

Effluent Quality Assessment

Fort Myers Central WWTP

Lee County

NPDES #FL0021261

Sampled May 17-18, 2010

September 2010

Biology Section
Bureau of Laboratories
Division of Environmental Assessment and Restoration

Quality Manual No. 870346G
NELAC Certification No. E31780

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Fort Myers Central WWTP, 1501 Raleigh Street, Fort Myers, Lee County, Florida, 33901. NPDES # FL0021261. Effluent composite samples for bioassay analyses were collected on May 17-18, 2010. Effluent grab samples for chemical and microbiological analyses for this facility were collected on May 18, 2010.

Introduction

Fort Myers Central WWTP is a Type 1 wastewater treatment facility which uses the Bardenpho Process followed by clarification and disinfection to treat domestic wastewater. The facility has a separate high-level disinfection system for Part III reuse. (See Appendix F for detailed facility information provided by Alyssa Mork of FDEP South District.)

Methods

Samples were collected from the EFD-01 NPDES sampling point for Outfall D-001 by Alyssa Mork (FDEP South District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOPs are available on the web at: http://www.floridadep.org/labs/bars/sas/sop/index.htm.

See Appendix A for the completed chain of custody form.

The 96-hour acute screening toxicity tests and algal growth potential (AGP) 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.

An aliquot of the AGP sample was salinity adjusted by the addition of artificial sea salts to meet the salinity requirements of the test species.

Results and Discussion

Toxicity Test Results

Tests were performed May 19 - 23, 2010.

Ceriodaphnia dubia 96-hour acute screening bioassay – LC_{50} > 100%, 0%* mortality in 100% sample at 96 hours

Cyprinella leedsi 96-hour acute screening bioassay – LC_{50} > 100%, 5%* mortality in 100% sample at 96 hours

The bioassay sample was not acutely toxic to the test organisms.

*NOTE: In a 96-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.).

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.

Algal Growth Potential

Effluent Sample

The effluent algal growth potential (AGP) was 21.2 mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and

Schultz (1987) determined 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 the total phosphorus concentration was 24.1 (±20%) mg dry wt/L (Table 1a; Miller et al. 1978).

Salinity Adjusted Effluent Sample
The salinity adjusted effluent algal growth potential (AGP) was 3.0 U* mg dry wt/L of the saltwater species *Dunaliella tertiolecta.* Raschke and Schultz determined that AGP values above 10.0 mg dry weight/L represent a “problem” threshold for marine receiving waters, implying nutrient enrichment (personal communication, Marshall Faircloth, et. al. FDEP, with Ron Raschke USEPA Region 4 1987). One potential explanation for such low growth in the salinity-adjusted sample may be that precipitation of enough orthophosphate by the added salts caused the sample to become extremely phosphorus-limited (Manahan 1994).

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

See Table 1a and Table 1b 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 grab sample collected and preserved for chemical analysis was 0.023 F* mg N/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg N/L.

*F – Analyte was detected in both sample and field blank

Aluminum, arsenic, chloroform, bromoform, nickel and zinc were detected in the effluent at levels that comply with Class III marine water quality criteria (62-302.530, F.A.C.). Atrazine, chromium-III, copper, iron and lead were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL). Bromodichloromethane (62 µg/L; limit ≤22 µg/L, 62-302.500 (35)(b)(5), F.AC. and permit # FL0021261), and dibromochloromethane (49 µg/L; limit ≤34 µg/L, 62-302.500 (35)(b)(2), F.A.C. and permit # FL0021261) exceeded both the Class III criteria for marine water and the permit limits. Aluminum was detected in the field blank.

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 B for bioassay lab equipment.

Conclusion
The effluent sample collected from the EFD-01 NPDES sampling point for Outfall D-001 for this facility on May 17-18, 2010, was not acutely toxic to either test species during the 96-hour acute screening bioassays. The effluent AGP result was greater than the "problem” threshold for fresh receiving waters and suggests nutrient enrichment may be an issue. Conversely, the salinity adjusted sample AGP result suggests that nutrient enrichment is not an issue, but a possible explanation for this discrepancy is that the addition of salts to the sample for salinity adjustment may cause precipitation of enough orthophosphate that the sample becomes extremely phosphorus-limited. Effluent water quality samples collected on May 17-18, 2010, exceeded both the Class III criteria for marine waters and the facility’s permit limits for bromodichloromethane and dibromochloromethane.

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.

Manahan, S. E. 1994. Environmental Chemistry, 6th edition. Lewis Publishers, USA. 811 pp.

Table 1a. Measured and predicted algal growth potential (AGP; mg dry weight/L) for orthophosphate (OP) and total phosphorus (TP) limitation of the freshwater species *Pseudokirchneriella subcapitata* for samples collected from the Fort Myers Central WWTP on May 18, 2010.

Fort Myers Central WWTP					
Location	AGP (measured)	Predicted AGP (OP) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
EFD01 grab	21.2	4.3 ± 0.9	24.1 ± 4.8	92.3	32.3

Table 1b. Measured algal growth potential (AGP; mg dry weight/L) of the saltwater species *Dunaliella tertiolecta* and ratios of nitrogen to phosphorus for samples collected from the Fort Myers Central WWTP on May 18, 2010.

Fort Myers Central WWTP			
Location	AGP (measured)	Inorganic N:P ratio	Total N:P ratio
EFD01 grab*	3.0 U	92.3	32.3

* - sample salinity adjusted to 7ppt

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

Table 2. Effluent limits, Class III Criteria for predominantly marine waters and chemical and microbiological data for samples collected from the Fort Myers Central WWTP on May 18, 2010.

Fort Myers Central WWTP NPDES# FL0021261	Class III Criteria	Effluent Limits	EFD01 grab	
Organic Constituents (µg/L)				
Atrazine	-	-	0.079	I
Bromodichloromethane	≤ 22	≤ 22	62	
Bromoform	-	-	7.2	
Chloroform	-	report	60	
Dibromochloromethane	≤ 34	≤ 34	49	
Metals (µg/L unless otherwise noted)				
Aluminum	≤ 1500	report	370	F
Arsenic	≤ 50	report	1.1	
Cadmium	≤ 8.8	-	0.03	U
Calcium (mg/L)	-	-	75.8	F
Chromium-III	-	-	0.64	I
Copper	≤ 3.7	report	0.75	I
Iron	≤ 300	report	75	I
Lead	≤ 8.5	report	0.34	I
Magnesium (mg/L)	-	-	11.6	
Nickel	≤ 8.3	report	1.07	
Selenium	≤ 71	-	0.2	U
Silver	≤ 2.3	report	0.025	U
Zinc	≤ 86	report	26	
Nutrients (mg/L)				
Ortho-phosphate	-	-	0.01	I
Total Phosphorus	-	≤ 1.0 s	0.056	
Total Ammonia	-	-	0.023	F
Un-ionized Ammonia	-	report	≤ 0.02	c
Nitrate and Nitrite	-	-	0.9	
Total Kjeldahl Nitrogen	-	-	0.91	
Organic Nitrogen	-	-	0.887	c
Total Nitrogen	-	≤ 6.0 s	1.81	c
General Physical and Chemical Parameters				
Dissolved Oxygen (mg/L)	≥ 4.0	≥ 4.0 s	5.9	
pH (SU)	6.5 - 8.5	6.5 - 8.5 s	7.6	
Conductivity (µmhos/cm)	-	report	1170	
Temperature (°C)	-	-	24.7	
Total Residual Chlorine (mg/L)	≤ 0.01	≤ 0.01 s	0.01	
Total Suspended Solids (mg/L)		2754 lbs/day	4	U
Chlorophyll *a* (µg/L) - Corrected	-	-	0.55	U
CBOD, 5 day (mg/L), N - inhibited	-	≤ 60 s	1.6	I
Oils and Greases (mg/L)	≤ 5.0	report	1.4	UY
Chloride (mg/L)	-	report	200	
Fluoride (mg/L)	≤ 5.0	report	0.52	
Flow (MGD)	-	11 ma	3.26	
Hardness (mg $CaCO_3$)	-	report	237.04	c
Microbiology (Number of colony forming units/100ml)				
Fecal Coliforms € #2 site	≤ 400s #	report	8	
Fecal Coliforms € EFD01 grab	≤ 400s #	report	13	

Value exceeds the Class III Water Quality Criteria or permit limits

a - Annual average
c - Value is calculated
ma - monthly average
s - Single sample
F - Analyte was detected in both sample and field blank.Field Blank values: Aluminum (85 I), Calcium (0.19 I), Ammonia (0.069 I)
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
U - Material analyzed for but not detected; value reported is the method detection limit
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- If 10 or fewer samples are taken within a month, the single sample limit is 400 CFU (62-302.530(6), F.A.C.)
€ - Analysis performed at Sanders Laboratories, Inc. Fort Myers

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2010-05-17-40
Fort Myers Central FYI3

Customer: SO-DIST
Project ID: FYI3
PMAS: 1143

Requester: Cari Butler
Collected By: Alyssa Mork
Sampling Agency: FDEP-South Dist – DW

Field Report Prepared By: Alyssa Mork
Send Final Report To: Keith Kleinmann
Alyssa Mork

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Fort Myers Central WWTF	☒ Comp ☐ Grab Date 5-17-10 Time 12:00 Eastern/Central	Date 5-18-10 Time 12:00 Eastern/Central	A
	Field ID: DW-051810-EFD01-COMP	Tot Res Chlorine (mg/L): 0.00	Diss Oxygen (mg/L): 9.65	Storet Station Number:
	Matrix (include type e.g. Salt, Fresh, etc): DW Plant Effluent→Fresh	Temp (C): 11.14	pH: 7.33	
	Latitude: o ' "	Longitude: o ' "	Sample Depth ☐ m ☐ ft: .51	☒ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 1024
			NPDES Number:	Comments:

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Fort Myers Central WWTF	☐ Comp ☒ Grab Date 5-18-10 Time 9:00 Eastern/Central	Date Time Eastern/Central	A
	Field ID: DW-051810-EFD01-Grab	Tot Res Chlorine (mg/L): .01	Diss Oxygen (mg/L): 5.92	Storet Station Number:
	Matrix (include type e.g. Salt, Fresh, etc): DW Plant Eff → Fresh	Temp (C): 26.74	pH: 7.56	
	Latitude: o ' "	Longitude: o ' "	Sample Depth ☐ m ☐ ft: .58	☒ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 1170
			NPDES Number:	Comments:

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Fort Myers Central WWTF	☐ Comp ☒ Grab Date 5/8 Time ~~7:30~~ Eastern/Central	Date Time Eastern/Central	B
	Field ID: DW-051810-EFD01-Blank	Tot Res Chlorine (mg/L): 0	Diss Oxygen (mg/L): 7.80	Storet Station Number:
	Matrix (include type e.g. Salt, Fresh, etc): DW Plant Eff → Fresh	Temp (C): 25.24	pH: 8.82	
	Latitude: o ' "	Longitude: o ' "	Sample Depth ☐ m ☐ ft: .02	☒ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 34
			NPDES Number:	Comments:

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
		☐ Comp ☐ Grab Date Time Eastern/Central	Date Time Eastern/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:	
	Latitude: o ' "	Longitude: o ' "	Sample Depth ☐ m ☐ ft:	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm):
			NPDES Number:	Comments: 2 Bottles Rec'd in Tox by JD. 9:47 5.19.10

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time:	Relinquished By:	Date/Time	Received By:	Date/Time
Alyssa Mork		FEDEX overnight		5-18-10 14:10				

