

Effluent Quality Assessment

Siesta Keys Utilities Authority WWTP

Sarasota County

NPDES #FL0025755

Sampled April 23, 2007

August 2007

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Siesta Key Utilities Authority WWTP, 5200 Oakmont Place, Sarasota, Sarasota County, Florida 34242. NPDES #FL0025755. Effluent grab samples for this facility were collected on April 23, 2007. Flow-proportioned composite samples for chemical analyses were collected April 23-24, 2007.

Introduction

Siesta Key Utilities Authority WWTP is a Type I conventional contact-stabilization advanced domestic wastewater treatment plant. The facility has a design flow of 2.7 million gallons per day (MGD) annual average daily flow (AADF). The AADF from May 1, 2006, through April 30, 2007, was 1.18 MGD. The facility consists of a headworks with two Parshall flumes, a mechanically cleaned bar screen, a backup manually cleaned screen, two de-gritting chambers, a flow equalization basin, a biological process system with a contact tank, a single re-aeration basin, dual clarifiers, a nitrification tank, a holding basin, three de-nitrification towers, an intermediate reactor clarifier, two rotating disk filters, a chlorine contact chamber and a de-chlorination system. Liquid hypochlorite is used for disinfection. Sulfur dioxide is used for dechlorination.

Phosphorous removal is accomplished by addition of sodium aluminate into the biological process. Methanol is used in the denitrification process. Filter backwash is returned through a mudwell to the head of the plant. An enclosed air scrubber system removes objectionable odors from the equalization basin, the headworks, the contact and the re-aeration basins. Effluent is used on-site for plant washdown and casual site irrigation. Residuals are further processed on site and then removed and disposed of by land application or are transported to a permitted Residuals Management Facility for further treatment.

Treated effluent is discharged through Outfall D001 to the Class III marine waters of Grand Canal thence to Roberts Bay. Outfall D001 consists of a 0.61 m (2 feet) diameter reinforced concrete pipe discharging through the seawall at a depth of approximately 0.91 m (3 feet). Outfall D001 is located approximately at latitude 27º 16’ 32” N, longitude 82º 33” 06” W.

There are no Administrative Orders or Consent Orders for this facility. The facility has no mixing zone. A review of Discharge Monitoring Report data for the past year revealed a permit violation for total nitrogen (value 6.1 mg/L, limit 6 mg/L single sample) in December 2006, and two total chlorine residual (as a measure of disinfection) excursions, one in July 2006 and one in January 2007. The facility has passed all toxicity tests since October 2004. There are no declining trends in effluent quality. (Facility information provided by Lori Pillsbury and Michele Duggan of FDEP Southwest District.)

Methods

Samples were collected from the EFD-01 NPDES sampling point (sample box, prior to pipe leading to outfall) for Outfall D001 by Chris Anastasiou, Peter Wenner, and Michele Duggan (FDEP Southwest District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. A grab sample was collected on April 23, 2007, and a 24-hour flow-proportioned composite sample was collected April 23-24, 2007. 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 acute screening toxicity tests and algal growth potential test were performed following internal DEP SOPs TA07_03, TA07_04, 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. While the 48-hour acute screening toxicity test does not reflect the permit required conditions, the Department uses it to provide reasonable assurance that the facility does not adversely affect waters of the state.

An aliquot of the bioassay sample was salinity-adjusted from an apparent salinity of approximately 1.1 parts per thousand (ppth) to a salinity of approximately 8 ppth using 40 Fathoms® artificial sea salts for the *Americamysis bahia* test, per permit conditions. The salinity of the bioassay sample was not adjusted for the *Menidia beryllina* test. The salt control used for the *A. bahia* tests was prepared by diluting 20 ppth artificial seawater (ASW) with well water to a salinity of approximately 1 ppth then salting this solution with artificial sea salts to match the salinity of the test solution (approximately 8 ppth). The purpose of the salt control was to confirm that there was no effect of adding artificial sea salts to the sample. There was no mortality in the salt controls of the *Americamysis bahia* test.

The AGP test was salinity-adjusted to meet the minimum salinity requirement of the marine test species.

Toxicity Test Results

Tests were performed April 24-26, 2007.

Americamysis bahia 48-hour acute screening bioassay –	LC_{50} > 100%, 0% mortality* in 100% sample at 48 hours
Menidia beryllina 48-hour acute screening bioassay –	LC_{50} > 100%, 5% mortality* in 100% sample at 48 hours

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

See Appendix 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 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% 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) of the saltwater species *Dunaliella tertiolecta* was less than the Method Detection Limit of 3.0 mg dry wt/L. Raschke and Shultz found that AGP values above 10.0 mg dry weight/L represent a "problem" threshold for marine receiving waters, implying nutrient enrichment (personal communication with Ron Raschke USEPA Region 4, 1987). The analytical chemistry suggests that the effluent is nitrogen-limited (Table 1; Maloney et al. 1975).

See Table 1 for AGP results

Chemistry Results

The total residual chlorine (TRC) detected in the effluent grab sample (0.38 mg/L) and in the effluent composite sample (0.03 mg/L) in the field exceeded both the Class III marine criterion (≤ 0.01 mg/L; 62-302.530(18), F.A.C.) and the permit limit (≤ 0.01 mg/L). TRC and total ammonia were not detected in the bioassay sample in the laboratory. The total ammonia concentrations in the effluent samples collected and preserved for chemical analysis were 0.57 mg/L and 0.047 mg/L in the grab and composite samples, respectively. Based on the pH, salinity, and

temperature of the effluent as collected, the calculated unionized ammonia concentration was less than 0.02 mg/L for both the grab and composite samples.

Aluminum, bromodichloromethane, bromoform, chloroform, iron, and zinc were detected in the effluent grab sample collected on April 23, 2007, at levels that comply with Class III marine water quality criteria (62-302.530, F.A.C.). Arsenic, copper, and nickel were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL). Effluent dibromochloromethane (44 µg/L) exceeded the water quality marine criterion of ≤ 34 µg/L (62-302.530(35)(b)(2), F.A.C.). Copper was detected in the equipment blank for the effluent grab samples.

In the effluent flow-proportioned composite sample collected on April 24, 2007, copper, iron, and zinc were detected at levels that comply with Class III marine water quality criteria (62-302.530, F.A.C.). Aluminum and arsenic were detected between the MDL and PQL. Lead and nickel were detected in the equipment blank for the composite 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.

Conclusion

The effluent sample collected from the EFD-01 NPDES sampling point for Outfall D-001 for this facility on April 23, 2007, 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 marine receiving waters. Effluent dibromochloromethane exceeded Class III marine water quality criteria. Effluent total residual chlorine exceeded both the Class III marine criteria and the facility's permit limit.

Literature Cited

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

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. The AGP (salinity adjusted) of the saltwater species Dunaliella tertiolecta, and ratios of nitrogen to phosphorus for samples collected from Siesta Key Wastewater Treatment Plant on April 23, 2007.

Location	AGP (salinity adjusted)		Inorganic N:P ratio	Total N:P ratio
Effluent D-001	3.0	U	0.9	3.2

U - Material was analyzed for but not detected. The value reported is the minimum detection limit.

Table 1. Effluent limits, Class III Criteria for predominantly marine waters, and chemical and microbiological data for samples collected from the Siesta Key Wastewater Treatment Plant on April 23 and 24, 2007.

