

Bioassays of

USN Mayport Naval Station Wastewater Treatment Facility

Duval County

NPDES #FL0000922

Sampled April 2 and 3, 2006

May 2006

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

USN Mayport Naval Station Wastewater Treatment Facility, Building 285, Bon-Homme Richard Street, Mayport, Duval County, Florida, NPDES #FL0000922. Effluent samples for this facility were collected on April 2 and 3, 2006.

Introduction

USN Mayport Naval Station Wastewater Treatment Facility is a wastewater treatment plant which uses the conventional activated-sludge process to treat domestic wastewater. The facility has a design flow of 2.0 million gallons per day (MGD) average annual daily flow (AADF). The AADF from March 2005 through February 2006 was 0.919 MGD. The facility consists of two separate headworks, one serving the base and the second serving ships in port. The flow from the ship headworks goes to an on-line flow equalization tank, three equal-volume aeration tanks, four equal-size secondary clarifiers, a chlorine contact chamber, and a dechlorination unit. Chlorine gas is used for disinfection and sulfur dioxide gas is used for dechlorination. Treated effluent is discharged through Outfall D-001 into the Class III marine waters of the St. Johns River. Outfall D-001, which is approximately 61 m (200 feet) in length, discharges at an approximate depth of 6.8 m (22.4 feet). The point of discharge is located approximately at latitude 30º 23' 38" N, longitude 81º 24' 13" W. Both headworks perform influent screening and grit removal. Residuals are treated by aerobic digestion and are disposed by land application.

The facility is not under any Administrative Orders or Consent Orders. The facility has a mixing zone for copper. The mixing zone, 1,800 square meters in area, is centered on the tee of the diffuser (D-001). The mixing zone extends 30 meters (2X30) along the diffuser and 15 meters (2x15) perpendicular to the diffuser (total length 60 meters, total width 30 meters). Discharge Monitoring Report (DMR) data for 2005 showed that the facility was in violation of permitted limits for oil and grease (limit ≤ 5.0 mg/l; February, 6.3 mg/l; March, 6.2 mg/l; July, 10 mg/l); surfactants (MBAs) (limit 0.5 mg/l; April, 0.53 mg/l; May, 0.72 mg/l; June, 0.54 mg/l); and total residual chlorine (limit for disinfection minimum 0.5 mg/l – October, 0.2 mg/l). (Facility information provided by Joseph Emery of FDEP Northeast District.)

Methods

Samples were collected from the EFD-1 NPDES sampling point for Outfall D-001 by Tom Kallemeyn (FDEP Northeast District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOP's are available on the web at: http://www.floridadep.org/labs/qa/sops.htm. See Appendix 1 for the completed chain of custody form.

The 96-hour acute screening toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_01, TA07_02, and TA08_01 through TA08_09. All internal DEP SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

One bioassay sample was collected every 6 hours for 24 hours, so a total of 4 bioassay samples were tested. The bioassay samples were adjusted to approximately 20 parts per thousand (ppth) salinity using 40 Fathoms® artificial sea salts per permit requirements.

Aeration was initiated at 72 hours in the *Americamysis bahia* bioassay tests for sample 1 and sample 3 due to the dissolved oxygen (DO) concentrations decreasing below 5.0 mg/L. All replicates, including the controls, of these two tests were aerated at a rate of approximately 100 bubbles per minute for the remainder of the test period.

The AGP test was salinity adjusted to meet the minimum salinity requirements of the test species.

Toxicity Test Results

Tests were performed April 4 - 8, 2006.

Americamysis bahia 96-hour acute screening bioassay 1 – LC_{50} < 100%, 55% mortality in 100% sample at 96 hours

Menidia beryllina 96-hour acute screening bioassay 1 – LC_{50} > 100%, 10% mortality in 100% sample at 96 hours

Americamysis bahia 96-hour acute screening bioassay 2 – LC_{50} < 100%, 55% mortality in 100% sample at 96 hours

Menidia beryllina 96-hour acute screening bioassay 2 – LC_{50} > 100%, 0% mortality in 100% sample at 96 hours

Americamysis bahia 96-hour acute screening bioassay 3 – LC_{50} > 100%, 35% mortality in 100% sample at 96 hours

Menidia beryllina 96-hour acute screening bioassay 3 – LC_{50} > 100%, 0% mortality in 100% sample at 96 hours

Americamysis bahia 96-hour acute screening bioassay 4 – LC_{50} < 100%, 55% mortality in 100% sample at 96 hours

Menidia beryllina 96-hour acute screening bioassay 4 – LC_{50} > 100%, 0% mortality in 100% sample at 96 hours

The bioassay samples were acutely toxic to the *Americamysis bahia* test organisms but were not acutely toxic to the *Menidia beryllina* test organisms, according to permit conditions. Effluent copper (66.4 µg/l) exceeded a copper concentration shown to produce mortality in *Americamysis bahia* (57 µg/l USEPA Ecotox data base May 2006). The noted toxicity is likely due at least in part to the effluent copper concentration and possibly to additive or synergistic effects of other metals in the effluent.