05/19/10 09:10

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Appendix A. Continued

Sanders Laboratories INC.
Environmental Testing Services

CHAIN-OF-CUSTODY RECORD

PROJECT # F1005236 LAB USE ONLY

Page 1 of 1

Client: FDEP
Address: 2295 Victoria Ave, Fort Myers, FL 33901
Phone: 239-332-6975 Fax: 332-6969

Report To: Alyssa
Bill To: FDEP
P.O. #
Preservative: HCl = H, HNO_3 = N, $Na_2S_2O_3$ = ST, H_2SO_4 = S, NaOH = SH, NH_4Cl = NH

Project Name:
Project Location:
Customer Type:
Kit # LAB USE ONLY
REQUESTED DUE DATE: 5/26/10

Sampled By (PRINT): Alyssa Mork
Sampler Signature:

Matrix	SAMPLE DESCRIPTION	Sample DATE	Sample TIME	Sample TYPE	PRESERVATIVES	ANALYSES REQUEST	Sample ID #
WW	Ft Myers Central 1	5-18	9:00	Grab	XX	+	1A
1	Ft Myers Central 2	5-19	9.00	Grab	XX	+	2A

Bottle Lot #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
SC	Alyssa Mork / FDEP				5/18/10	1:45

COMMENTS:

OKAY TO RUN AS IS...
CLIENT INITIAL:

SAMPLES ON ICE
4.2 (Yes) No

1050 Endeavor Ct., Nokomis, FL 34275-3623 • (941)488-8103 • FAX 484-6774 • 10090 Bavaria Rd., Fort Myers, FL 33913 • (239) 590-0337 • FAX (239) 590-0536

Appendix A. Continued

RQ-2010-05-17-40

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: DEP Contract: LAB 028

DEP Project Manager: Kate Brackett (850) 245-8095

Contractor: TestAmerica Savannah
5102 LaRouche Avenue
Savannah, GA 31404 (912) 354-7858
Att: Sample Receiving

NELAC Certification #: E87052

State Approval By: _____ Contractor Approval By: _____ *
Project Manager Project Manager

Contractor Representative Contacted: Laura Smith Date: 5/3/10
Means of Contact: e-mail

Task Assignment Number: TA100 Maximum Cost: $250.00
Turnaround Time: 21 days

Sample Delivery Date: _____
Project Name/Description: (include purpose, location, etc.) Fort Myers FYI

Parameter Group/ Method	Sample Matrix	# of Samples	Analyte/Method in Contract (Y/N)	DEP ID #	Unit Cost	%mark-up (if any)	Cost
MBAS	W	2	Y	shipped from field	$50.00		$100.00

Total: $100.00

Total No. of Containers: _____

QC Instructions: Run duplicate matrix spikes in the sample.

Samples released to Contract Lab by: Alyssa Mark Date/Time 5-18-10/15:00

Delivery Method: _____

Samples Accepted by: _____ *

* **Please sign and return by FAX at (850) 245-8218**

Xerox copy Sent To: Contracts-MS #93 F&A-MS #78 Bureau of Labs

FDEP Biology Laboratory - Acute Bioassay Bench Sheets

Facility: Ft. Myers Central AWWTF

Address: 1501 Raleigh Street

City: Fort Myers County: Lee

Contact/District: Alyssa Mork / South

NPDES Permit #: FL 0021261

LIMS Job #: TLH-2010-05-19-68

LIMS Sample #: 127202

Lims Data Entry: 5-24-10 MF

Data Entry Verification: BA 5.24.10

Sample Collection: Date: 5-18-10 Time: 1200

Hold Time Start: Date: 5-18-10 Time: 1200

Comments:

Initial sample handling:

Instructions: Check yes or no. If yes is checked, complete blanks

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:

Instructions: Check yes or no. Fill in temperatures.

Temperature: Shipped ≤ 6°C ☑ Yes ☐ No — IF Hand Delivered: Cooling ☐ Yes ☐ No (received _____°C collected_____°C)

Holding Time: ≤ 36 Hours ☑ Yes ☐ No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures:

	Initials:
James Daniels	JD
Kim Spencer	KMS
Marshall Faircloth	MF
Brad Alexander	BA

REVIEWER: Liz Miller

Diluent/Control Batch#:	5.11.10	5.FW10 BA							
Water Quality Parameters	20% DMW	Well Water	Moderately Hard Water	Salt Water ASW NSW Test 1	Salt Water ASW NSW Test 2	Other:	Original Sample	Measured by	Verified by
Field Total Residual Cl_2 (mg/L):	N/A	N/A	N/A	N/A	N/A	N/A	0.00	A Mork*	MF
Lab Total Residual Cl_2 (mg/L):	<0.03	--					<0.03	KMS	BA
Alkalinity (mg/L as $CaCO_3$):	87	135					198	BA	MF
Hardness (mg/L as $CaCO_3$):	84	141					214	BA	MF
Total Ammonia (mg/L as N):	<0.017	<0.017				[illegible]	<0.017	MF	BA
Conductivity: ☒ µmhos ☐ mmhos	198	281					1172	JD	BA
Salinity (ppth):	—	—					—	—	—

* Field samplers on submittal form MF 6/9/10

V 1.8 1/13/10

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Appendix B. Continued

FDEP Biology Laboratory - Bioassay Survival Bench Sheet

LIMS Sample # 1272402 **SOP#: TA 07** 01 **Test #** 1 **of** 2

Test Species:
Batch #: 14.10 Age: <24hrs
- [X] *Ceriodaphnia dubia*
- [ ] *Cyprinella leedsi*
- [ ] *Pimephales promelas*
- [ ] *Menidia beryllina*
- [ ] *Americamysis bahia*
- [ ] Other:______

Test Validation
Control Survival ≥ 90%: [X] Yes [ ] No
Temperature Range ≤ 3° C: [X] Yes [ ] No

Diluent (Batch # 5.11.10 **)**
[ ] ASW [X] 20% DMW
[ ] MHW [ ] Well

Test Type: [X] Acute [ ] Definitive
[ ] Static [X] Static Renewal [ ] Flow-Through

Test Duration: [ ] 48 hr [X] 96 hr [ ] __hr

Chamber Size 30 **ml**
Test Volume: 20 **ml**

Test Started: Date 5-19-10 Time 1100

Test Ended: Date 5.23.10 Time 1505

Concentration	Replicate	Chamber #	0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
Ctrl	A	A	5	5	5	5	5	5
	B	B	5	5	5	5	5	5
	C	C	5	5	5	5	5	5
	D	D	5	5	5	5	5	5
100%	A	A	5	5	5	5 (A) 4 10.5	5	5
	B	B	5	5	5	5	5	5
	C	C	5	5	5	5	5	5
	D	D	5	5	5	5	5	5
Checked or Verified by:			JD	KMM	BA	KMR by MF	MF	BA

Food
- [X] YCT Batch# 10.30.09
- [X] P. subcapitata Batch# 12.23.09
- [ ] Artemia Lot#______

Feeding and Artemia Batch #
- [X] 0 hr____ [X] Prior to Test
- [ ] 24 hr____
- [X] 48 hr____ [X] Prior to Renewal
- [ ] 72 hr____

Temperature Range (°C)

Incubator # 2
min. 25.1 max. 27.2 mean 26.2

Incubator #___
min.______max.______mean______

Waterbath #___
min.______max.______mean______

Room B246
min. 25.1 max. 25.8 mean 25.5

Light intensity (ft. candles): 50-100

Photoperiod (hours): 16 light, 8 dark

Loaded/ Verified by: KMF BA

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%
Calculated LC50 (Definitive) 95% CI______ Method______

Comments: (A)
KMR: WROTE MORE FOR WRONG TEST

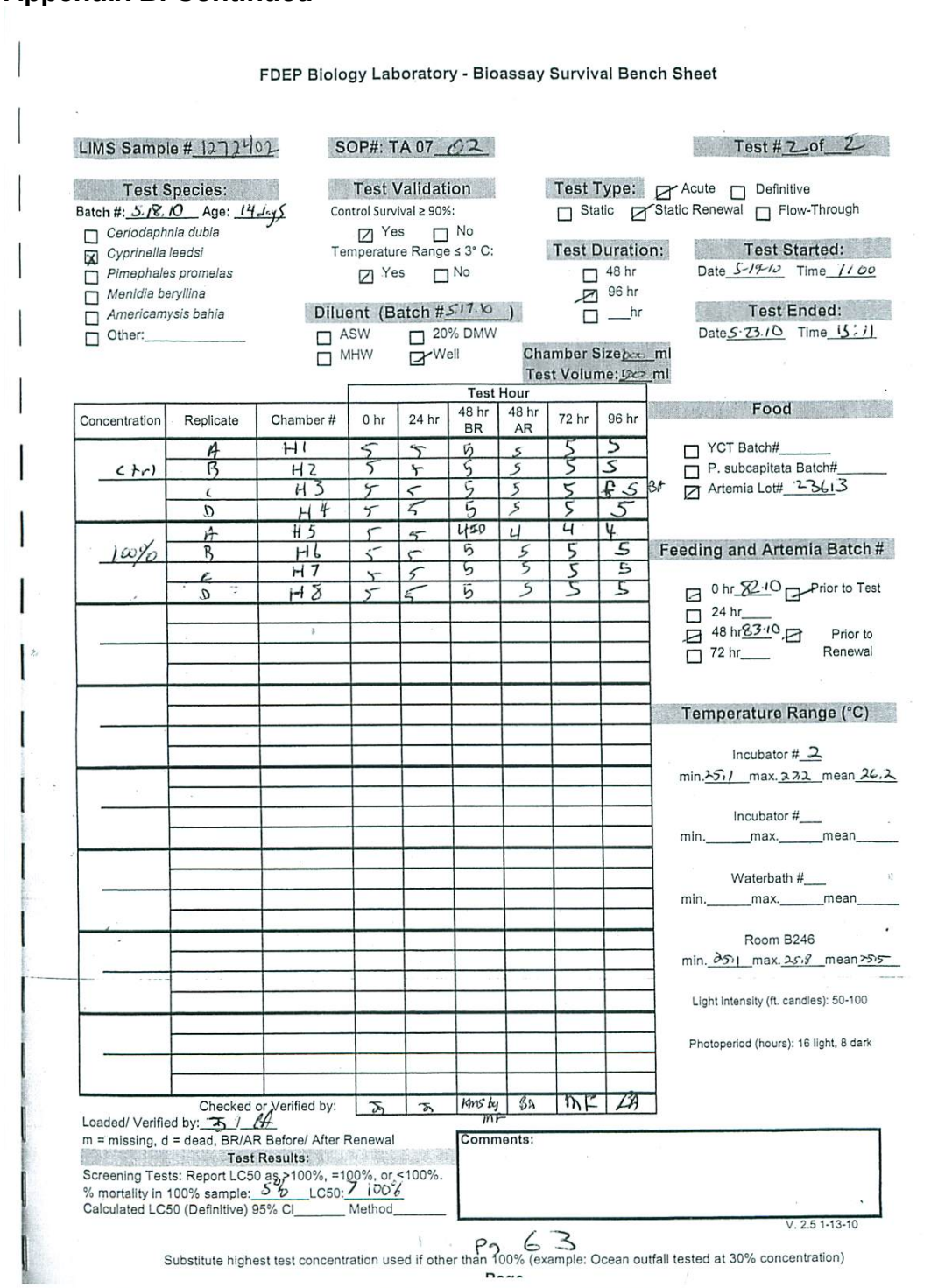
V. 2.5 1-13-10

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

Page

Appendix B. Continued



FDEP Biology Laboratory - Bioassay Survival Bench Sheet

LIMS Sample # 127402 SOP#: TA 07_02 Test # 2 of 2

Test Species:
Batch #: 5.18.10 Age: 14 days
- ☐ *Ceriodaphnia dubia*
- ☒ *Cyprinella leedsi*
- ☐ *Pimephales promelas*
- ☐ *Menidia beryllina*
- ☐ *Americamysis bahia*
- ☐ Other:_____