Siesta Key Wastewater Treatment Plant NPDES# FL0025755	**Class III Marine Stds**	**Effluent Limits***	**Effluent Grab Samples 4/23/07**	**Effluent Composite Samples 4/24/07**
Organic Constituents (µg/L)				
Atrazine	-	Report	0.05 UJ	-
Bromodichloromethane	≤ 22 a	-	18	-
Bromoform	≤ 360 a	-	33 J	-
Chloroform	≤ 470.8 a	-	7	-
Dibromochloromethane	≤ 34 a	Report p	44	-
Metals (µg/L unless otherwise noted)				
Aluminum	≤ 1500	-	38	36 I
Arsenic	≤ 50	-	0.75 I	0.79 I
Cadmium	≤ 8.8	-	0.03 U	3.42 U
Calcium (mg/L)	-	-	84.1 f	82.4 f
Chromium-III	-	-	1.2 U	1 U
Copper	≤ 3.7	Report p	0.66 If	6.14
Iron	≤ 300	≤ 300 sp	26	22
Lead	≤ 8.5	-	0.2 U	0.2 Uf
Magnesium (mg/L)	-	-	50.4	49.1 f
Nickel	≤ 8.3	-	1.2 I	1.14 f
Selenium	≤ 71	-	0.5 U	0.5 U
Silver	≤ 2.3	-	0.025 U	0.025 U
Zinc	≤ 86	-	28	27
Nutrients (mg/L)				
Ortho-phosphate	-	-	0.26	-
Total Phosphorus	-	≤ 2.0 sp	0.36	0.4
Total Ammonia	-	-	0.057	0.047
Un-ionized Ammonia	-	-	< 0.02 c	< 0.02 c
Nitrate and Nitrite	-	-	0.18	0.39
Total Kjeldahl Nitrogen	-	-	0.98	0.99 Q
Organic Nitrogen	-	-	0.923 c	0.943 c
Total Nitrogen	-	≤ 6.0 sp	1.16 c	1.38 c
General Physical and Chemical Parameters				
Dissolved Oxygen (mg/L)	≥ 4.0	≥ 5.0	7.8	-
pH (SU)	6.5 - 8.5	6.5 - 8.5 s	7.3	-
Conductivity (µmhos/cm)	-	-	2,147	-
Temperature °C	-	-	26.2	-
Salinity (ppth)	-	-	1.09	-
Total Residual Chlorine (mg/L)	≤ 0.01	≤ 0.01 s	0.38	0.03
Total Suspended Solids (mg/L)	-	≤ 10 sp	4 U	4 U
Turbidity (NTU)	≤ 29 t	-	0.7	-
Color (pt-Co)	-	-	10	-
CBOD, 5 day (mg/L), N - inhibited	-	≤ 10 sp	1.2 I	1.4 IQ
Oils and Greases (mg/L)	≤ 5.0	-	2.5 If	-
Flow (MGD)	-	2.7 a	1.24 a	-
Hardness (mg $CaCO_3$)	-	-	417.54 c	407.95 c
Microbiology (Number of counts/100ml)				
Fecal Coliforms	800 s	≤ 25 s	1	-

Value exceeds the Class III Water Quality Criteria or permit limits

a - Annual average
c - Value is calculated
f - Analyte was detected in both sample and eqiupmwnt blank
p - Limit is for a flow proportional composite sample
s - Single sample
t - Shall not exceed 29 NTUs above background
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
Q - Sample held beyond normal holding time
U - Material analyzed for but not detected; value reported is the method detection limit
* - Limits are for grab samples unless otherwise noted

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2007-04-23-25
Siesta Key Utilities Authority

Event ID *

Requester: Shannan Bogdanov

Field Report Prepared By: C. ANASTASIOU

Customer: SW-DIST

Collected By: C. ANASTASIOU P WENNER M. DUGGAN

Send Final Report To: Tom Gucciardo

Project ID: FYI3

Sampling Agency: FDEP SW. DIST

PMAS: 1153

Lab ID *	Location	Collection (begin) Eastern	Collection (end) Eastern	Bottle Group(s)**
	SIESTA KEY UTILITIES D0001	☐ Comp ☒ Grab Date 4/23/07 Time 1000 Central	Date Time Central	A
	Field ID: 35035	Tot Res Chlorine (mg/L): 0.38	Diss Oxygen (mg/L): 7.82	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc): FRESH	Temp (C): 26.19 pH: 7.25	Sample Depth ☐ m ☐ ft: N/A	1,09 / 2147 ☒ Salinity (PPTh) ☒ Sp Conductance (umho/cm)
	Latitude: 27° 16' 34.2"	Longitude: 82° 33' 05.9"	Comments	NPDES Number

Lab ID *	Location	Collection (begin) Eastern	Collection (end) Eastern	Bottle Group(s)**
	EQUIPMENT BLANK	☐ Comp ☒ Grab Date 4/23/07 Time 1100 Central	Date Time Central	C
	Field ID: 35036	Tot Res Chlorine (mg/L): N/A	Diss Oxygen (mg/L): N/A	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc): FRESH	Temp (C): N/A pH: N/A	Sample Depth ☐ m ☐ ft: N/A	N/A ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
	Latitude: o ' "	Longitude: o ' "	Comments	NPDES Number

Lab ID *	Location	Collection (begin) Eastern	Collection (end) Eastern	Bottle Group(s)**
	EQUIPMENT BLANK	☐ Comp ☒ Grab Date 4/24/07 Time 0310 Central	Date Time Central	B
	Field ID: 35037	Tot Res Chlorine (mg/L): N/A	Diss Oxygen (mg/L): N/A	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc): FRESH	Temp (C): pH:	Sample Depth ☐ m ☐ ft: N/A	N/A ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
	Latitude: o ' "	Longitude: o ' "	Comments	NPDES Number

Lab ID *	Location	Collection (begin) Eastern	Collection (end) Eastern	Bottle Group(s)**
		☐ Comp ☐ Grab Date Time Central	Date Time Central	
	Field ID	Tot Res Chlorine (mg/L):	Diss Oxygen (mg/L):	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc):	Temp (C): pH:	Sample Depth ☐ m ☐ ft:	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
	Latitude: o ' "	Longitude: o ' "	Comments: 2 Reassay 11:24 4/24/07 S.B.	NPDES Number

Relinquished By:	Date/Time	Shipping Method	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
C. Anastasiou	4/23/07 1130	DHL	Tom.G	04/24/07 9:24				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2007-04-23-25
Siesta Key Utilities Authority

Event ID *

Requester: Shannan Bogdanov
Field Report Prepared By: Michele Duggan
Collected By: Michele Duggan
Send Final Report To Tom Gucciardo
Sampling Agency: FDEP

Customer: SW-DIST
Project ID: FYI3
PMAS: 1153

Lab ID *	Location EFD-01	X Comp ☐ Grab	Collection (begin) Date 04/23/07 Time 1015	Eastern Central	Collection (end) Date 04/24/07 Time 1015	Eastern Central	Bottle Group(s)**		
	Field ID 35057	Tot Res Chlorine (mg/L) 0.03 mg/L	Diss Oxygen (mg/L) –		Storet Station Number				
	Matrix (Include type e.g. Salt, Fresh, etc) FRESH (EFFLUENT)	Temp (C)	pH	Sample Depth ☐ m ☐ ft –	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	13		
	Latitude o ' "	Longitude o ' "		Comments					
Lab ID *	Location	☐ Comp ☐ Grab	Collection (begin) Date Time	Eastern Central	Collection (end) Date Time	Eastern Central	Bottle Group(s)**		
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)		Storet Station Number				
	Matrix (Include type e.g. Salt, Fresh, etc	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number			
	Latitude o ' "	Longitude o ' "		Comments					
Lab ID *	Location	☐ Comp ☐ Grab	Collection (begin) Date Time	Eastern Central	Collection (end) Date Time	Eastern Central	Bottle Group(s)**		
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)		Storet Station Number				
	Matrix (Include type e.g. Salt, Fresh, etc	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number			
	Latitude o ' "	Longitude o ' "		Comments					
Lab ID *	Location	☐ Comp ☐ Grab	Collection (begin) Date Time	Eastern Central	Collection (end) Date Time	Eastern Central	Bottle Group(s)**		
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)		Storet Station Number				
	Matrix (Include type e.g. Salt, Fresh, etc	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number			
	Latitude o ' "	Longitude o ' "		Comments					

Relinquished By:	Date/Time	Shipping Method	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
M. Duggan	04/24/07 1400	DHL						4-25-07 9:15 am

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

FDEP Biology Section - Acute Screen Bioassay Bench Sheets

Facility: SIESTA KEY UTILITIES AUTHORITY WWTP

Address: 5200 OAKMONT PLACE

City: SARASOTA County: SARASOTA

Contact/District: LORI DILLSBURY / SWD (SOUTHWEST)

NPDES Permit #: FL 0025755

LIMS Job #: TLH-2007-04-24-64-01 LIMS Sample #: 1003350

Lims Data Entry: MF 5/7/07 Data Entry Verification: 5.8.07

Sample Collection: Date: 4/23/07 Time: 1000

Hold Time Start: Date: 4/23/07 Time: 1000

Comments: Sample salinity adjusted from a salinity of approximately 1.1 ppth (parts per thousand) to ~ 8.0 ppth by the addition of artificial seasalts for the Americamysis bahia test, the sample salinity was not adjusted for the menidia beryllina test. A salted control was prepared by adding artificial seasalts to 1 ppth ASW (20 ppth ASW diluted 1:1 well water to 1 ppth) to match the salinity of the salted sample. MF 4-26-07

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.
Light Intensity : 50 - 100 ft. candles.
Photoperiod : 16 hours light 8 hours dark.

