthrene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	beta-BHC	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	delta-BHC	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L	14	57
3/10/2008 11:20	Blank	Priority Organic Pollutants	Chrysene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	11
3/10/2008 11:20	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	2-Chlorophenol	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L	14	57
3/10/2008 11:20	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Endrin aldehyde	3.8	U	ug/L	3.8	15
3/10/2008 11:20	Blank	Priority Organic Pollutants	Phenol	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Diethyl phthalate	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Heptachlor epoxide	1.4	U	ug/L	1.4	5.7

Appendix E. (continued)

Date Sampled	Field ID	Analysis	Component	Result	Remark	Units	MDL	PQL
3/10/2008 11:20	Blank	Priority Organic Pollutants	Hexachlorobenzene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	11
3/10/2008 11:20	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	gamma-BHC	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	9.5	U	ug/L	9.5	38
3/10/2008 11:20	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	4,4'-DDE	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Aldrin	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L	2.9	11
3/10/2008 11:20	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	4.8	U	ug/L	4.8	19
3/10/2008 11:20	Blank	Priority Organic Pollutants	Endosulfan sulfate	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Isophorone	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Acenaphthene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	4.8	U	ug/L	4.8	19
3/10/2008 11:20	Blank	Priority Organic Pollutants	Endosulfan II	3.8	U	ug/L	3.8	15
3/10/2008 11:20	Blank	Priority Organic Pollutants	Fluoranthene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.6
3/10/2008 11:20	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	4,4'-DDT	1.4	U	ug/L	1.4	5.7
3/10/2008 11:20	Blank	Priority Organic Pollutants	Acenaphthylene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Anthracene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Benzidine	95	U	ug/L	95	380
3/10/2008 11:20	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.6
3/10/2008 11:20	Blank	Priority Organic Pollutants	Pentachlorophenol	2.9	U	ug/L	2.9	11
3/10/2008 11:20	Blank	Priority Organic Pollutants	Pyrene	0.95	U	ug/L	0.95	3.8
3/10/2008 11:20	Blank	Priority Organic Pollutants	alpha-BHC	1.4	U	ug/L	1.4	5.7

Appendix F. Bioassay Laboratory Instrument ID

Facility ID: Everglades STA 3/4 Test Dates: March 11 -13, 2008

METER / DEVICE	ID	SOP	Parameter	Method	√ used
YSI Model 58 Dissolved Oxygen Meter	90H018262	TA06_04	Dissolved Oxygen	SM 4500 O G	√
Accumet AR-10 pH Meter	93312105	TA06_23	pH	SM 4500 H^+	√
Mettler-Toledo SevenMulti Conductivity Meter	SN 1225117049 Probe H04257	TA06_25	Conductivity Salinity	SM 2510 B SM 2520 B	√
Denver Model 225 ISE with ammonia probe	SN K01377	TA06_17	Ammonia	SM 4500 NH3 F	√
Thermometer (DO probe)	YSI 5750 SN 05J1720	TA06_05	Temperature	SM-2530B modified DEP SOP-001/01 FT1400	√
Hach Pocket Colorimeter II	05050C026378	TA06_22	Total Residual Chlorine	EPA 330.5 SM 4500 CL G	√
Alkalinity (Hach Kit)	No SN	TA06_08	Alkalinity	SM 2320 B	√
Hardness (Hach Kit)	No SN	TA06_09	Hardness	SM 2340 C	√
OHAUS Balance 250D	1125481084	TA06_21 TA06_27	Weight	-	
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	

SM-2530B modified to allow use electronic and non-mercury filled thermometers.
Insert other device information in blank spaces(if used). Test ID = Facility or SRTs (acute SRT--Chronic SRT)

V 1.1 6/12/08 MF

The Bioassay of Stormwater Treatment Area 3/4 effluent sampled on March 10, 2008. NPDES #FL0300195.

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 3 0 0 1 9 5 11	12 0 8 0 3 1 0	18 B	19 S	20 2

Remarks

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The Priority Pollutants Analysis of Stormwater Treatment Area 3/4 effluent sampled on March 10, 2008. NPDES #FL0300195.

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 3 0 0 1 9 5 11	12 0 8 0 3 1 0	18 X	19 S	20 2

Remarks

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Biological Analyses of Stormwater Treatment Area 3/4 effluent sampled on March 10, 2008. NPDES #FL0300195.

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 3 0 0 1 9 5 11	12 0 8 0 3 1 0	18 S	19 S	20 2

Remarks

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