Test Validation
Control Survival ≥ 90%: ☑ Yes ☐ No
Temperature Range ≤ 3° C: ☑ Yes ☐ No

Diluent (Batch #5.17.10)
☐ ASW ☐ 20% DMW
☐ MHW ☑ Well

Test Type: ☑ Acute ☐ Definitive
☐ Static ☑ Static Renewal ☐ Flow-Through

Test Duration:
☐ 48 hr
☑ 96 hr
☐ ___hr

Chamber Size: ___ ml
Test Volume: ___ ml

Test Started: Date 5-19-10 Time 1100

Test Ended: Date 5-23-10 Time 1511

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
Ctrl	A	H1	5	5	5	5	5	5
	B	H2	5	5	5	5	5	5
	C	H3	5	5	5	5	5	5 BF
	D	H4	5	5	5	5	5	5
100%	A	H5	5	5	4 50	4	4	4
	B	H6	5	5	5	5	5	5
	C	H7	5	5	5	5	5	5
	D	H8	5	5	5	5	5	5
Checked or Verified by:			JS	JS	KMS by MF	BA	MF	LA

Loaded/ Verified by: JS / LA
m = missing, d = dead, BR/AR Before/ After Renewal

Food
- ☐ YCT Batch#_____
- ☐ P. subcapitata Batch#_____
- ☑ Artemia Lot# 23613

Feeding and Artemia Batch #
- ☑ 0 hr 82.10 ☑ Prior to Test
- ☐ 24 hr____
- ☑ 48 hr 83.10 ☑ Prior to Renewal
- ☐ 72 hr____

Temperature Range (°C)
Incubator # 2
min. 25.1 max. 27.2 mean 26.2
Incubator #___
min._____max._____mean_____
Waterbath #___
min._____max._____mean_____
Room B246
min. 25.1 max. 25.8 mean 25.5
Light Intensity (ft. candles): 50-100
Photoperiod (hours): 16 light, 8 dark

Test Results:
Screening Tests: Report LC50 as >100%, =100%, or <100%.
% mortality in 100% sample: 50 LC50: > 100%
Calculated LC50 (Definitive) 95% CI_____ Method_____

Comments:

V. 2.5 1-13-10

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

Appendix B. Continued

FDEP Biology Laboratory - Bioassay Parameter Sheet

LIMS Sample # 1272402 Test # 1 of 2

Test Species:

☒ *Ceriodaphnia dubia* ☐ *Pimephales promelas* ☐ *Americamysis bahia*
☐ *Cyprinella leedsi* ☐ *Menidia beryllina* ☐ Other:_____

Test aerated: (if DO is < 4.0 mg/L) ☐ Yes ☒ No

Concentration	Replicate	Test Hour	pH (SU)	Temperature (°C)	Dissolved Oxygen (mg/L)	Conductivity ☒ µmhos ☐ mmhos	Salinity* (ppth)
	A	0 hr	8.2	25.3	7.9	198	
	"	24 hr	"	"	"	"	
Ctrl	A	48 hr BR	7.9	24.0	7.5	211	
	M	48 hr AR	7.9	24.0	7.6	182	
	"	72 hr	"	"	"	"	
	A	96 hr	8.0	24.2	7.7	218	
	A	0 hr	7.7	25.8	8.0	1171	
	"	24 hr	"	"	"	"	
100%	A	48 hr BR	8.3	24.0	7.7	1318	
	M	48 hr AR	7.7	24.0	7.6	1201	
	"	72 hr	"	"	"	"	
	A	96 hr	8.4	24.0	6.8	1349	
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					

*Measure/ record salinity for marine tests

Comments:

Measured By:
0 hr: BS
24 hr: —
48 hr BR: BA
48 hr AR: BA
72 hr: —
96 hr: BA

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V. 2.3 1-13-10

Appendix B. Continued

FDEP Biology Laboratory - Bioassay Parameter Sheet

LIMS Sample # 1272402 Test # 2 of 3

Test Species:

☐ *Ceriodaphnia dubia* ☐ *Pimephales promelas* ☐ *Americamysis bahia*
☒ *Cyprinella leedsi* ☐ *Menidia beryllina* ☐ Other:_____

Test aerated: (if DO is < 4.0 mg/L) ☐ Yes ☑ No

Concentration	Replicate	Test Hour	pH (SU)	Temperature (°C)	Dissolved Oxygen (mg/L)	Conductivity ☒ µmhos ☒ ~~mmhos~~	Salinity* (ppth)
Ctrl	A	0 hr	7.9	25.9	7.7	281	
	B	24 hr	8.2	24.9	7.4	326	
	C	48 hr BR	8.3	25.0	7.5	303	
	C	48 hr AR	8.1	25.1	7.4	296	
	D	72 hr	8.3	24.9	7.7	284	
	A	96 hr	8.3	24.0	6.9	288	
100%	A	0 hr	7.7	25.8	7.8	1172	
	B	24 hr	8.2	25.3	7.1	1194	
	C	48 hr BR	8.4	24.8	7.5	1206	
	C	48 hr AR	7.8 fmb	25.4	7.4	1186	
	D	72 hr	8.2	25.2	7.5	1227	
	A	96 hr	8.4	24.0	6.9	1248	
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					
		0 hr					
		24 hr					
		48 hr BR					
		48 hr AR					
		72 hr					
		96 hr					

*Measure/ record salinity for marine tests

Comments:

Measured By:
0 hr: [illegible]
24 hr: VMT
48 hr BR: VMT
48 hr AR: VMT
72 hr: MF
96 hr: [illegible]

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V. 2.3 1-13-10

Appendix B. Continued

Bioassay Instrument ID

Test ID: Ptmyra Control Dates: 5/19/2010 - 5/23/2010 ~~5-19-23-10 am~~

METER / DEVICE	ID	SOP	Parameter	Method	v 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	SM 2510 B	✓
			Salinity	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 of electronic and non-mercury filled thermometers.

Insert other device information in blank spaces(if used). Test ID = Facility or SRTs (acute SRT--Chronic SRT)

entered by MF 6-15-10

V 1.1 6/12/08 MF

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Appendix C. SRT Bench Sheets and Statistical Analysis

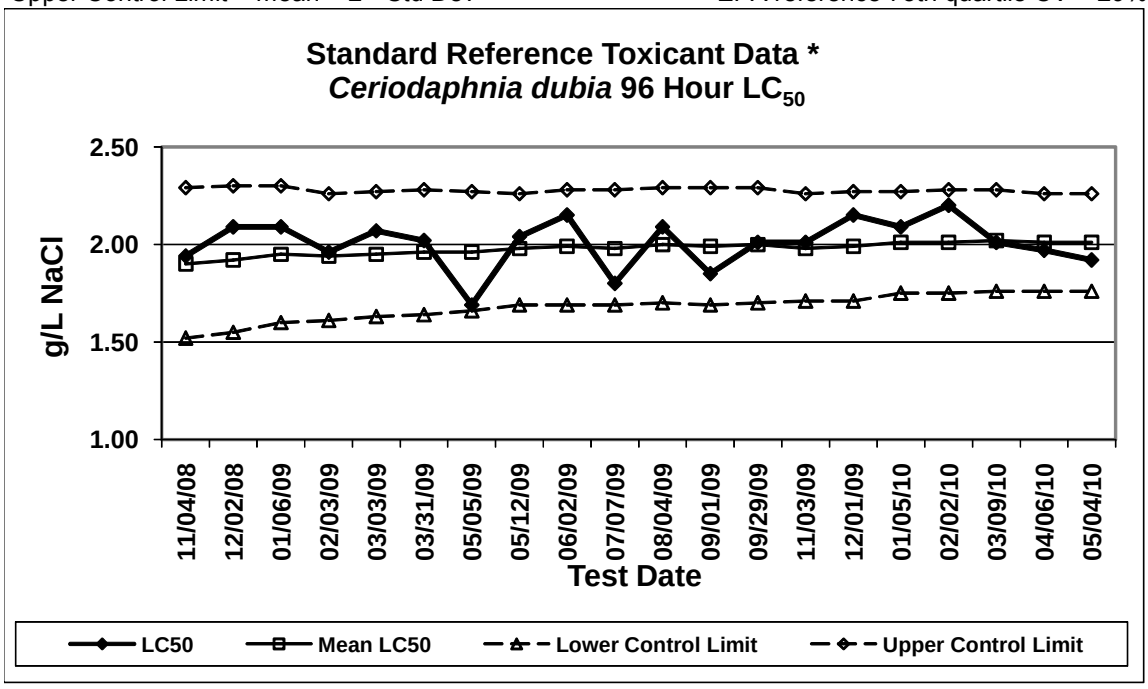
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 96-hour Acute Toxicity
Ceriodaphnia dubia (water flea) - Sodium Chloride (NaCl)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
11/04/08	1.94	1.90	0.19	1.52	2.29
12/02/08	2.09	1.92	0.19	1.55	2.30
01/06/09	2.09	1.95	0.17	1.60	2.30
02/03/09	1.96	1.94	0.16	1.61	2.26
03/03/09	2.07	1.95	0.16	1.63	2.27
03/31/09	2.02	1.96	0.16	1.64	2.28
05/05/09	1.69	1.96	0.15	1.66	2.27
05/12/09	2.04	1.98	0.14	1.69	2.26
06/02/09	2.15	1.99	0.15	1.69	2.28
07/07/09	1.80	1.98	0.15	1.69	2.28
08/04/09	2.09	2.00	0.15	1.70	2.29
09/01/09	1.85	1.99	0.15	1.69	2.29
09/29/09	2.01	2.00	0.15	1.70	2.29
11/03/09	2.01	1.98	0.14	1.71	2.26
12/01/09	2.15	1.99	0.14	1.71	2.27
01/05/10	2.09	2.01	0.13	1.75	2.27
02/02/10	2.20	2.01	0.13	1.75	2.28
03/09/10	2.01	2.02	0.13	1.76	2.28
04/06/10	1.97	2.01	0.12	1.76	2.26
05/04/10	1.92	2.01	0.12	1.76	2.26

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

CV = 6.20
EPA reference 75th quartile CV = 29%



Appendix C. (continued)