Test 1 validation: Test 1: SOP TA 07-~~03~~04 PP 4/24/07
Control survival ≥90%: Yes No
Temperature Range ≤3°C: Yes No

Test 2 validation: Test 2: SOP TA 07-~~04~~03 PP 4/24/07
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 - menidia test #1

Salinity adjusted (Test 2): yes no Initial Salinity: ~1.1 Final Salinity: ~ 8.0 Salts Hypersaline brine mysid test #2

Dechlorination: yes no ____mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC: ____

Temperature Range °C
Incubator #"2 Range 25.6-25.9
Room B246: 23.1-24.3
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

Patsy Vichaikul

James Daniels

Bud Jamison

Marshall Faircloth

Nicki Wellendorf

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		0.38	Hach	M Duggan	MF
Lab Total Residual Cl_2 (mg/L):			<0.03			<0.03	HACH	BA	MF
Alkalinity (mg/L as $CaCO_3$):			205			177	HACH	PPV	MF
Hardness (mg/L as $CaCO_3$):			—			—	HACH	PPV	—
Total Ammonia (mg/L as N):			<0.034			<0.017	DENVER	BA / MF	MF
Salinity (ppth):			~1.1			~1.1	YSI / Mettler	TD	MF

V 1.4 9/12/05

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Appendix B. (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 1003350
Test #: 1
Test Started: Date 4/24/07 Time: 13:45
Organism: M. BERYLLINA
SOP #: TA 07_04
Test Ended: Date 4/26/07 Time: 11:00
Organism Batch: 4-24-07
Diluent/ Batch: ASW / 4-5-07
Organism Age: ~~5~~ 13 DAYS
Food: YCT | *P. subcapitata* | *Artemia*
Chamber Size: 1000 mL
Batch: — | — | 651-536-40 55-07
Test Volume: 500 mL
Feeding: (Prior to test), Prior to renewal, Daily

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	Ⓐ ~~A1~~ A	~~5~~ A1	S	5	5			
	~~A2~~ B	~~5~~ A2	S	5	5			
	~~A3~~ C	~~5~~ A3	S	5	5			
	~~A4~~ D	~~5~~ A4	S	5	5			
100%	~~A5~~ A	A5	S	5	5			
	~~A6~~ B	A6	S	5	5			
	~~A7~~ C	A7	S	5	4/D			
	~~A8~~ D	A8	S	5	5			
Organisms loaded by: BA		Checked by:		JD	JD			

Loading Verified by: PFV

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

Comments:
Ⓐ TRANSCRIPTION ERRORS FOR REPLICATE & CHAMBER NUMBER AS WELL AS ORGANISM AGE. PFV 4/24/07

Test Results:
% mortality in 100% sample: 5%
LC_{50}: >100% If Calculated: 95% CI__________ Method:__________

Screening Tests:
Report LC50 as >100%, =100%, or <100%.
Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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Appendix B. (continued)

[redacted]

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 1003350 Test #: 2 Test Started: Date 4/24/07 Time: 1330
Organism: A. BAHIA SOP #: TA 07_03 Test Ended: Date 4.26.07 Time: 1100
Organism Batch: 4-24-07 Diluent/ Batch: ASW 14-S-07
Organism Age: 5 DAYS Food: YCT *P. subcapitata* *Artemia*
Chamber Size: 1000 mL Batch: — — ES 53609 5507, 5607
Test Volume: 500 mL Feeding: Prior to test - Prior to renewal (Daily)

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	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			
SALT CTRL	A	D9	5	5	5			
	B	D10	5	5	5			
	C	D11	5	5	5			
	D	D12	5	5	5			
Organisms loaded by: JD	Checked by: [redacted]		JD	JD				
Loading Verified by: DA								

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

Comments:

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).

V 2.1 11/01/2005

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FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 1003350 **Test #:** 1 of 2

TEST SOP #: TA07_04 **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.)	8.5	7.0	7.5			
Temperature °C	24.2	24.9	24.8			
Dissolved Oxygen mg/L	7.4	6.7	6.7			
Conductivity µmhos (mmhos)	2.2	2.7	2.4			
(initials) Measured by:	~~PPV~~	JJ	JJ			
(initials) Recorded by:	~~PPV~~	JJ	JJ			

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	8.1	8.3			
Temperature °C	24.7	25.0	25.0			
Dissolved Oxygen mg/L	7.7	6.5	6.7			
Conductivity µmhos (mmhos)	2.2	2.5	2.7			
(initials) Measured by:	~~PPV~~	JJ	JJ			
(initials) Recorded by:	~~PPV~~	JJ	JJ			

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:

000039

V 2.0 2/24/04

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 1003350 **Test #:** 2 of 2

TEST SOP #: TA07_03 **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.)	8.5	7.9	7.6			
Temperature °C	24.0	24.7	24.4			
Dissolved Oxygen mg/L	6.3	5.6	5.1			
Conductivity µmhos (mmhos)	13.68	13.8	14.3			
(initials) Measured by:	~~PRV~~	JJ	JJ			
(initials) Recorded by:	~~PRV~~	JJ	JJ			

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.)	8.0	8.0	8.0			
Temperature °C	24.7	24.7	24.5			
Dissolved Oxygen mg/L	6.4	4.8	4.8			
Conductivity µmhos (mmhos)	13.9	13.9	14.5			
(initials) Measured by:	~~PRV~~	JJ	JJ			
(initials) Recorded by:	~~PRV~~	JJ	JJ			

Comments:

Concentration SLT CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	9.1	8.0	7.4			
Temperature °C	24.3	24.6	24.7			
Dissolved Oxygen mg/L	6.4	4.8	5.1			
Conductivity µmhos (mmhos)	13.9	14.1	14.6			
(initials) Measured by:	~~PRV~~	JJ	JJ			
(initials) Recorded by:	~~PRV~~	JJ	JJ			