See Appendix 2 for bioassay bench sheets. See Appendix 3 for results of the last 20 standard reference toxicant (SRT) tests and bench sheets and statistical analyses of the SRT tests that correspond to these facility tests. See Appendix 4 for test organism receipts.

Algal Growth Potential

The effluent Algal Growth Potential (AGP) was 634 mg dry wt/L of the saltwater species, *Dunaliella tertiolecta.* Raschke and Shultz found that AGP values above 10.0 mg dry weight/L represent a “problem” threshold for marine receiving waters, implying nutrient enrichment (personal communication with Ron Raschke USEPA Region 4 1987). The analytical chemistry suggests that the effluent is nitrogen-limited.

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine (TRC) and total ammonia were not detected in the bioassay samples in the laboratory. Effluent TRC measured in the field (0.03 µg/L) exceeded the Class III marine water quality criterion (≤ 0.01 µg/l, 62-302.530(19), F.A.C.). The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.11 mg/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

Aluminum and zinc were detected in the effluent at levels that comply with Class III marine water quality criteria. Lead was detected between the laboratory method detection limit (MDL) and practical quantitation limit (PQL). Effluent iron (349 µg/l) and nickel (32.1 µg/l) exceeded their respective Class III marine criteria of ≤ 300 µg/l (62-302.530(39), F.A.C.) and ≤ 8.3 µg/l (62-302.530(45), F.A.C.). Effluent

copper (66.4 µg/L) exceeded the Class III marine criterion of ≤ 3.7 µg/L (62-302.530(24), F.A.C.), but did not exceed the permitted mixing zone limit of 150 µg/L.

Effluent pH measured in the field (6.2 S.U.) violated the Class III marine quality criterion of ≥ 6.5 mg/L (62-302.530(52)(c), F.A.C.). The pH of the bioassay samples as received in the laboratory were ≥ 6.5 S.U. Effluent oil and grease (7.4 mg/L) exceeded the Class III marine water quality criterion (≤ 5 mg/L, 62-302.530(50)(a), F.A.C.); however, oil and grease was also detected in the field blank (2.1 mg/L).

See Table 2 for results of analytes detected in the effluent, and corresponding limits. See Appendix 5 for a complete list of chemical analyses performed.

Conclusion

The effluent samples collected from D-001 for this facility on April 2 and 3, 2006, were acutely toxic to the *Americamysis bahia* test species but were not acutely toxic to the *Menidia beryllina* test species during the 96-hour acute screen bioassays. The toxicity is attributed, at least in part, to the effluent copper concentration. The effluent AGP result greatly exceeded the "problem" threshold for marine receiving waters. The effluent copper, iron, nickel, oil and grease, pH, and total residual chlorine exceeded Class III marine water quality criteria. Effluent oil and grease, pH, and total residual chlorine also violated permitted limits. Effluent copper did not exceed the permitted mixing zone limit.

Table 1. Algal growth potential (AGP; mg dry weight/L) of the saltwater species Dunaliella tertiolecta *and ratios of nitrogen to phosphorus for samples collected from USN Mayport Naval Station Wastewater Treatment Facility on April 3, 2006.*

Location	AGP (measured)	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	634	3.91	3.87

Table 2. Effluent limits, Class III Marine Criteria and chemical and microbiological data for samples collected from USN Mayport Naval Station Wastewater Treatment Facility on April 3, 2006