Florida Department of Environmental Protection
Bureau of Laboratories

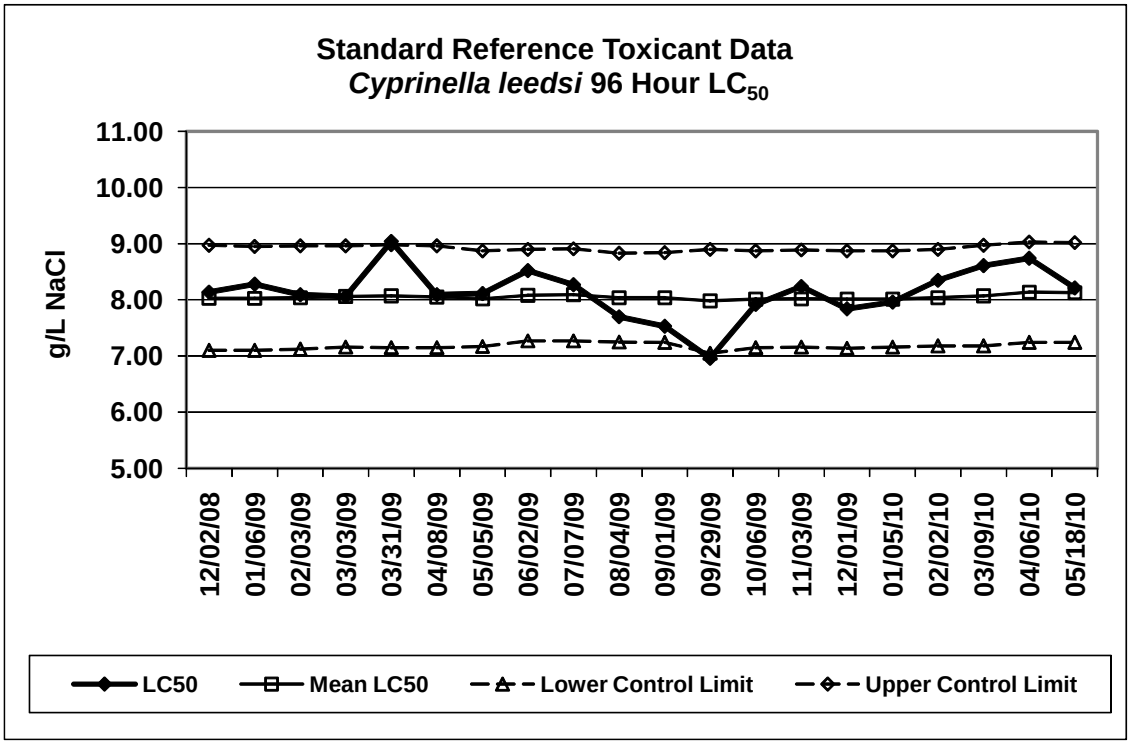
Standard Reference Toxicant (SRT) Test Data - 96-hour Acute Toxicity
Cyprinella leedsi (bannerfin shiner) - Sodium Chloride (NaCl)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
12/02/08	8.14	8.03	0.47	7.10	8.97
01/06/09	8.28	8.03	0.46	7.10	8.95
02/03/09	8.09	8.04	0.46	7.12	8.96
03/03/09	8.06	8.06	0.45	7.16	8.96
03/31/09	9.04	8.07	0.46	7.15	8.98
04/08/09	8.09	8.05	0.45	7.15	8.96
05/05/09	8.11	8.02	0.43	7.17	8.87
06/02/09	8.52	8.08	0.41	7.27	8.90
07/07/09	8.27	8.09	0.41	7.27	8.91
08/04/09	7.70	8.04	0.40	7.25	8.83
09/01/09	7.53	8.04	0.40	7.24	8.84
09/29/09	6.96	7.98	0.46	7.05	8.90
10/06/09	7.92	8.01	0.43	7.15	8.87
11/03/09	8.24	8.02	0.43	7.16	8.89
12/01/09	7.84	8.01	0.43	7.14	8.87
01/05/10	7.96	8.01	0.43	7.16	8.87
02/02/10	8.35	8.04	0.43	7.18	8.90
03/09/10	8.61	8.07	0.45	7.18	8.97
04/06/10	8.74	8.14	0.45	7.24	9.03
05/18/10	8.21	8.13	0.45	7.24	9.02

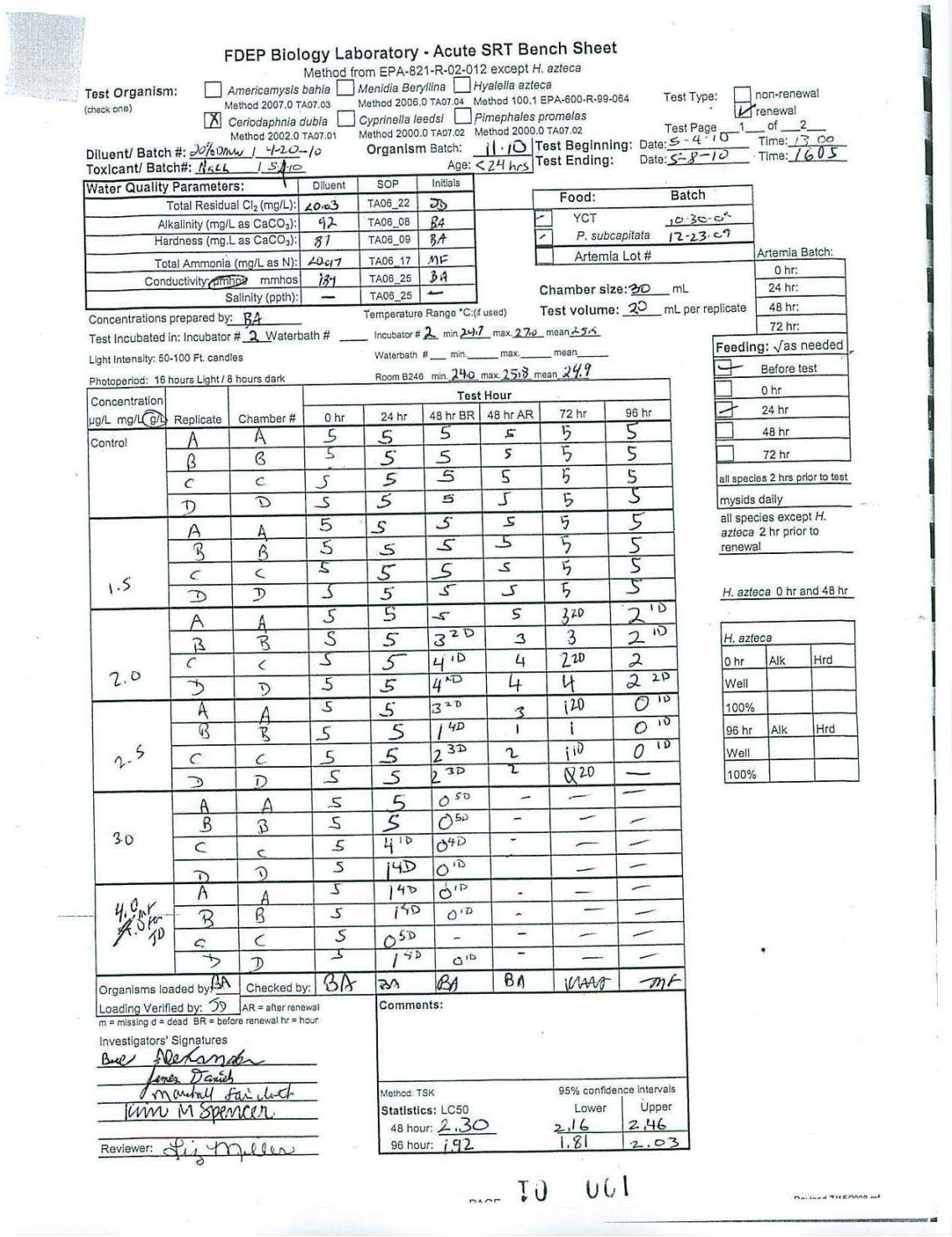
NOTE: Test of 5/4/2010 invalidated due to concentration error (96 hr LC50 of 8.76 g/L not plotted)

Lower Confidence Limit = mean - 2 * Std Dev **CV = 5.48**

Upper Confidence Limit = mean + 2 * Std Dev EPA reference 75th quartile CV = 19%



Appendix C. (continued)



FDEP Biology Laboratory - Acute SRT Bench Sheet

Method from EPA-821-R-02-012 except *H. azteca*

Test Organism: (check one) ☐ *Americamysis bahia* Method 2007.0 TA07.03 ☐ *Menidia Beryllina* Method 2006.0 TA07.04 ☐ *Hyalella azteca* Method 100.1 EPA-600-R-99-064 ☒ *Ceriodaphnia dubia* Method 2002.0 TA07.01 ☐ *Cyprinella leedsi* Method 2000.0 TA07.02 ☐ *Pimephales promelas* Method 2000.0 TA07.02

Test Type: ☐ non-renewal ☑ renewal

Test Page 1 of 2

Diluent/ Batch #: 20%DMW / 4-20-10

Toxicant/ Batch#: NaCl / 1.5/10

Organism Batch: 11.10 Age: < 24 hrs

Test Beginning: Date: 5-4-10 Time: 13 00

Test Ending: Date: 5-8-10 Time: 1605

Water Quality Parameters:	Diluent	SOP	Initials
Total Residual Cl_2 (mg/L):	<0.03	TA06_22	ZD
Alkalinity (mg/L as $CaCO_3$):	92	TA06_08	BA
Hardness (mg.L as $CaCO_3$):	87	TA06_09	BA
Total Ammonia (mg/L as N):	<0.17	TA06_17	MF
Conductivity: ~~µmhos~~ mmhos	181	TA06_25	BA
Salinity (ppth):	—	TA06_25	—

Food:	Batch
✓ YCT	10-30-09
✓ *P. subcapitata*	12-23-09
☐ Artemia Lot #	

Artemia Batch:

0 hr:

24 hr:

48 hr:

72 hr:

Chamber size: 30 mL

Test volume: 20 mL per replicate

Concentrations prepared by: BA

Temperature Range °C:(if used)

Test Incubated in: Incubator # 2 Waterbath # ____ Incubator # 2 min. 24.7 max. 27.0 mean 25.5

Light Intensity: 50-100 Ft. candles Waterbath # ___ min. ____ max. ____ mean ____

Photoperiod: 16 hours Light / 8 hours dark Room B246 min. 24.0 max. 25.8 mean 24.9

Feeding: √as needed

☐ Before test

☐ 0 hr

☑ 24 hr

☐ 48 hr

☐ 72 hr

all species 2 hrs prior to test

mysids daily

all species except *H. azteca* 2 hr prior to renewal

H. azteca 0 hr and 48 hr

Concentration µg/L mg/L g/L	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
Control	A	A	5	5	5	5	5	5
	B	B	5	5	5	5	5	5
	C	C	5	5	5	5	5	5
	D	D	5	5	5	5	5	5
1.5	A	A	5	5	5	5	5	5
	B	B	5	5	5	5	5	5
	C	C	5	5	5	5	5	5
	D	D	5	5	5	5	5	5
2.0	A	A	5	5	5	5	3 2D	2 1D
	B	B	5	5	3 2D	3	3	2 1D
	C	C	5	5	4 1D	4	2 2D	2
	D	D	5	5	4 1D	4	4	2 2D
2.5	A	A	5	5	3 2D	3	1 2D	0 1D
	B	B	5	5	1 4D	1	1	0 1D
	C	C	5	5	2 3D	2	1 1D	0 1D
	D	D	5	5	2 3D	2	X 2D	—
3.0	A	A	5	5	0 5D	—	—	—
	B	B	5	5	0 5D	-	—	—
	C	C	5	4 1D	0 4D	-	—	—
	D	D	5	1 4D	0 1D		—	—
4.0 ~~4.5~~ for TD	A	A	5	1 4D	0 1D	-	—	—
	B	B	5	1 4D	0 1D	-	—	—
	C	C	5	0 5D	-	-	—	—
	D	D	5	1 4D	0 1D	-	—	—