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

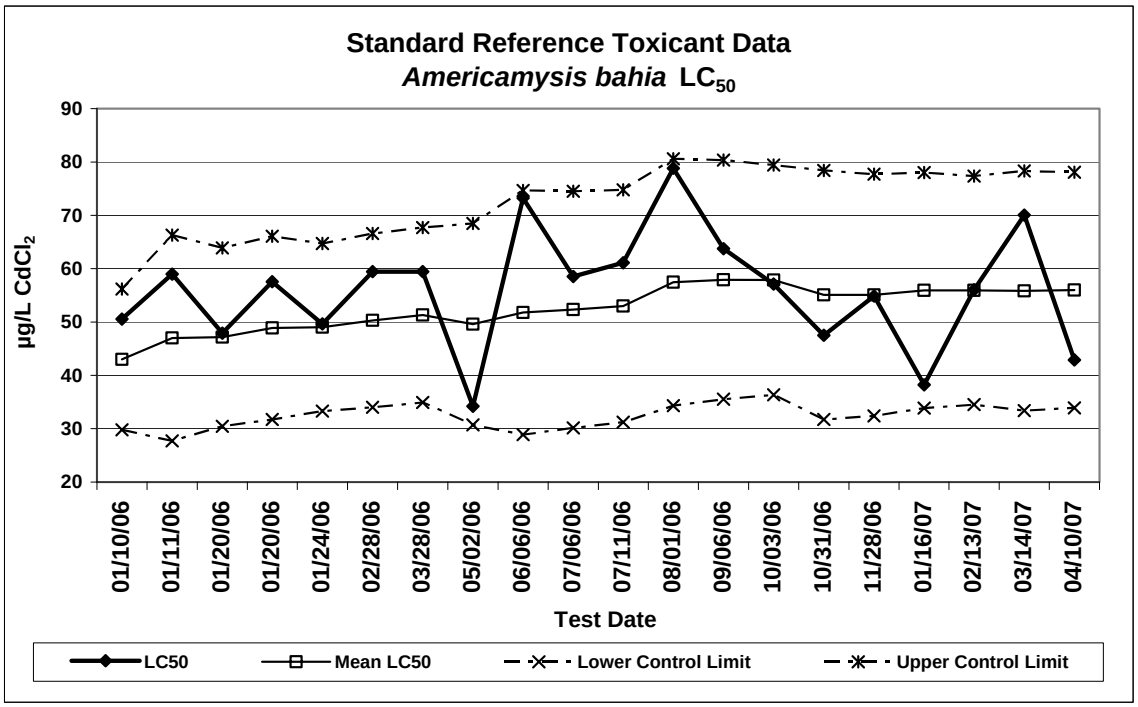
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 48-hour Acute Toxicity
Americamysis bahia (mysid shrimp) - Cadmium Chloride ($CdCl_2$)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
01/10/06	50.55	43.00	6.60	29.80	56.21
01/11/06	58.98	47.00	9.64	27.72	66.27
01/20/06	47.91	47.18	8.36	30.47	63.89
01/20/06	57.54	48.91	8.59	31.73	66.08
01/24/06	49.65	49.01	7.84	33.32	64.70
02/28/06	59.45	50.32	8.15	34.03	66.61
03/28/06	59.42	51.33	8.20	34.93	67.73
05/02/06	34.19	49.62	9.44	30.73	68.50
06/06/06	73.23	51.76	11.44	28.88	74.65
07/06/06	58.53	52.33	11.08	30.16	74.49
07/11/06	61.12	53.00	10.89	31.22	74.78
08/01/06	78.84	57.45	11.57	34.32	80.59
09/06/06	63.78	57.94	11.21	35.51	80.36
10/03/06	57.10	57.88	10.78	36.33	79.43
10/31/06	47.52	55.07	11.67	31.73	78.42
11/28/06	54.87	55.06	11.33	32.41	77.71
01/16/07	38.23	55.94	11.03	33.87	78.00
02/13/07	56.06	55.94	10.70	34.53	77.35
03/14/07	70.07	55.86	11.23	33.40	78.32
04/10/07	42.91	56.00	11.04	33.91	78.08

Lower Confidence Limit = mean - 2 * Std Dev
Upper Confidence Limit = mean + 2 * Std Dev

CV = 19.72
EPA reference 75th quartile CV = 26%



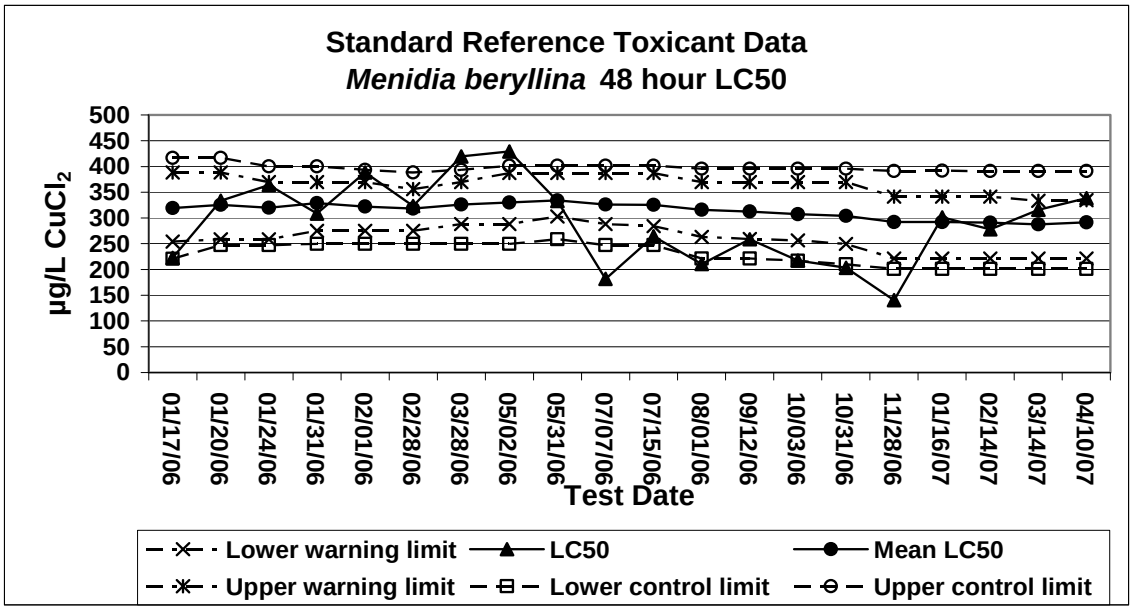
Appendix C. (continued)

Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - Acute Toxicity
Menidia beryllina (Inland silverside) - Copper Chloride ($CuCl_2$)

Date	LC50	Mean LC50	Lower control limit	Lower warning limit	Upper warning limit	Upper control limit
01/17/06	222.49	319.27	220.7	254.0	388.4	416.5
01/20/06	333.67	325.74	247.2	258.7	388.4	416.5
01/24/06	363.93	319.79	247.2	258.7	369.7	400.4
01/31/06	308.77	328.86	250.0	275.4	369.7	400.4
02/01/06	388.25	322.40	250.0	275.4	369.7	393.6
02/28/06	323.38	318.11	250.0	275.4	356.1	388.7
03/28/06	419.55	326.32	250.0	288.5	369.7	393.6
05/02/06	429.19	330.10	250.0	288.5	387.2	401.5
05/31/06	333.13	334.26	258.8	303.2	387.2	401.5
07/07/06	181.98	326.28	247.2	288.5	387.2	401.5
07/15/06	264.59	325.48	247.2	284.4	387.2	401.5
08/01/06	210.80	316.05	221.3	263.4	369.7	395.6
09/12/06	258.82	312.50	221.3	259.6	369.7	395.6
10/03/06	217.64	307.20	217.0	256.6	369.7	395.6
10/31/06	203.06	304.28	210.0	249.7	369.7	395.6
11/28/06	140.31	292.22	201.0	221.3	341.2	391.4
01/16/07	301.29	291.93	201.0	221.3	341.2	392.0
02/14/07	278.00	291.27	201.0	221.3	341.2	391.4
03/14/07	316.16	287.74	201.0	221.3	333.3	391.4
04/10/07	338.35	291.67	201.0	221.3	334.8	391.4

Means are of the last 20 SRT tests.
Upper warning and control limits are the 75th and 90th percentiles, respectively, of the past 20 LC50s.
Lower warning and control limits are the 25th and 10th percentiles, respectively, of the past 20 LC50s.
EPA reference 75th quartile CV = 21% **CV = 27.14***



* High variability due to change in fish supplier beginning 7/7/06.

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 #: ASW 14-5-07
Toxicant/ Batch#: Cl_2 14-10-07

Test Beginning: Date: 4.10.07 Time: 1230
Test Ending: Date: 4.14.07 Time: 10:20

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	20.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	205	Hach	PPV
Hardness (mg.L as $CaCO_3$):	--	Hach	--
Total Ammonia (mg/L as N):	20.034	Denver	MF
Salinity (ppth):	~20	Mettler	BA