USN Mayport Naval Station WWTF NPDES# FL0000922	Class III Marine Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
Total petroleum hydrocarbons	-	Report	-
Metals (µg/L unless otherwise noted)			
Aluminum	≤ 1,500	-	135
Arsenic	≤ 50	-	4 U
Cadmium	≤ 9.3	-	0.5 U
Calcium (mg/L)	-	-	130
Chromium-III	-	-	2 U
Copper	≤ 3.7	≤ 150	66.4
Iron	≤ 300	-	349
Lead	≤ 8.5	-	1 I
Magnesium (mg/L)	-	-	257
Nickel	≤ 8.3	-	32.1
Selenium	≤ 71	-	5 U
Silver	≤ 2.3	-	0.25 U
Zinc	≤ 86	-	59
Nutrients (mg/L)			
Ortho-phosphate	-	Report	3.1
Total Phosphorus	-	Report	3.8
Ammonia	-	Report	0.11 A
Unionized Ammonia	-	-	< 0.02 c
Nitrate	-	Report	-
Nitrite	-	Report	-
Nitrate+Nitrite	-	-	12
Total Kjeldahl Nitrogen	-	Report	2.7 J
Organic Nitrogen	-	Report	2.59 c
Total Nitrogen	-	Report	14.7 c
General Physical and Chemical Parameters			
pH (S.U.)	6.5-8.5	6.5-8.5	6.2
Conductivity (umhos/cm)	-	-	11,817
Temperature (C)	-	-	24.4
Dissolved Oxygen (mg/L)	≥ 4	≥ 4	6.2
CBOD (mg/L)	-	≤ 60 s	5.2
Oil and Grease (mg/L)	≤ 5	≤ 5	7.4 fJ
Total residual chlorine (mg/L)	≤ 0.01	≤ 0.01	0.03
Hardness (mg/L)	-	-	1,382.9 c
Total Suspended Solids (mg/L)	-	≤ 60 s	17
MBAS (Anionic surfactants) (mg/L)	≤ 0.5	≤ 0.5	0.19 JV
Chlorophyll a (mg/L)	-	-	0.85 U
Phaeophytin a (mg/L)	-	-	1.5 U
Flow (MGD)	-	2.0 a	0.919
Percent Capacity	-	Report	46
Microbiology (# counts/100ml)			
Fecal Coliforms-Membrane Filter	≤ 800 s	≤ 800 s	4 AB*
Total Coliforms	≤ 2,400 s	-	80 AB*

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

a - Annual average
c - Calculated value
f - Oil and grease was detected in the field blank at a concentration of 2.1 mg/L I
s - Single sample
A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptable range
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 minimum detection limit
V - Analyte was detected in both sample and method blank
* - Data provided by FL DEP Northeast District lab

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2006-04-03-33
USN Mayport Naval Station WWTF

Event ID *

Requester: Shannan Bogdanov
Field Report Prepared By: Tom Kallemeyn
Collected By: Tom Kallemeyn
Send Final Report To Melissa Long
Sampling Agency: NED DEP

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

Lab ID *	Location: USN MAYPORT Naval Station WWTF F.E.	☐ Comp ☒ Grab	Collection (begin) Date 3APR06 Time 11:20 Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Field ID		Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L) 6.33	Storet Station Number	A, B, C
	Matrix (Include type e.g. Salt, Fresh, etc): Salt	Temp (C): 24.4	pH 6.25	Sample Depth 0.1 ☒ m ☐ ft	11,817	☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' "	Longitude o ' "	Comments: 0.03 mg/L Chlorine after Dechlor (final Effluent)					
Lab ID *	Location: Equipment Blank/Blank	☐ Comp ☒ Grab	Collection (begin) Date 3APR06 Time 12:15 Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Field ID		Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L) 5.4	Storet Station Number	B
	Matrix (Include type e.g. Salt, Fresh, etc): D.I.	Temp (C): 24.2	pH 7.6	Sample Depth ☐ m ☐ ft	2	☐ 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: 8b: ofSay 10:10 4.4.06 James Daniels JD.					

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Kallemeyn	3APR06	DHL	Tim. E	4/4/06 9:00				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

FDEP Biology Section - Acute Screen 4/24 Bioassay Bench Sheets

Facility: USN Mayport Naval Station WWTF
Address: Building 285 Bon-Homme Richard Street
City: Mayport County: Duval
Contact/District: Tom Kallemeyn / Northeast District
NPDES Permit #: FL 0000922
LIMS Job #: TLH-20060404-01 LIMS Sample #: 913475
Lims Data Entry: 4-12-06 MF Data Entry Verification: 4-12 No Err

Sample Collection: Date: 4-2-06 Time: 1745
Hold Time Start: Date: 4-3-06 Time: 11:00
Sample: 1 of 4

Comments:
aeration after 72 hours due to low D.O. - J.D.
For A.bahia only Tests 1+3
Waterbath Temperature For: A.bahia = 24.1-24.2

A.bahia for tests 1-4 were kept in Incubator 2,
A.bagillum for tests 1-4 were kept in Incubator 3
Sample salinity increased to ~20 parts per thousand with artificial sea salts per test requirement MF 4-7-06