H. azteca		
0 hr	Alk	Hrd
Well		
100%		
96 hr	Alk	Hrd
Well		
100%		

Organisms loaded by: BA Checked by: BA ZD BA BA MF MF

Loading Verified by: SD AR = after renewal

m = missing d = dead BR = before renewal hr = hour

Comments:

Investigators' Signatures

Brian DeRamo

James Daniels

Marshall Faircloth

Kim M Spencer

Reviewer: Liz Miller

Method: TSK

Statistics: LC50	95% confidence intervals Lower	Upper
48 hour: 2.30	2.16	2.46
96 hour: 1.92	1.81	2.03

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Appendix C. (continued)

FDEP Biology Laboratory - Acute SRT Bench Sheet
0-96 hour parameters

Methods from EPA-821-R-02-012 except *H. azteca*

Test Page 2 of 2

Test Organism: (check one)
- ☐ *Americamysis bahia* Method 2007.0 TA07.03
- ☐ *Menidia Beryllina* Method 2006.0 TA07.04
- ☐ *Hyalella azteca* Method 100.1 EPA-600-R-99-064
- ☒ *Ceriodaphnia dubia* Method 2002.0 TA07.01
- ☐ *Cyprinella leedsi* Method 2000.0 TA07.02
- ☐ *Pimephales promelas* Method 2000.0 TA07.02

Test Beginning: Date: 5-4-10 Time: 1300
Test Ending: Date: 5-8-10 Time: 1605

Test Type: ☐ non-renewal ☒ renewal

hr = hour AR = after renewal BR = before renewal

Concentration µg/L mg/L (%)	Replicate	Test Hour	pH (SU)	Temperature (° C)	Dissolved Oxygen (mg/L)	Conductivity ☐ µmhos ☒ mmhos	Salinity (ppth)	
Control	M	0 hr	8.0	24.0	7.6	0.184		
		24 hr				~~0.~~		
	M	48 hr BR	8.0	24.0	7.6	0.181		A
	A	48 hr AR	8.1	24.0	7.3	0.199		
		72 hr						
	A	96 hr	8.2	25.1	7.8	0.195		
1.5	M	0 hr	8.1	24.1	7.6	2.89		
		24 hr						
	M	48 hr BR	8.0	24.0	7.6	3.01		A
	A	48 hr AR	8.0	24.0	7.5	3.31		
		72 hr						
	A	96 hr	8.1	25.0	8.0	3.17		
2.0	M	0 hr	8.1	24.0	7.5	3.85		
		24 hr						
	M	48 hr BR	8.1	24.0	7.3	3.93		A
	A	48 hr AR	8.0	24.0	7.4	4.21		
		72 hr						
	A	96 hr	8.1	24.7	7.9	4.14		
2.5	M	0 hr	8.1	24.0	7.5	4.67		
		24 hr						
	M	48 hr BR	8.1	24.0	7.4	4.81		A
	A	48 hr AR	8.1	24.0	7.3	5.14		
		72 hr						
	A	96 hr	8.1	24.6	8.7	4.98		
3.0	M	0 hr	8.1	24.0	7.5	5.62		
		24 hr						
	M	48 hr BR	8.1	24.0	7.4	5.74		A
	A	48 hr AR	8.1	24.0	7.4	6.41		
		72 hr						
		96 hr						
4.0	M	0 hr	8.1	24.0	7.5	7.37		
		24 hr						
	A	48 hr BR	8.1	24.0	7.4	8.75		
		48 hr AR						
		72 hr						
		96 hr		BA wrong place		BA wrong place		

Investigators Signatures
Marshall Faircloth
Kim M Spencer

Reviewed By: Liz Miller

Measured by:
0 hr: BA
24 hr: —
48 hr BR: BA
48 hr AR: BA
72 hr: —
96 hr: MF

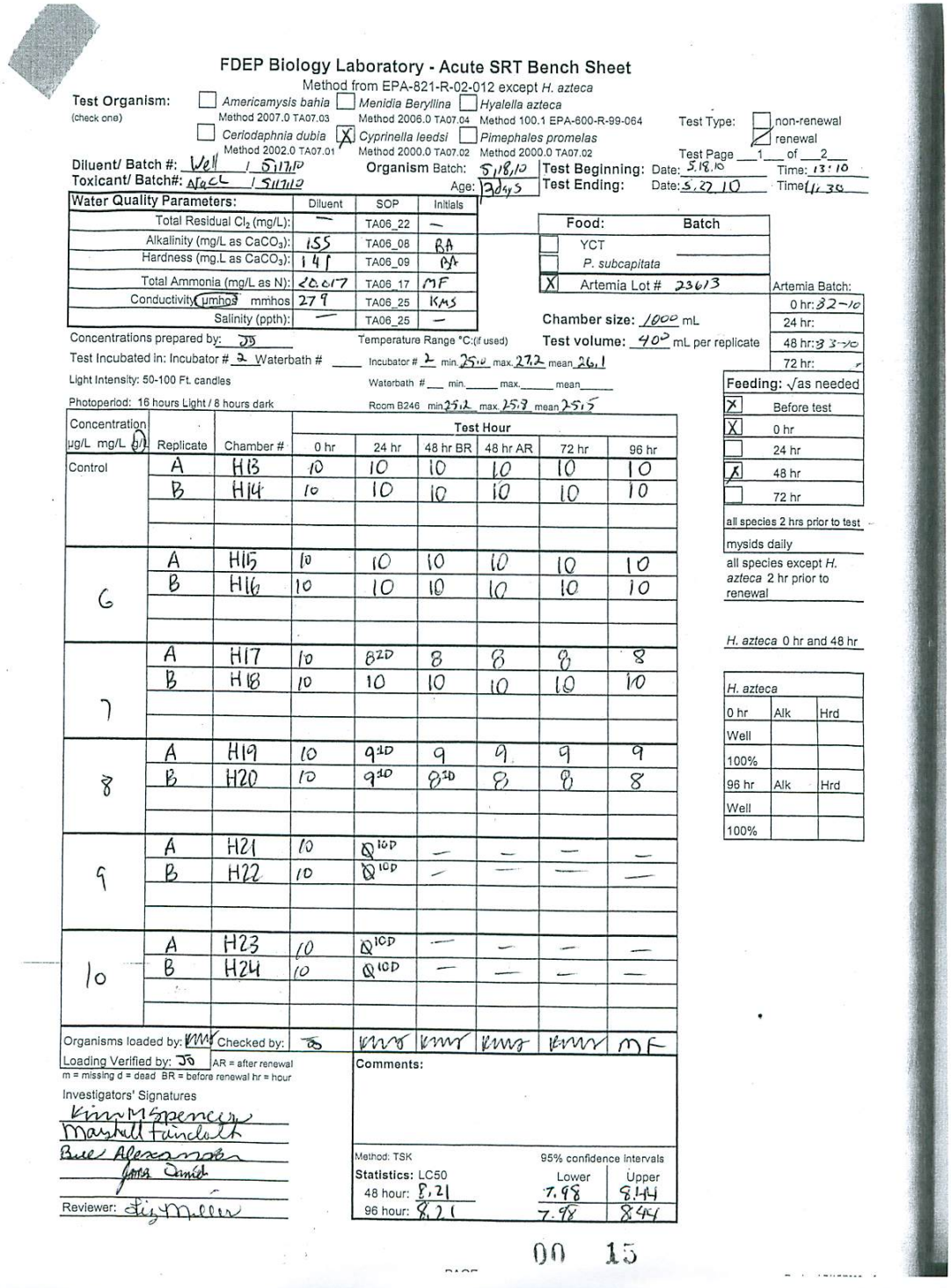
Measure/record salinity for marina tests

Comments: (A) 48hr BR & 48 AR switched - BA

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Revised 07/15/2008 MF

Appendix C. (continued)



FDEP Biology Laboratory - Acute SRT Bench Sheet

Method from EPA-821-R-02-012 except *H. azteca*

Test Organism: (check one)
- ☐ *Americamysis bahia* Method 2007.0 TA07.03
- ☐ *Menidia Beryllina* Method 2006.0 TA07.04
- ☐ *Hyalella azteca* Method 100.1 EPA-600-R-99-064
- ☐ *Ceriodaphnia dubia* Method 2002.0 TA07.01
- ☒ *Cyprinella leedsi* Method 2000.0 TA07.02
- ☐ *Pimephales promelas* Method 2000.0 TA07.02

Test Type: ☐ non-renewal ☑ renewal

Test Page 1 of 2

Diluent/ Batch #: Well / 5117.10

Toxicant/ Batch#: NaCl / 5117.10

Organism Batch: 5/18/10 Age: 3 days

Test Beginning: Date: 5.18.10 Time: 13:10

Test Ending: Date: 5.22.10 Time: 11:30

Water Quality Parameters:	Diluent	SOP	Initials
Total Residual Cl_2 (mg/L):	—	TA06_22	—
Alkalinity (mg/L as $CaCO_3$):	155	TA06_08	BA
Hardness (mg.L as $CaCO_3$):	141	TA06_09	BA
Total Ammonia (mg/L as N):	<0.017	TA06_17	MF
Conductivity (µmhos mmhos)	279	TA06_25	KMS
Salinity (ppth):	—	TA06_25	—

Food:	Batch
☐ YCT	
☐ *P. subcapitata*	
☒ Artemia Lot # 23613	

Artemia Batch:
- 0 hr: 32-10
- 24 hr:
- 48 hr: 33-10
- 72 hr:

Chamber size: 1000 mL

Test volume: 400 mL per replicate

Concentrations prepared by: JS

Temperature Range °C:(if used)

Test Incubated in: Incubator # 2 Waterbath # ____ Incubator # 2 min. 25.0 max. 27.2 mean 26.1

Light Intensity: 50-100 Ft. candles

Waterbath # ___ min. ____ max. ____ mean ____

Photoperiod: 16 hours Light / 8 hours dark

Room B246 min 25.2 max 25.8 mean 25.5

Feeding: √as needed
- ☒ Before test
- ☒ 0 hr
- ☐ 24 hr
- ☒ 48 hr
- ☐ 72 hr

all species 2 hrs prior to test

mysids daily

all species except *H. azteca* 2 hr prior to renewal

H. azteca 0 hr and 48 hr

Concentration µg/L mg/L g/L	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
Control	A	H13	10	10	10	10	10	10
	B	H14	10	10	10	10	10	10
6	A	H15	10	10	10	10	10	10
	B	H16	10	10	10	10	10	10
7	A	H17	10	8 2D	8	8	8	8
	B	H18	10	10	10	10	10	10
8	A	H19	10	9 1D	9	9	9	9
	B	H20	10	9 1D	8 1D	8	8	8
9	A	H21	10	Ø 10D	—	—	—	—
	B	H22	10	Ø 10D	—	—	—	—
10	A	H23	10	Ø 10D	—	—	—	—
	B	H24	10	Ø 10D	—	—	—	—
Organisms loaded by: KMS	Checked by:		KMS	KMS	KMS	KMS	MF	

Loading Verified by: JS AR = after renewal

m = missing d = dead BR = before renewal hr = hour

H. azteca		
0 hr	Alk	Hrd
Well		
100%		
96 hr	Alk	Hrd
Well		
100%		

Comments:

Investigators' Signatures

Kim Mspencer

Marshall Faircloth

Bree Alexander

Jess Smith

Reviewer: Liz Miller

Method: TSK — 95% confidence Intervals

Statistics: LC50	Lower	Upper
48 hour:	8.21	7.98	8.44
96 hour:	8.21	7.98	8.44

00 15

Appendix C. (continued)