Organism Batch #/ Age: 4-10-07 Bdays 3
Feeding: Prior to test / Prior to renewal (Daily)
Food: YCT *P.subcapitata* Artemia: Lot # GSL-S36-70
Food Batch: -- -- 0hr 4.10.07 24hr 4.5-7 48hr 4.6.07 72hr 4.7.07
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 µmhom/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	F1	5	5	5	8.3			24.7			6.7			34.7		
	B	F2	5	5	5		8.2			24.4			5.3			35.1	
	C	F3	5	5	5			8.1			24.5			4.5			35.6
	D	F4	5	5	5												
20	A	F5	5	5	4[1D]	8.3			24.2			6.7			35.1		
	B	F6	5	5	5		8.1			24.4			4.8			35.5	
	C	F7	5	5	5			8.1			24.4			4.9			35.5
	D	F8	5	5	5												
30	A	F9	5	5	3[2D]	8.3			24.2			6.8			35.1		
	B	F10	5	5	4[1D]		8.2			24.4			5.0			35.6	
	C	F11	5	4[1D]	3[1D]			8.2			24.3			5.0			35.4
	D	F12	5	4[1D]	3[1D]												
45	A	F13	5	4[1D]	4	8.3			24.2			6.8			35.0		
	B	F14	5	5	3[2D]		8.2			24.5			5.2			35.6	
	C	F15	5	5	4[1D]			8.2			24.2			4.9			35.3
	D	F16	5	5	3[2D]												
67	A	F17	5	3[2D]	0[2D]	8.3			24.2			6.6			34.9		
	B	F18	5	4[1D]	0[4D]		8.2			24.5			5.3			35.5	
	C	F19	5	3[2D]	1[1D]			8.1			24.5			4.0			35.3
	D	F20	5	3[2D]	0[3D]												
100	A	F21	5	5	0[5D]	8.3			24.2			6.9			35.0		
	B	F22	5	4[1D]	0[4D]		8.2			24.4			5.4			35.7	
	C	F23	5	1[4D]	0[1D]			8.2			24.3			5.0			35.2
	D	F24	5	5	0[5D]												
	A											6					
	B																
	C																
	D																
Loaded / measured by:			JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD
Recorded by:			JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD

Investigators' Signatures
James Daniels
Robin Vicharike
Bree Stalker
Marshall Faircloth
Nicole Wilkerson
REVIEWER

Concentrations prepared by: 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. 26.2 mean 26.1
Incubator # ___ min. _____ max. _____ mean _____
Room B246 min. 24.9 max. 26.2 mean 25.6

Comments:

Statistics: Method: Spearman-Karber
48 / 96 hour LC_{50}: 42.9
95% Confidence Interval: lower 37.44 upper 49.18

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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 #: ASW 14-S-07
Toxicant/ Batch#: $CdCl_2$ 1-4-10-07

Test Beginning: Date: 4.16.07 Time: 1230
Test Ending: Date: 4-14-07 Time: 10:20

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	205	Hach	PDV
Hardness (mg.L as $CaCO_3$):	—	Hach	—
Total Ammonia (mg/L as N):	0.034	Denver	MF
Salinity (ppth):	~20	Mettler	BA

Organism Batch #/ Age: 4-10-07 S.bahia
Feeding: Prior to test / Prior to renewal / (Daily)
Food: YCT — *P.subcapitata* — Artemia: Lot # ESL-S36 510
Food Batch: — —
0hr 4-4-07 24hr 4-5-07 48hr 4-6-07 72hr 4-7-07
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 µmhom/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	F1	5 / 5 / 5	/ / 8.1	/ / 5.0	/ / 24.8	/ / 35.2
	B	F2	5 / 5 / 5		/ / (A)	/ / (A)	
	C	F3	5 / 5 / 5	8.4 / /	24.0 / /	6.5 / /	34.5 / /
	D	F4	5 / 5 / 5	/ 8.2 /	/ 24.9 /	/ 6.4 /	/ 35.0 /
20	A	F5	4 / 4 / 4	/ / 8.1	/ / 5.0	/ / 24.6	/ / 35.4
	B	F6	5 / 5 / 5				
	C	F7	5 / 5 / 5	8.3 / /	24.0 / /	6.5 / /	34.8 / /
	D	F8	5 / 5 / 4 1D	/ 8.2 /	/ 24.6 /	/ 6.1 /	/ 35.0 /
30	A	F9	3 / 3 / 3	/ / 8.1	/ / 5.2	/ / 25.0	/ / 35.2
	B	F10	4 / 4 / 2 2D				
	C	F11	3 / 3 / 3	8.4 / /	24.1 / /	6.4 / /	34.8 / /
	D	F12	3 / 3 / 3	/ 8.2 /	/ 24.8 /	/ 6.0 /	/ 34.8 /
45	A	F13	4 / 3 1D / 1 2D	/ / 8.1	/ / 5.3	/ / 24.9	/ / 35.3
	B	F14	3 / 0 3D / —				
	C	F15	4 / 1 3D / 1	8.4 / /	24.0 / /	6.4 / /	34.7 / /
	D	F16	3 / 1 2D / 0 1D	/ 8.2 /	/ 25.2 /	/ 5.7 /	/ 34.6 /
67	A	F17	— / — / —	/ / —	/ / —	/ / —	/ / —
	B	F18	— / — / —				
	C	F19	1 / 0 1D / —	8.4 / 8.2 / —	24.1 / 24.8 /	6.5 / 5.3 /	34.7 / 34.8 /
	D	F20	— / — / —				
100	A	F21	— / — / —	— / / —	— / / —	— / / —	— / / —
	B	F22	— / — / —	— / /	— / /	— / /	— / /
	C	F23	— / — / —	— / /	/ /	/ /	/ /
	D	F24	— / — / —	— / /	/ /	/ /	/ /
	A		/ /	/ /	/ /	/ /	/ /
	B		/ /	/ /	/ /	/ /	/ /
	C		/ /	/ /	/ /	/ /	/ /
	D		/ /	/ /	/ /	/ /	/ /
Loaded / measured by:			JD / BA / BA	PDV / BA / BA	PDV / BA / BA	PDV / BA / BA	PDV / BA / BA
Recorded by:			JD / BA / BA	PDV / BA / BA	PDV / BA / BA	PDV / BA / BA	PDV / BA / BA

Investigators' Signatures
James Daniel
Hassi Vichaikul
Buck Alverson
Marshall Fairbanks
Nigel Wellendorf
REVIEWER

Concentrations prepared by: BA
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. 26.2 mean 26.1
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.9 max. 26.2 mean 25.6

Comments: (A) Temp & DO sw: rch BA 4-14-07

Statistics: Method: Spearman-Karber
48 / (96) hour LC_{50}: 30.77
95% Confidence Interval: lower 27.22 upper 34.78

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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 #: ASW 14-S-07
Toxicant/ Batch#: $CdCl_2$ 14-10-07

Test Beginning: Date: 4/10/07 Time: 1235
Test Ending: Date: 4-14-07 Time: 1210

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	205	Hach	PPV
Hardness (mg/L as $CaCO_3$):	—	Hach	—
Total Ammonia (mg/L as N):	<0.039	Denver	MF
Salinity (ppth):	~20	Mettler	BA

Organism Batch #/ Age: 4-10-07/ 13 days
Feeding: (Prior to test) Prior to renewal / Daily
Food: YCT *P.subcapitata* Artemia: Lot # GSL-S36 510
Food Batch: — — 0hr 1407 24hr — 48hr 1416 72hr —
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. (µg/L mg/L)	Rep.	Chamber #	Number Live 0 hr	Number Live 24 hr	Number Live 48 hr	pH (SU) 0 hr	pH (SU) 24 hr	pH (SU) 48 hr	Temperature (°C) 0 hr	Temperature (°C) 24 hr	Temperature (°C) 48 hr	D.O. (mg/L) 0 hr	D.O. (mg/L) 24 hr	D.O. (mg/L) 48 hr	Uncorrected Conductivity µmhom/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	A1	10	10	10	8.3			24.1		24.2	7.0			341		
	B	A2	10	10	10		8.1			24.7			5.3			345	
	C							(A) 8.2			24.3			(A) 5.7			(A) 35.1
	D																
100	A	A3	10	10	10	8.3			24.0		24.3	7.0			355		35.7
	B	A3A4	10	9	9		8.1			24.7			5.4			355	
	C							(A) 8.2						(A) 5.8			
	D																
200	A	A5	10	10	10	8.3			24.1		24.3	6.4			35.3		35.6
	B	A6	10	9	9		8.1			24.6			5.4			35.1	
	C							(A) 8.2						(A) 5.9			
	D																
300	A	A7	10	7	7	8.3			24.3		24.3	6.7			353		35.7
	B	A8	10	8	8		8.1			24.7			5.3			356	
	C							(A) 8.2						(A) 6.0			
	D																
400	A	A9	10	3	2	8.3			24.3		24.4	6.9			35.1		35.5
	B	A10	10	3	2		8.1			24.8			5.4			35.5	
	C							(A) 8.3						(A) 6.0			
	D																
500	A	A11	10	3	0	8.4			24.3		24.3	6.8			35.1		35.5
	B	A12	10	5	2		8.2			24.5			4.9			35.0	
	C							(A) 8.3						(A) 6.2			
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD
Recorded by:			JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD	JD