FDEP Biology Laboratory - Acute SRT Bench Sheet
0-96 hour parameters

Methods from EPA-821-R-02-012 except *H. azteca*

Test Page 2 of 2

Test Organism: (check one)
- ☐ *Americamysis bahia* Method 2007.0 TA07.03
- ☐ *Menidia Beryllina* Method 2006.0 TA07.04
- ☐ *Hyalella azteca* Method 100.1 EPA-600-R-99-064
- ☐ *Ceriodaphnia dubia* Method 2002.0 TA07.01
- ☑ *Cyprinella leedsi* Method 2000.0 TA07.02
- ☐ *Pimephales promelas* Method 2000.0 TA07.02

Test Beginning: Date: 5.18.10 Time: 13:10
Test Ending: Date: 5.22.10 Time: 11:20

Test Type: ☐ non-renewal ☑ renewal

hr = hour AR = after renewal BR = before renewal

Concentration µg/L mg/L ‰	Replicate	Test Hour	pH (SU)	Temperature (°C)	Dissolved Oxygen (mg/L)	Conductivity ☐ µmhos ☑ mmhos	Salinity (ppth)
Control	A	0 hr	7.8	25.9	7.9	0.279	—
	B	24 hr	8.1	25.0	7.1	0.333	—
	A	48 hr BR	8.2	24.9	7.0	0.309	—
	A	48 hr AR	8.1	24.8	7.6	0.296	—
	B	72 hr	8.2	25.1	7.3	0.293	—
	A	96 hr	8.2	25.9	7.2	0.300	—
6	A	0 hr	7.9	25.9	7.7	10.8	—
	B	24 hr	8.0	24.9	6.5	10.2	—
	A	48 hr BR	8.1	24.8	7.0	10.5	—
	A	48 hr AR	8.0	25.4	7.4	10.8	—
	B	72 hr	8.0	25.0	6.9	10.9	—
	A	96 hr	8.0	25.8	6.7	11.5	—
7	A	0 hr	8.0	25.9	7.6	13.1	—
	B	24 hr	8.0	24.8	6.5	12.7	—
	A	48 hr BR	8.1	24.8	7.0	13.1	—
	A	48 hr AR	8.0	25.6	7.3	12.4	—
	B	72 hr	8.0	24.9	6.9	12.4	—
	A	96 hr	8.1	25.8	6.5	12.8	—
8	A	0 hr	8.0	25.9	7.6	14.6	—
	B	24 hr	8.0	24.7	6.3	14.1	—
	A	48 hr BR	8.1	25.1	7.0	14.7	—
	A	48 hr AR	8.0	25.9	7.2	14.7	—
	B	72 hr	8.0	24.8	7.0	14.9	—
	A	96 hr	8.1	25.9	6.6	15.2	—
9	A	0 hr	~~8.0~~ 7.6	25.9	7.6	16.2	—
	B	24 hr	7.9	24.8	6.0	15.7	—
		48 hr BR	—	—	—	—	—
		48 hr AR	—	—	—	—	—
		72 hr	—	—	—	—	—
		96 hr					
10	A	0 hr	7.8	25.9	7.6	18.2	—
	B	24 hr	7.7	24.8	5.3	17.5	—
		48 hr BR	—	—	—	—	—
		48 hr AR	—	—	—	—	—
		72 hr	—	—	—	—	—
		96 hr					

Investigators Signatures
Kim M Spencer
Marshall Faircloth
Bree Alexander
Jane Daniels

Reviewed By: Liz Fuller

Measured by:
0 hr: KMS
24 hr: KMS
48 hr BR: KMS
48 hr AR: KMS
72 hr: KMS
96 hr: MF

Measure/record salinity for marine tests

Comments: (A) 7.8 MF for KMS 6-1-10

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Revised 07/15/2008 MF

Appendix C. (continued)

DATE: 5-4-10 DURATION: 96 h TOXICANT : NaCl
SPECIES: *Ceriodaphnia dubia*

RAW DATA: Concentration (g/L)	Number Exposed	Mortalities
.00	20	0
1.50	20	0
2.00	20	12
2.50	20	20
3.00	20	20
4.00	20	20

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES**:** **LC50: 1.92**
95% LOWER CONFIDENCE: 1.81
95% UPPER CONFIDENCE: 2.03

DATE: 5-18-10 DURATION: 96 h TOXICANT: NaCl

SPECIES: *Cyprinella leedsi*

RAW DATA: Concentration (g/L)	Number Exposed	Mortalities
.00	20	0
6.00	20	0
7.00	20	2
8.00	20	3
9.00	20	20
10.00	20	20

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: **LC50: 8.21**
95% LOWER CONFIDENCE: 7.98
95% UPPER CONFIDENCE: 8.44

Appendix D. Test Organism Receipt

MARINCO BIOASSAY LABORATORY
The Aquatic Toxicology Specialists

NELAP Certification # E84191

Shipment Record

State of Florida Aquaculture Certificate Number AQ0668007

Shipping Date: 5/17/10

Ship to: FDEP

P.O. No:

Species	Quantity	Age	Brood/Lot Number	Temp. (°C)	pH (S.U.)	Salinity (‰)
Mysidopsis bahia						
Menidia beryllina						
						Hardness mg/L
Cyprinella leedsi	~~1000~~					
	200	12 DAYS	CL100505	25	7.8	80
Pimephales promelas						
Ceriodaphnia dubia						
Daphnia magna						
YCT						
P. subcapitata						

Packed by:

Shipped Via: FedEx

Notes:

Thank you for your order.

4569 Samuel Street · Sarasota, FL 34233 · Tel: 941-925-3594 · Fax: 941-922-3874 · Web: www.biologylab.com

Appendix E. Chemical Analyses performed on the effluent from the Fort Myers Central WWTP Plant Outfall D001, sampled on May 17-18, 2010.

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 12:00	EFD01 comp	Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	L	LC50		
5/18/2010 12:00	EFD01 comp	Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	L	LC50		
5/18/2010 12:00	EFD01 comp	Field Parameter	Specific Conductance	1024		umhos/cm		
5/18/2010 12:00	EFD01 comp	Field Parameter	Temperature	11.14		C		
5/18/2010 12:00	EFD01 comp	Field Parameter	Dissolved Oxygen	9.65		mg/L		
5/18/2010 9:00	EFD01 grab	AGP/LN	Algal Growth Potential	21.2		mg DryWt/L	0.3	0.9
5/18/2010 9:00	EFD01 grab	AGP/LN	Algal Growth Potential-Salinity Adjusted	3	U	mg DryWt/L	3	3
5/18/2010 9:00	EFD01 grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.55	U	ug/L	0.55	1.7
5/18/2010 9:00	EFD01 grab	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.6	I	mg/L	0.2	2
5/18/2010 9:00	EFD01 grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.4	U	ug/L	0.4	1.2
5/18/2010 9:00	EFD01 grab	Overflow	Fecal Coliforms-Membrane Filter	13		#/100 mL		
5/18/2010 9:00	EFD01 grab	Metals	Nickel	1.07		ug/L	0.25	1
5/18/2010 9:00	EFD01 grab	Metals	Lead	0.34	I	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Metals	Zinc	26		ug/L	5	20
5/18/2010 9:00	EFD01 grab	Metals	Selenium	0.2	U	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Metals	Silver	0.025	U	ug/L	0.025	0.1
5/18/2010 9:00	EFD01 grab	Metals	Cadmium	0.03	U	ug/L	0.03	0.12
5/18/2010 9:00	EFD01 grab	Metals	Copper	0.75	I	ug/L	0.5	1
5/18/2010 9:00	EFD01 grab	Metals	Aluminum	370		ug/L	60	240
5/18/2010 9:00	EFD01 grab	Metals	Calcium	75.8		mg/L	0.075	0.3
5/18/2010 9:00	EFD01 grab	Metals	Magnesium	11.6		mg/L	0.04	0.16
5/18/2010 9:00	EFD01 grab	Metals	Beryllium	0.025	U	ug/L	0.025	0.1
5/18/2010 9:00	EFD01 grab	Metals	Iron	75	I	ug/L	30	120
5/18/2010 9:00	EFD01 grab	Metals	Chromium	0.64	I	ug/L	0.3	1.2
5/18/2010 9:00	EFD01 grab	Metals	Antimony	0.41	I	ug/L	0.25	1
5/18/2010 9:00	EFD01 grab	Metals	Arsenic	1.1		ug/L	0.25	1
5/18/2010 9:00	EFD01 grab	Nutrients	NO2NO3-N	0.9		mg N/L	0.04	0.1
5/18/2010 9:00	EFD01 grab	Nutrients	TSS	4	U	mg/L	4	16
5/18/2010 9:00	EFD01 grab	Nutrients	Total-P	0.056		mg P/L	0.005	0.05
5/18/2010 9:00	EFD01 grab	Nutrients	Ammonia-N	0.023		mg N/L	0.01	0.02
5/18/2010 9:00	EFD01 grab	Nutrients	Fluoride	0.52		mg F/L	0.05	0.1
5/18/2010 9:00	EFD01 grab	Nutrients	Chloride	200		mg Cl/L	2	5
5/18/2010 9:00	EFD01 grab	Nutrients	O-Phosphate-P	0.01	I	mg P/L	0.004	0.01

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 9:00	EFD01 grab	Nutrients	Kjeldahl Nitrogen	0.91		mg N/L	0.08	0.2
5/18/2010 9:00	EFD01 grab	Overflow	MBAS	0.15	IJ	mg/l LAS	0.12	0.2
5/18/2010 9:00	EFD01 grab	Overflow	Oil and Grease	1.4	UY	mg/L	1.4	5
5/18/2010 9:00	EFD01 grab	Pesticides	Chlordane	0.2	U	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Pesticides	Ethion	0.05	U	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Metolachlor	0.5	U	ug/L	0.5	2
5/18/2010 9:00	EFD01 grab	Pesticides	Aldrin	0.01	U	ug/L	0.01	0.04
5/18/2010 9:00	EFD01 grab	Pesticides	Chlorpyrifos Methyl	0.1	U	ug/L	0.1	0.4
5/18/2010 9:00	EFD01 grab	Pesticides	Naled	0.8	UJ	ug/L	0.8	3.2
5/18/2010 9:00	EFD01 grab	Pesticides	Endosulfan I	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Metalaxyl	0.25	UJ	ug/L	0.25	1
5/18/2010 9:00	EFD01 grab	Pesticides	DDE-p,p'	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	DDT-p,p'	0.03	U	ug/L	0.03	0.12
5/18/2010 9:00	EFD01 grab	Pesticides	Endrin Aldehyde	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Fenamiphos	0.2	U	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Pesticides	Endrin	0.05	U	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Heptachlor Epoxide	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Toxaphene	0.75	U	ug/L	0.75	3
5/18/2010 9:00	EFD01 grab	Pesticides	Atrazine	0.079	I	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Fonofos	0.1	U	ug/L	0.1	0.4
5/18/2010 9:00	EFD01 grab	Pesticides	Malathion	0.15	U	ug/L	0.15	0.6
5/18/2010 9:00	EFD01 grab	Pesticides	Norflurazon	0.15	U	ug/L	0.15	0.6
5/18/2010 9:00	EFD01 grab	Pesticides	Parathion Ethyl	0.15	U	ug/L	0.15	0.6
5/18/2010 9:00	EFD01 grab	Pesticides	Alpha-BHC	0.01	U	ug/L	0.01	0.04
5/18/2010 9:00	EFD01 grab	Pesticides	Delta-BHC	0.01	U	ug/L	0.01	0.04
5/18/2010 9:00	EFD01 grab	Pesticides	Heptachlor	0.01	U	ug/L	0.01	0.04
5/18/2010 9:00	EFD01 grab	Pesticides	Azinphos Methyl	0.2	UJ	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Pesticides	Butylate	0.2	U	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Pesticides	Diazinon	0.05	U	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	DDD-p,p'	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Dieldrin	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Gamma-BHC	0.01	U	ug/L	0.01	0.04
5/18/2010 9:00	EFD01 grab	Pesticides	Alachlor	0.6	U	ug/L	0.6	2.4
5/18/2010 9:00	EFD01 grab	Pesticides	Chlorpyrifos Ethyl	0.05	U	ug/L	0.05	0.2

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 9:00	EFD01 grab	Pesticides	Ethoprop	0.1	U	ug/L	0.1	0.4
5/18/2010 9:00	EFD01 grab	Pesticides	Hexazinone	0.1	U	ug/L	0.1	0.4
5/18/2010 9:00	EFD01 grab	Pesticides	Parathion Methyl	0.1	U	ug/L	0.1	0.4
5/18/2010 9:00	EFD01 grab	Pesticides	Phorate	0.05	U	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Simazine	0.05	U	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Endosulfan II	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Endosulfan Sulfate	0.02	U	ug/L	0.02	0.08
5/18/2010 9:00	EFD01 grab	Pesticides	Methoxychlor	0.05	UJ	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Ametryn	0.05	U	ug/L	0.05	0.2
5/18/2010 9:00	EFD01 grab	Pesticides	Bromacil	0.2	U	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Pesticides	Metribuzin	0.1	U	ug/L	0.1	0.4
5/18/2010 9:00	EFD01 grab	Pesticides	Mevinphos	0.2	U	ug/L	0.2	0.8
5/18/2010 9:00	EFD01 grab	Pesticides	Prometryn	0.15	U	ug/L	0.15	0.6
5/18/2010 9:00	EFD01 grab	Pesticides	Beta-BHC	0.01	U	ug/L	0.01	0.04
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2-Chloronaphthalene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1	U	ug/L	3.1	12
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2	U	ug/L	2	8.2
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	61
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Benzidine	100	UJ	ug/L	100	410
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Butyl benzyl phthalate	5.1	U	ug/L	5.1	20
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Dimethyl phthalate	10	U	ug/L	10	41
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Hexachlorobutadiene	3.1	U	ug/L	3.1	12
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2-Chlorophenol	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Benzo(b)fluoranthene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Chrysene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Di-n-octyl phthalate	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Diethyl phthalate	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Fluorene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Isophorone	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2	U	ug/L	2	8.2
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Pentachlorophenol	3.1	UJ	ug/L	3.1	12

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	61
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2,6-Dinitrotoluene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	41	U	ug/L	41	160
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Acenaphthene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Anthracene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Benzo(a)anthracene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Benzo(a)pyrene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Benzo(k)fluoranthene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Hexachlorobenzene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Nitrobenzene	2	U	ug/L	2	8.2
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Pyrene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Bromodichloromethane	62		ug/L	0.2	1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2-Nitrophenol	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.1	U	ug/L	3.1	12
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Acenaphthylene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2	U	ug/L	2	8.2
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Chloroform	60		ug/L	0.2	1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Di-n-butyl phthalate	5.1	U	ug/L	5.1	20
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Fluoranthene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3.1	UJ	ug/L	3.1	12
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Phenanthrene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2,4-Dinitrotoluene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	15	U	ug/L	15	61
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Naphthalene	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2,4-Dichlorophenol	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	2,4-Dimethylphenol	10	U	ug/L	10	41
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.1	U	ug/L	3.1	12
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Hexachloroethane	3.1	U	ug/L	3.1	12

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Phenol	1	U	ug/L	1	4.1
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Bromoform	7.2		ug/L	0.5	2
5/18/2010 9:00	EFD01 grab	Priority Organic Pollutants	Dibromochloromethane	49		ug/L	0.2	1
5/18/2010 9:00	EFD01 grab	Field Parameter	Dissolved Oxygen	5.92		mg/L		
5/18/2010 9:00	EFD01 grab	Field Parameter	Temperature	24.74		C		
5/18/2010 9:00	EFD01 grab	Field Parameter	pH	7.56				
5/18/2010 9:00	EFD01 grab	Field Parameter	Specific Conductance	1170		umhos/cm		
5/18/2010 9:00	EFD01 grab	Field Parameter	Total Residual Chlorine	0.01		mg/L		
5/18/2010 9:00	#2	Overflow	Fecal Coliforms-Membrane Filter	8		#/100 mL		
5/18/2010 9:00	trip blank	Priority Organic Pollutants	Bromodichloromethane	0.2	U	ug/L	0.2	1
5/18/2010 9:00	trip blank	Priority Organic Pollutants	Bromoform	0.5	U	ug/L	0.5	2
5/18/2010 9:00	trip blank	Priority Organic Pollutants	Chloroform	0.2	U	ug/L	0.2	1
5/18/2010 9:00	trip blank	Priority Organic Pollutants	Dibromochloromethane	0.2	U	ug/L	0.2	1
5/18/2010 7:30	Field Blank	Metals	Copper	0.5	U	ug/L	0.5	1
5/18/2010 7:30	Field Blank	Metals	Silver	0.025	U	ug/L	0.025	0.1
5/18/2010 7:30	Field Blank	Metals	Lead	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Metals	Magnesium	0.04	U	mg/L	0.04	0.16
5/18/2010 7:30	Field Blank	Metals	Zinc	5	U	ug/L	5	20
5/18/2010 7:30	Field Blank	Metals	Antimony	0.25	U	ug/L	0.25	1
5/18/2010 7:30	Field Blank	Metals	Beryllium	0.025	U	ug/L	0.025	0.1
5/18/2010 7:30	Field Blank	Metals	Nickel	0.25	U	ug/L	0.25	1
5/18/2010 7:30	Field Blank	Metals	Chromium	0.3	U	ug/L	0.3	1.2
5/18/2010 7:30	Field Blank	Metals	Calcium	0.19	I	mg/L	0.075	0.3
5/18/2010 7:30	Field Blank	Metals	Cadmium	0.03	U	ug/L	0.03	0.12
5/18/2010 7:30	Field Blank	Metals	Aluminum	85	I	ug/L	60	240
5/18/2010 7:30	Field Blank	Metals	Arsenic	0.25	U	ug/L	0.25	1
5/18/2010 7:30	Field Blank	Metals	Selenium	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Metals	Iron	30	U	ug/L	30	120
5/18/2010 7:30	Field Blank	Nutrients	Kjeldahl Nitrogen	0.08	U	mg N/L	0.08	0.2
5/18/2010 7:30	Field Blank	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
5/18/2010 7:30	Field Blank	Nutrients	Ammonia-N	0.069		mg N/L	0.01	0.02
5/18/2010 7:30	Field Blank	Nutrients	Total-P	0.004	U	mg P/L	0.004	0.01
5/18/2010 7:30	Field Blank	Nutrients	Fluoride	0.05	U	mg F/L	0.05	0.1
5/18/2010 7:30	Field Blank	Nutrients	NO2NO3-N	0.004	U	mg N/L	0.004	0.01

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 7:30	Field Blank	Overflow	Oil and Grease	1.4	UY	mg/L	1.4	5
5/18/2010 7:30	Field Blank	Overflow	MBAS	0.12	U	mg/l LAS	0.12	0.2
5/18/2010 7:30	Field Blank	Pesticides	Simazine	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Heptachlor Epoxide	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Toxaphene	0.74	U	ug/L	0.74	3
5/18/2010 7:30	Field Blank	Pesticides	Bromacil	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Pesticides	Chlorpyrifos Methyl	0.099	U	ug/L	0.099	0.4
5/18/2010 7:30	Field Blank	Pesticides	Beta-BHC	0.0099	U	ug/L	0.0099	0.04
5/18/2010 7:30	Field Blank	Pesticides	Delta-BHC	0.0099	U	ug/L	0.0099	0.04
5/18/2010 7:30	Field Blank	Pesticides	Endosulfan Sulfate	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Endrin	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Metolachlor	0.49	U	ug/L	0.49	2
5/18/2010 7:30	Field Blank	Pesticides	Naled	0.79	UJ	ug/L	0.79	3.2
5/18/2010 7:30	Field Blank	Pesticides	Parathion Ethyl	0.15	U	ug/L	0.15	0.6
5/18/2010 7:30	Field Blank	Pesticides	Phorate	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	DDD-p,p'	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Endosulfan I	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Heptachlor	0.0099	U	ug/L	0.0099	0.04
5/18/2010 7:30	Field Blank	Pesticides	Ametryn	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Ethoprop	0.099	U	ug/L	0.099	0.4
5/18/2010 7:30	Field Blank	Pesticides	Fenamiphos	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Pesticides	Fonofos	0.099	U	ug/L	0.099	0.4
5/18/2010 7:30	Field Blank	Pesticides	Chlordane	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Pesticides	Gamma-BHC	0.0099	U	ug/L	0.0099	0.04
5/18/2010 7:30	Field Blank	Pesticides	Methoxychlor	0.049	UJ	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Azinphos Methyl	0.2	UJ	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Pesticides	Ethion	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Metalaxyl	0.25	UJ	ug/L	0.25	1
5/18/2010 7:30	Field Blank	Pesticides	Endrin Aldehyde	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Atrazine	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Mevinphos	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Pesticides	Norflurazon	0.15	U	ug/L	0.15	0.6
5/18/2010 7:30	Field Blank	Pesticides	DDT-p,p'	0.03	U	ug/L	0.03	0.12
5/18/2010 7:30	Field Blank	Pesticides	Malathion	0.15	U	ug/L	0.15	0.6

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 7:30	Field Blank	Pesticides	Prometryn	0.15	U	ug/L	0.15	0.6
5/18/2010 7:30	Field Blank	Pesticides	Alpha-BHC	0.0099	U	ug/L	0.0099	0.04
5/18/2010 7:30	Field Blank	Pesticides	Dieldrin	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Endosulfan II	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Pesticides	Alachlor	0.59	U	ug/L	0.59	2.4
5/18/2010 7:30	Field Blank	Pesticides	Butylate	0.2	U	ug/L	0.2	0.8
5/18/2010 7:30	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Diazinon	0.049	U	ug/L	0.049	0.2
5/18/2010 7:30	Field Blank	Pesticides	Hexazinone	0.099	U	ug/L	0.099	0.4
5/18/2010 7:30	Field Blank	Pesticides	Metribuzin	0.099	U	ug/L	0.099	0.4
5/18/2010 7:30	Field Blank	Pesticides	Parathion Methyl	0.099	U	ug/L	0.099	0.4
5/18/2010 7:30	Field Blank	Pesticides	Aldrin	0.0099	U	ug/L	0.0099	0.04
5/18/2010 7:30	Field Blank	Pesticides	DDE-p,p'	0.02	U	ug/L	0.02	0.08
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	58
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	15	U	ug/L	15	58
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Fluorene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.8
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Naphthalene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Phenol	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Pyrene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	58
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.8
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Bromodichloromethane	0.2	U	ug/L	0.2	1
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Acenaphthene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Benzidine	97	U	ug/L	97	390