Investigators' Signatures
James Daniels
Penny Vickaryous
Bill Walker
Marshall Faircloth
Tinkie Wetherington
REVIEWER

Concentrations prepared by: 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. 26.2 mean 26.1
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.9 max. 26.2 mean 25.6

Comments: (A) 48 hour Readings recorded in C replicate spaces should be in A replicate spaces. MF 4-16-07

Statistics: 48 / 96 hour LC_{50}: 338.35 Method: Spearman-Karber
95% Confidence Interval: lower 305.14 upper 374.56

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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 #: ASW 14-5-07
Toxicant/ Batch#: $CuCl_2$ 14-10-07

Test Beginning: Date: 4.10.07 Time: 1235
Test Ending: Date: 4-14-07 Time: 10:10

Water Quality Parameters	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	205	Hach	BA
Hardness (mg.L as $CaCO_3$):	—	Hach	—
Total Ammonia (mg/L as N):	<0.034	Denver	MK
Salinity (ppth):	~20	Mettler	BA

Organism Batch #/ Age: 4-5-07 / (3 day)
Feeding: ~~Prior to test~~ Prior to renewal / Daily
Food: YCT — *P.subcapitata* — Artemia: Lot # ESL-S36 90
Food Batch: _____ — _____ 0hr 44-07 24hr ____ 48hr ____ 72hr ____
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. 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 µmhom/cm (mmhos/cm) ~~0 hr~~ 48 hr	~~24 hr~~ 72 hr	~~48 hr~~ 96 hr
Control	A	A1	10	10	10	8.3		8.1	24.0		25.2	6.6		7.4	34.8		35.1
	B	A2	10	10	10		8.3			24.7			6.2			35.1	
	C																
	D																
100	A	A3	10	10	10	8.4		8.2	24.0		25.6	6.7		7.1	34.9		35.2
	B	A4	9	9	9		8.3			24.2			5.9			34.8	
	C																
	D																
200	A	A5	10	10	10	8.4		8.2	24.0		25.5	6.6		6.8	34.9		35.2
	B	A6	9	9	9		8.3			25.4			5.9			35.1	
	C																
	D																
300	A	A7	7	7	7	8.4		8.2	~~24.0~~ 24.1		25.6	6.6		6.7	34.8		35.1
	B	A8	8	8	8		8.2			25.7			5.8			35.0	
	C																
	D																
400	A	A9	2	2	2	8.4		8.2	24.0		25.4	6.6		6.6	34.6		35.1
	B	A10	2	2	2		8.3			24.6			5.9			34.4	
	C																
	D																
500	A	A11	0	—	—			8							~~35.6~~ 34.7		
	B	A12	2	2	2	8.4	8.2	8.2	24.1	24.4	25.2	6.6	5.9	6.7	34.7	34.7	35.0
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			BA	BA	BA	PPr	BA	BA	PPr	BA	BA	PPr	BA	BA	PPr	BA	BA
Recorded by:			BA	BA	BA	PPr	BA	BA	PPr	BA	BA	PPr	BA	BA	PPr	BA	BA

Investigators' Signatures
James Daniels
Brad Vicyanke
Brad Fowler
Marshall Faircloth
Nicole Willardy
REVIEWER

Concentrations prepared by: BA
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 26.2 mean 26.1
Incubator # ___ min ___ max ___ mean ___
Room B248 min 24.9 max 26.2 mean 25.6

Comments:
(A) TRANSCRIPTION ERRORS. PPr 4/12/07

Statistics: Method: Spearman-Karber
48 / (96) hour LC_{50}: 338.35
95% Confidence Interval: lower 305.69 upper 374.56

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revised 08/24/06 SP

Appendix C. (continued)

***Americamysis bahia* Acute Standard Reference Toxicant Test**

DATE: 04-10-07 DURATION: 48 h TOXICANT: CdCl2
SPECIES: A. Bahia

RAW DATA: Concentration (ug/L)	Number Exposed	Mortalities
0.00	20	0
20.00	20	1
30.00	20	7
45.00	20	6
67.00	20	19
100.00	20	20

SPEARMAN-KARBER TRIM: 5.00%

SPEARMAN-KARBER ESTIMATES: LC50: 42.91
95% LOWER CONFIDENCE: 37.44
95% UPPER CONFIDENCE: 49.18

NOTE: MORTALITY PROPORTIONS WERE NOT MONOTONICALLY INCREASING. ADJUSTMENTS WERE MADE PRIOR TO SPEARMAN-KARBER ESTIMATION.

***Menidia Beryllina* Acute Standard Reference Toxicant Test**

DATE: 0 4-10-07 DURATION: 48 h TOXICANT: CuCl2
SPECIES: M. Beryllina

RAW DATA: Concentration (ug/L)	Number Exposed	Mortalities
0.00	20	0
100.00	20	1
200.00	20	1
300.00	20	5
400.00	20	16
500.00	20	18

SPEARMAN-KARBER TRIM: 10.00%

SPEARMAN-KARBER ESTIMATES: LC50: 338.35
95% LOWER CONFIDENCE: 305.64
95% UPPER CONFIDENCE: 374.56

Appendix D. Test Organism Receipts

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: 4/9/07

Shipped to: FTE

P.O. No: _____

Species	Quantity	Age	Brood Number	Temperature	Salinity
Mysidopsis bahia	150+	4 Day	MSC 1405	25C	~30‰
Menidia beryllina	150+	12 Day	SSC 1004 318	25°C	~30‰
Cyprinella leedsi	50+	12 Day	CHC 1018	25°C	
Pimephales promelas					

Packed by: Frank Gangi

Shipped Via: FedEx

Notes: _____

Thank you for your order.

Frank Gangi

Appendix D. (continued)

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: 4/13/07

Shipped to: FSEP

P.O. No: _____

Species	Quantity	Age	Brood Number	Temperature	Salinity
Mysidopsis bahia	300+	4 Days	MSD 0419	25°C	~30‰
	50+	4 Days	MSD 041915	25°C	
Menidia beryllina	100+	12 Days	SSD 0411	25°C	~30‰
	50+	12 Days	SSD 041115	25°C	
Cyprinella leedsi					
Pimephales promelas					

Packed by: Frank Gary

Shipped Via: FedEx

Notes: _____

Thank you for your order.

Appendix E. Chemical Analyses performed on the effluent from the Siesta Key Wastewater Treatment Plant Outfall D-001 (EFD-01), sampled on April 23-24, 2007.

Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 10:00	SIESTA KEY UTILITIES D001	AGP/LN	Algal Growth Potential - Saltwater	3	U	mg DryWt/L	3	3
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.2	I	mg/L	0.2	2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	L	LC50		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	L	LC50		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Aluminum	38		ug/L	4	16
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Calcium	84.1		mg/L	0.02	0.08
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Chromium	1.2	U	ug/L	1.2	4.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Iron	26		ug/L	5	20
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Magnesium	50.4		mg/L	0.005	0.02
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Nickel	1.2	I	ug/L	1	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Zinc	28		ug/L	5	20
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Arsenic	0.75	I	ug/L	0.5	2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Cadmium	0.05	U	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Copper	0.66	I	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Lead	0.2	U	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Selenium	0.5	U	ug/L	0.5	2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Metals	Silver	0.025	U	ug/L	0.025	0.1
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Turbidity	0.7		NTU	0.05	0.05
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Color	10		PCU	5	5
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Organic Carbon	6.8	A	mg C/L	1	5
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Ammonia-N	0.057		mg N/L	0.01	0.02
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	NO2NO3-N	0.18		mg N/L	0.004	0.01
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	O-Phosphate-P	0.26		mg P/L	0.02	0.05
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Kjeldahl Nitrogen	0.98		mg N/L	0.16	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Organic Carbon	6.7		mg C/L	1	5
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	Total-P	0.36		mg P/L	0.02	0.06
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Nutrients	TSS	4	U	mg/L	4	16
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Overflow	Oil and Grease	2.5	I	mg/L		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Alachlor	0.6	U	ug/L	0.6	2.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Ametryn	0.05	UJ	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Atrazine	0.05	UJ	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Azinphos Methyl	0.2	U	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Bromacil	0.2	UJ	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Butylate	0.2	UJ	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Chlorpyrifos Ethyl	0.05	U	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Chlorpyrifos Methyl	0.1	U	ug/L	0.1	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Diazinon	0.05	U	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Ethion	0.05	U	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Ethoprop	0.1	U	ug/L	0.1	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Fenamiphos	0.2	U	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Fonofos	0.1	U	ug/L	0.1	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Hexazinone	0.1	U	ug/L	0.1	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Malathion	0.15	U	ug/L	0.15	0.6
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Metalaxyl	0.25	U	ug/L	0.25	1