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Chrysene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Pentachlorophenol	2.9	UJ	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Isophorone	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9	UJ	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Phenanthrene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Bromoform	0.5	U	ug/L	0.5	2
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39	U	ug/L	39	160
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	4.9	U	ug/L	4.9	19
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Diethyl phthalate	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Fluoranthene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	9.7	U	ug/L	9.7	39
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.8
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	4.9	U	ug/L	4.9	19
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	9.7	U	ug/L	9.7	39
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.8
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Dibromochloromethane	0.2	U	ug/L	0.2	1
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Anthracene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.97	U	ug/L	0.97	3.9
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.97	U	ug/L	0.97	3.9

Appendix E. (continued)

Date	Field ID	Analysis	Component	Results	Remark	Units	MDL	PQL
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L	2.9	12
5/18/2010 7:30	Field Blank	Priority Organic Pollutants	Chloroform	0.2	U	ug/L	0.2	1
5/18/2010 7:30	Field Blank	Field Parameter	Dissolved Oxygen	9.8		mg/L		
5/18/2010 7:30	Field Blank	Field Parameter	pH	8.82				
5/18/2010 7:30	Field Blank	Field Parameter	Temperature	25.24		C		
5/18/2010 7:30	Field Blank	Field Parameter	Specific Conductance	34		umhos/cm		

Appendix F. Facility Summary, Effluent Limits, and Permit Violations Recorded on Discharge Monitoring Report

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By:	**Contact Number:**
Facility Name (as it appears on permit): Fort Myers Central WWTP	**Former Names:**
NPDES Permit Number: FL0021261	**Permit Expiration Date:** February 15, 2011
Physical Address: 1501 Raleigh Street, Fort Myers, 33901	
District: South	**County:** Lee
Function of Facility: Treat domestic wastewater.	
Facility Type: Type 1	**Permitted Capacity (MGD):** 11.0
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): For March 2009 – March 2010, the average D-001 flow was 3.26 MGD.	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): For March 2009 – March 2010, the average R-001 flow was 2.88 MGD.	
Description of type of Discharge: ☒ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify**	

Appendix F. (continued)

Description of Sampling Location(s) - actual permit designation of permitted sampling point(s): EFA-01: slide gate No. 3 after disinfection; EFD-01: slide gate No. 4 downstream of sodium bisulfite addition; CAL-01: Sum of flows.
Description of Permitted Outfall(s): 36 inch diameter pipe approximately 2390 feet in length from the shoreline and discharges at a depth of approximately 15.8 feet
Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility): 5-stage Bardhenpho process followed by clarification and disinfection. Facility has a separate high-level disinfection system for Part III reuse.

Appendix F. (continued)

PART I: Continued

List current Effluent Limits of Outfall(s) to be Sampled: This should include any AO or CO limits the facility may be under (Leave cell blank if not applicable)

			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow	MGD	Report		11.0	-	-	Continuous	Recording flow meters and totalizers	CAL-1	See Cond.I.A.4
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	20.0	25.0	40.0	60.0	5 Days/Week	24-hour flow proportioned composite	EFD-01	
Solids, Total Suspended	MG/L	Maximum	20.0	30.0	45.0	60.0	5 Days/Week	24-hour flow proportioned composite	EFD-01	
pH	SU	Range	-	-	-	6.5 to 8.5	Continuous	Meter	EFA-01 EFA-01*	See Cond.I.A.3
Coliform, Fecal	#/100ML	Maximum	See Permit Condition I.A.5.				5 Days/Week	Grab	EFA-01 EFA-01*	
Total Residual Chlorine (For Disinfection)	MG/L	Minimum	-	-	-	0.5	Continuous	Meter	EFA-01 EFA-01*	See Cond.I.A.3, 5
Total Residual Chlorine (For Dechlorination)	MG/L	Maximum	-	-	-	0.01	Daily	Grab	EFD-01	
Nitrogen, Total	MG/L	Maximum	3.0	3.0	4.5	6.0	5 Days/Week	24-hour flow proportioned composite	EFD-01	
Phosphorus, Total (as P)	MG/L	Maximum	0.5	0.5	0.75	1.0	5 Days/Week	24-hour flow proportioned composite	EFD-01	
Whole Effluent Toxicity (toxicity)	See Permit Condition I.A.12								EFD-01	
Oxygen, Dissolved (DO)	MG/L	Minimum	5.0 Daily Average			4.0	Daily	Grab	EFD-01	
BOD, Carbonaceous 5 day, 20C	lbs./day	Maximum	2295.0					Calculated	EFD-01	
Total Suspended Solids	lbs./day	Maximum	2754.0					Calculated	EFD-01	
Total Nitrogen (as N)	lbs./day	Maximum	275.0					Calculated	EFD-01	
Total Phosphorus (as P)	lbs./day	Maximum	46.0					Calculated	EFD-01	
Ammonia, Unionized	MG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	

Appendix F. (continued)

PART I: Continued

List current Effluent Limits of Outfall(s) to be Sampled: This should include any AO or CO limits the facility may be under (Leave cell blank if not applicable)

			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Coliform, Fecal	#/100ML	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Coliform, Total	#/100ML	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Chloride (as Cl)	MG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Fluoride, Total (as F)	MG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Mercury, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Aluminum, Total Recoverable	MG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Iron, Total Recoverable	MG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Oil & Grease (freon extr.-ir meth) Total Recoverable	MG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Antimony, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Arsenic, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Chromium, Hexavalent Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Salinity	PPT	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Silver, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Copper, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Lead, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Nickel, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Zinc, Total Recoverable	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Chlorodibromomethane	UG/L	Maximum	34.0	-	-	-	Monthly	Grab	EFD-01	

Appendix F. (continued)

PART I: Continued

List current Effluent Limits of Outfall(s) to be Sampled: This should include any AO or CO limits the facility may be under (Leave cell blank if not applicable)

			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Dichlorobromomethane	UG/L	Maximum	22.0	-	-	-	monthly	Grab	EFD-01	
Beryllium, Total Recoverable	UG/L	Maximum	0.13	-	-	-	Annually	Grab	EFD-01	
Hardness, Total (as CACO3)	MG/L	Maximum	-	Report	-	Report	Annually	Grab	EFD-01	
Chloroform	UG/L	Maximum	-	-	-	Report	Annually	Grab	EFD-01	
Enterococci	#/100ml	Maximum	-	35.0	-	-	5/month	Grab	EFD-01	I.C. 19
Specific Conductance	UMHO/CM	Maximum				Report	Annually	Grab	EFD-01	

Appendix F. (continued)

PART I: Continued	
Receiving Waters: Tidal Caloosahatchee WBID# 3240A	**Classification (indicate whether fresh or marine):** Class III, Marine
Toxicity Test Requirements (routine and/or additional test language, test species, salinity adjustment, etc.): Acute definitive WET. Species are dependent upon salinity.	
Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.): AO-040-SD: Monthly monitoring of chlorodibomomethane and dichlorobromomethane starting January 30, 2006. Be in compliance with effluent limits, have mixing zone, or have SSAC by August 30, 2008.	
Facility Mixing Zone Details (if applicable): No mixing zone.	

List Permit Violations (DMR data) and plant upsets that occurred at the plant within the last year:

Date	Parameter and Units	Limit	Result

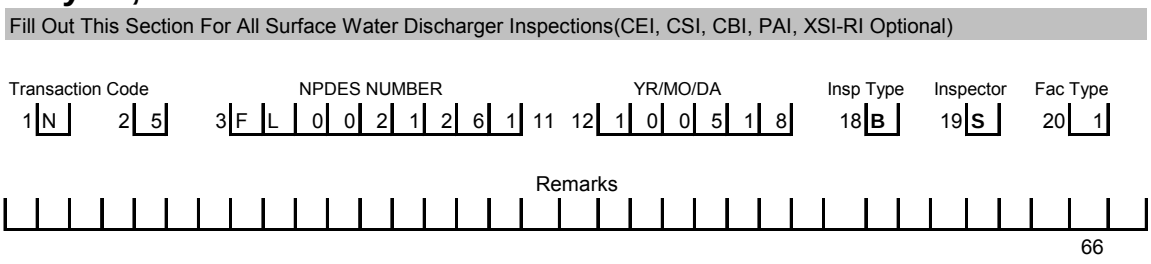
Describe previous FYI and WQBEL study: Level 1 WQBEL limiting nitrogen and phosphorus.
Describe previous or current Enforcement Actions (including WLs):
Describe any violations or problems noted in previous inspection:
Discuss whether DMR trends within previous five years are improving or declining:
Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):

Appendix F. (continued)

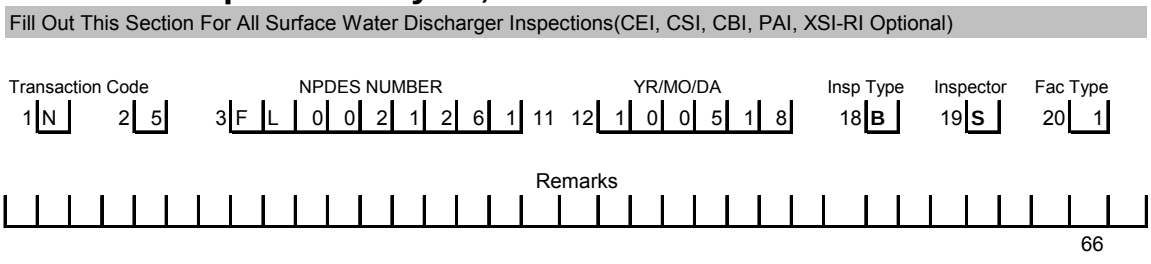
PART II: Sampling Event Information	
Date(s) sample collected:	**Sampler(s):**
Temperature (Deg C):	**pH (SU):**
Dissolved Oxygen (mg/L):	**Conductivity (umhos/cm):**
Total Residual Chlorine (mg/L):	**Total Residual Chlorine - after Disinfection (mg/L):**
Method of Chlorination: Sodium Hypochlorite	**Method of De-chlorination:** Sodium Bisulfite
Flow During Sample Collection for each outfall(MGD):	
Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):	
Describe Discharge during Sampling Event: ☐ Continuous ☐ Intermittent ☐ Seasonal ☐ Rainfall Dependent ☐ Other, please specify	
Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:	

Appendix G. EPA End Sheet

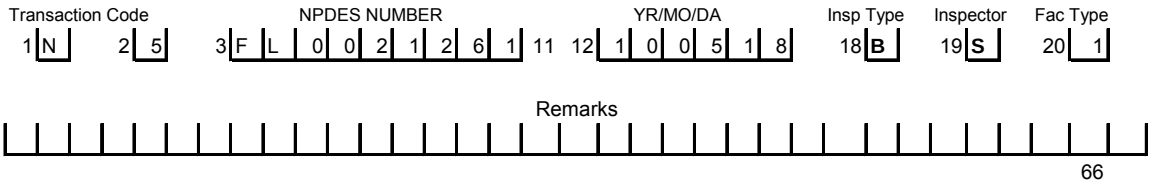
The Bioassay of Fort Myers Central WWTP effluent sampled on May 18, 2010. NPDES #FL0021261.



The Priority Pollutants Analysis of Fort Myers Central WWTP effluent sampled on May 18, 2010. NPDES #FL0021261.



Biological Analyses of Fort Myers Central WWTP effluent sampled on May 18, 2010. NPDES #FL0021261.



Note: Bioassay sample collected from May 17-18, 2010.