Appendix E. (continued)

Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Metolachlor	0.5	UJ	ug/L	0.5	2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Metribuzin	0.1	UJ	ug/L	0.1	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Mevinphos	0.2	U	ug/L	0.2	0.8
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Naled	0.8	U	ug/L	0.8	3.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Norflurazon	0.15	U	ug/L	0.15	0.6
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Parathion Ethyl	0.15	U	ug/L	0.15	0.6
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Parathion Methyl	0.1	U	ug/L	0.1	0.4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Phorate	0.05	U	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Prometryn	0.15	U	ug/L	0.15	0.6
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Pesticides	Simazine	0.05	UJ	ug/L	0.05	0.2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	1,2-Dichlorobenzene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	1,3-Dichlorobenzene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	1,4-Dichlorobenzene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2,4-Dichlorophenol	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2,4-Dimethylphenol	9.9	U	ug/L	9.9	40
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	59
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2,4-Dinitrotoluene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2,6-Dinitrotoluene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2-Chloronaphthalene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2-Chlorophenol	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3	U	ug/L	3	12
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	2-Nitrophenol	0.99	UJ	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	3,3'-Dichlorobenzidine	40	U	ug/L	40	160
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4,4'-DDD	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4,4'-DDE	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4,4'-DDT	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2	U	ug/L	2	7.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	59
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Acenaphthene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Acenaphthylene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Aldrin	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Anthracene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Benzidine	99	U	ug/L	99	400
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Benzo(a)anthracene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Benzo(a)pyrene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Benzo(b)fluoranthene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Benzo(k)fluoranthene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3	U	ug/L	3	12

Appendix E. (continued)

Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	15	U	ug/L	15	59
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Butyl benzyl phthalate	5	U	ug/L	5	20
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Chrysene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Di-n-butyl phthalate	5	U	ug/L	5	20
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Di-n-octyl phthalate	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Dieldrin	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Diethyl phthalate	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Dimethyl phthalate	50	U	ug/L	50	200
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Endosulfan I	4	U	ug/L	4	16
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Endosulfan II	4	U	ug/L	4	16
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Endosulfan sulfate	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Endrin	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Endrin aldehyde	4	U	ug/L	4	16
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Fluoranthene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Fluorene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Heptachlor	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Heptachlor epoxide	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Hexachlorobenzene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Hexachlorobutadiene	3	U	ug/L	3	12
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Hexachlorocyclopentadiene	3	UJ	ug/L	3	12
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Hexachloroethane	3	U	ug/L	3	12
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Isophorone	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2	U	ug/L	2	7.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	N-Nitrosodimethylamine	2	U	ug/L	2	7.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3	U	ug/L	3	12
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Naphthalene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Nitrobenzene	2	U	ug/L	2	7.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Pentachlorophenol	3	U	ug/L	3	12
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Phenanthrene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Phenol	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Pyrene	0.99	U	ug/L	0.99	4
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	alpha-BHC	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	beta-BHC	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	delta-BHC	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	gamma-BHC	1.5	U	ug/L	1.5	5.9
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Bromodichloromethane	18		ug/L	0.2	1
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Bromoform	33	J	ug/L	0.5	2
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Chloroform	7		ug/L	0.2	1
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Priority Organic Pollutants	Dibromochloromethane	44		ug/L	0.2	1
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Field Parameters	Dissolved Oxygen	7.82		mg/L		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Field Parameters	Salinity	1.09		PPTh		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Field Parameters	Specific Conductance	2147		umhos/cm		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Field Parameters	Temperature	26.19		C		

Appendix E. (continued)

Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Field Parameters	Total Residual Chlorine	0.38		mg/L		
4/23/2007 10:00	SIESTA KEY UTILITIES D001	Field Parameters	pH	7.25				
4/24/2007 10:15	EFD-01	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.4	IQ	mg/L	0.2	2
4/24/2007 10:15	EFD-01	Metals	Aluminum	36	I	ug/L	20	80
4/24/2007 10:15	EFD-01	Metals	Calcium	82.4		mg/L	0.02	0.08
4/24/2007 10:15	EFD-01	Metals	Iron	22		ug/L	5	20
4/24/2007 10:15	EFD-01	Metals	Magnesium	49.1		mg/L	0.005	0.02
4/24/2007 10:15	EFD-01	Metals	Zinc	27		ug/L	5	20
4/24/2007 10:15	EFD-01	Metals	Arsenic	0.79	I	ug/L	0.5	2
4/24/2007 10:15	EFD-01	Metals	Cadmium	0.05	U	ug/L	0.05	0.2
4/24/2007 10:15	EFD-01	Metals	Chromium	1	U	ug/L	1	4
4/24/2007 10:15	EFD-01	Metals	Copper	6.14		ug/L	0.2	0.8
4/24/2007 10:15	EFD-01	Metals	Lead	0.2	U	ug/L	0.2	0.8
4/24/2007 10:15	EFD-01	Metals	Nickel	1.14		ug/L	0.25	1
4/24/2007 10:15	EFD-01	Metals	Selenium	0.5	U	ug/L	0.5	2
4/24/2007 10:15	EFD-01	Metals	Silver	0.025	U	ug/L	0.025	0.1
4/24/2007 10:15	EFD-01	Nutrients	Organic Carbon	7.1		mg C/L	1	5
4/24/2007 10:15	EFD-01	Nutrients	Ammonia-N	0.047		mg N/L	0.01	0.02
4/24/2007 10:15	EFD-01	Nutrients	NO2NO3-N	0.39		mg N/L	0.004	0.01
4/24/2007 10:15	EFD-01	Nutrients	Kjeldahl Nitrogen	0.99	Q	mg N/L	0.08	0.2
4/24/2007 10:15	EFD-01	Nutrients	Organic Carbon	7.3		mg C/L	1	5
4/24/2007 10:15	EFD-01	Nutrients	Total-P	0.4		mg P/L	0.02	0.06
4/24/2007 10:15	EFD-01	Nutrients	TSS	4	U	mg/L	4	16
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Aluminum	4	U	ug/L	4	16
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Calcium	0.026	I	mg/L	0.02	0.08
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Chromium	0.3	U	ug/L	0.3	1.2
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Iron	5	U	ug/L	5	20
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Magnesium	0.005	U	mg/L	0.005	0.02
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Nickel	1	U	ug/L	1	4
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Zinc	5	U	ug/L	5	20
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Arsenic	0.5	U	ug/L	0.5	2
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Cadmium	0.05	U	ug/L	0.05	0.2
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Copper	0.25	I	ug/L	0.2	0.8
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Lead	0.2	U	ug/L	0.2	0.8
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Selenium	0.5	U	ug/L	0.5	2
4/23/2007 11:00	EQUIPMENT BLANK	Metals	Silver	0.025	U	ug/L	0.025	0.1
4/23/2007 11:00	EQUIPMENT BLANK	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
4/23/2007 11:00	EQUIPMENT BLANK	Nutrients	NO2NO3-N	0.004	U	mg N/L	0.004	0.01
4/23/2007 11:00	EQUIPMENT BLANK	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
4/23/2007 11:00	EQUIPMENT BLANK	Nutrients	Kjeldahl Nitrogen	0.08	U	mg N/L	0.08	0.2
4/23/2007 11:00	EQUIPMENT BLANK	Nutrients	Organic Carbon	1	U	mg C/L	1	5
4/23/2007 11:00	EQUIPMENT BLANK	Nutrients	Total-P	0.02	U	mg P/L	0.02	0.06
4/23/2007 11:00	EQUIPMENT BLANK	Overflow	Oil and Grease	1.9	I	mg/L		
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Alachlor	0.65	U	ug/L	0.65	2.6
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Ametryn	0.054	UJ	ug/L	0.054	0.22

Appendix E. (continued)

Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Atrazine	0.054	UJ	ug/L	0.054	0.22
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Azinphos Methyl	0.22	U	ug/L	0.22	0.88
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Bromacil	0.22	UJ	ug/L	0.22	0.88
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Butylate	0.22	UJ	ug/L	0.22	0.88
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Chlorpyrifos Ethyl	0.054	U	ug/L	0.054	0.22
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Chlorpyrifos Methyl	0.11	U	ug/L	0.11	0.44
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Diazinon	0.054	U	ug/L	0.054	0.22
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Ethion	0.054	U	ug/L	0.054	0.22
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Ethoprop	0.11	U	ug/L	0.11	0.44
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Fenamiphos	0.22	U	ug/L	0.22	0.88
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Fonofos	0.11	U	ug/L	0.11	0.44
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Hexazinone	0.11	U	ug/L	0.11	0.44
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Malathion	0.16	U	ug/L	0.16	0.64
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Metalaxyl	0.27	U	ug/L	0.27	1.1
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Metolachlor	0.54	UJ	ug/L	0.54	2.2
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Metribuzin	0.11	UJ	ug/L	0.11	0.44
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Mevinphos	0.22	U	ug/L	0.22	0.88
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Naled	0.87	U	ug/L	0.87	3.5
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Norflurazon	0.16	U	ug/L	0.16	0.64
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Parathion Ethyl	0.16	U	ug/L	0.16	0.64
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Parathion Methyl	0.11	U	ug/L	0.11	0.44
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Phorate	0.054	U	ug/L	0.054	0.22
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Prometryn	0.16	U	ug/L	0.16	0.64
4/23/2007 11:00	EQUIPMENT BLANK	Pesticides	Simazine	0.054	UJ	ug/L	0.054	0.22
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	1,2,4-Trichlorobenzene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	1,2-Dichlorobenzene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	1,3-Dichlorobenzene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	1,4-Dichlorobenzene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2,4,6-Trichlorophenol	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2,4-Dichlorophenol	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2,4-Dimethylphenol	11	U	ug/L	11	43
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2,4-Dinitrophenol	16	U	ug/L	16	64
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2,4-Dinitrotoluene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2,6-Dinitrotoluene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2-Chloronaphthalene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2-Chlorophenol	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.2	U	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	2-Nitrophenol	1.1	UJ	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	3,3'-Dichlorobenzidine	43	U	ug/L	43	170
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4,4'-DDD	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4,4'-DDE	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4,4'-DDT	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4-Bromophenyl phenyl ether	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4-Chloro-3-methylphenol	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.1	U	ug/L	2.1	8.5

Appendix E. (continued)

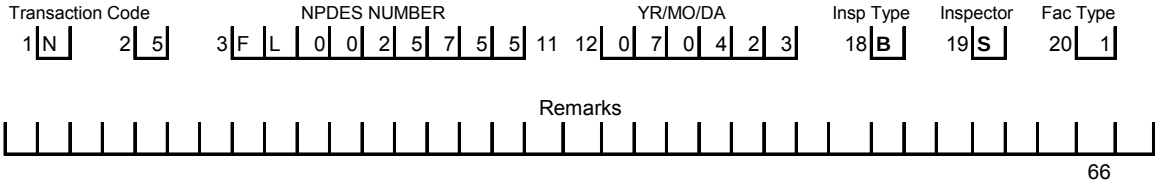
Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	4-Nitrophenol	16	U	ug/L	16	64
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Acenaphthene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Acenaphthylene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Aldrin	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Anthracene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Benzidine	110	U	ug/L	110	430
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Benzo(a)anthracene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Benzo(a)pyrene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Benzo(b)fluoranthene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Benzo(g,h,i)perylene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Benzo(k)fluoranthene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Bis(2-chloroethyl)ether	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.2	U	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	16	U	ug/L	16	64
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Butyl benzyl phthalate	5.3	U	ug/L	5.3	21
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Chrysene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Di-n-butyl phthalate	5.3	U	ug/L	5.3	21
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Di-n-octyl phthalate	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Dibenzo(a,h)anthracene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Dieldrin	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Diethyl phthalate	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Dimethyl phthalate	53	U	ug/L	53	210
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Endosulfan I	4.3	U	ug/L	4.3	17
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Endosulfan II	4.3	U	ug/L	4.3	17
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Endosulfan sulfate	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Endrin	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Endrin aldehyde	4.3	U	ug/L	4.3	17
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Fluoranthene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Fluorene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Heptachlor	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Heptachlor epoxide	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Hexachlorobenzene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Hexachlorobutadiene	3.2	U	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.2	UJ	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Hexachloroethane	3.2	U	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Isophorone	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.1	U	ug/L	2.1	8.5
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1	U	ug/L	2.1	8.5
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3.2	U	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Naphthalene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Nitrobenzene	2.1	U	ug/L	2.1	8.5
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Pentachlorophenol	3.2	U	ug/L	3.2	13
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Phenanthrene	1.1	U	ug/L	1.1	4.3

Appendix E. (continued)

Date Sampled	Field Id	Analysis	Component	Result	Remark	Units	MDL	PQL
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Phenol	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Pyrene	1.1	U	ug/L	1.1	4.3
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	alpha-BHC	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	beta-BHC	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	delta-BHC	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	gamma-BHC	1.6	U	ug/L	1.6	6.4
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Bromodichloromethane	0.2	U	ug/L	0.2	1
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Bromoform	0.5	UJ	ug/L	0.5	2
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Chloroform	0.2	U	ug/L	0.2	1
4/23/2007 11:00	EQUIPMENT BLANK	Priority Organic Pollutants	Dibromochloromethane	0.2	U	ug/L	0.2	1
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Aluminum	4	U	ug/L	4	16
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Calcium	0.032	I	mg/L	0.02	0.08
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Chromium	0.3	U	ug/L	0.3	1.2
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Iron	5	U	ug/L	5	20
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Magnesium	0.0054	I	mg/L	0.005	0.02
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Nickel	2.3	I	ug/L	1	4
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Zinc	5	U	ug/L	5	20
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Arsenic	0.5	U	ug/L	0.5	2
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Cadmium	0.05	U	ug/L	0.05	0.2
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Copper	6.7		ug/L	0.2	0.8
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Lead	0.52	I	ug/L	0.2	0.8
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Selenium	0.5	U	ug/L	0.5	2
4/23/2007 8:10	EQUIPMENT BLANK	Metals	Silver	0.025	U	ug/L	0.025	0.1
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	Organic Carbon	1	U	mg C/L	1	5
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	NO2NO3-N	0.004	U	mg N/L	0.004	0.01
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	Kjeldahl Nitrogen	0.08	U	mg N/L	0.08	0.2
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	Organic Carbon	1	U	mg C/L	1	5
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	Total-P	0.5		mg P/L	0.02	0.06
4/23/2007 8:10	EQUIPMENT BLANK	Nutrients	TSS	4	U	mg/L	4	16

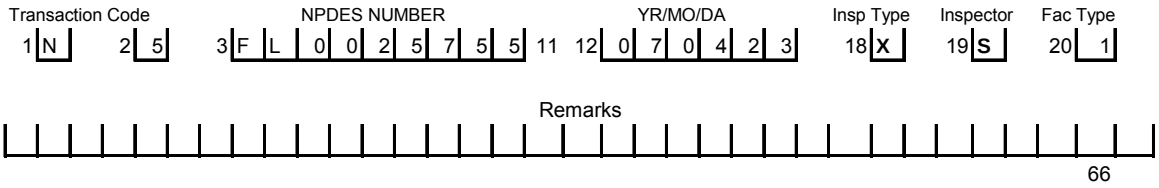
The Bioassay of Siesta Key Wastewater Treatment Plant effluent sampled on April 23, 2007. NPDES #FL0025755.

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



The Priority Pollutants Analysis of Siesta Key Wastewater Treatment Plant effluent sampled on April 23 and 24, 2007. NPDES #FL0025755.

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



Biological Analyses of Siesta Key Wastewater Treatment Plant effluent sampled on April 23, 2007. NPDES #FL0025755.

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