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

Test Type: Definitive 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
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Test 2 validation: Test 2: SOP TA 07_04
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: 9.0 mg/L Final DO: 7.3 mg/L Duration: 15 minutes Rate: ~100 bubbles/min
Salinity adjusted (Test 1): (yes) no Initial Salinity: 0.10 Final Salinity: ~20 ppt (Salts) Hypersaline brine
Salinity adjusted (Test 2): (yes) no Initial Salinity: 0.10 Final Salinity: ~20 ppt (Salts) Hypersaline brine
Dechlorination: yes (no) ____ mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC: ____

Temperature Range °C 2 3
Incubator # 2/3 Range 23.9-25.9 / 25.1-25.9
Room B246: 23.2-25.1
Waterbath: For A.bahia only 24.1-24.2

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
Sarah Pritchard
Brian Anderson
Jason Bandi
Gabriel Davis
Marshall Fairbeth
Anne Anderson
Nicole Wellbrock
REVIEWER

Water Quality Parameters	20% DMW	Moderately Hard Water/ Well Water	Salt Water (ASW) NSW Test 1	Salt Water (ASW) NSW Test 2	Other: Salt CTRL	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	N/A	N/A	N/A	N/A	N/A	—	—	—	BP
Lab Total Residual Cl2 (mg/L):			<0.03	<0.03	<0.03	<0.03	HACH	BA/BP	BP
Alkalinity (mg/L as $CaCO_3$):			202	202	235	150	HACH	SA	BP
Hardness (mg/L as $CaCO_3$):			-	-	-	-	HACH	-	-
Total Ammonia (mg/L as N):			<0.034	<0.034	<0.034	<0.031	DENVER	SP/MF	BP
Salinity (ppt):			20.42	20.42	19.96	6.69	YSI / Mettler	BA	MR

V 2.0 4/12/05

Appendix 2. (continued)



FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 913475 Test #: 1 Test Started: Date 04-04-06 Time: 1300
Organism: Artemia SOP #: TA 07_03 Test Ended: Date 4&06 Time: 1300
Organism Batch: 13-06 Diluent/ Batch: ASW 110-060
Organism Age: 4 days Food: YCT P. subcapitata Artemia
Chamber Size: 400 mL Batch: – – GSL 536-90
Test Volume: 250 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	Tox 2	5	5	5	5	5	5
	B	Tox 3	5	5	5	5	5	5
	C	Tox 4	5	5	5	5	5	5
	D	Tox 6	5	5	5	5	5	5
Salt CTRL	A	Tox 8	5	5	5	5	5	5
	B	Tox 12	5	5	5	5	5	5
	C	Tox 16	5	4 ID	4	4	4	4
	D	Tox 21	5	5	5	5	5	5
100%	A	Tox 29	5	5	4 ID	4	3 ID	3
	B	Tox 33	5	5	5	5	5	3 ID
	C	Tox 103	5	5	5	5	2 ID	2
	D	Tox 122	5	5	5	5	2 ID	1 ID
Organisms loaded by: JD	Checked by: [redacted]		SD	JD	JD	JD	JD	
Loading Verified by: SP								

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

Comments:

Test Results:
% mortality in 100% sample: 55%
LC_{50}: <100% If Calculated: 95% CI_____ Method:_____

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

V 2.1 11/01/2005

Page 000022

Appendix 2. (continued)

[redacted]

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 913475 Test #: 2 Test Started: Date 4-4-06 Time: 1405
Organism: M. beryllina SOP #: TA 07_ 04 Test Ended: Date 4.8.06 Time: 1300
Organism Batch: 14-06 Diluent/ Batch: ASW 1 10-06
Organism Age: 10 days Food: YCT P. subcapitata Artemia
Chamber Size: ~~8 100~~ 1000 mL Batch: – – GSL 536-90
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	E1	5	5	5	5	5	5
	B	E2	5	5	5	5	5	5
	C	E3	5	4D	4	4	4	4
	D	E4	5	5	5	5	5	5
Salt CTRL	A	E5	5	5	5	5	5	5
	B	E6	5	5	5	5	5	5
	C	E7	5	5	5	5	5	5
	D	E8	5	4D	4	4	4	4
100%	A	E9	5	5	5	5	5	5
	B	E10	5	4D	4	4	4	4
	C	E11	5	5	5	5	5	5
	D	E12	5	5	5	5	5	4D
Organisms loaded by: BR	Checked by: [redacted]		JD	JD	JD	JD	JD	
Loading Verified by: EJ								

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

Comments:

Test Results:
% mortality in 100% sample: 10%
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

Page 000023

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 913475 Test #: 1 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	C	D	A
pH (S.U.)	8.4	8.0	8.0	8.3	8.0	8.1
Temperature °C	24.0	24.5	24.5	24.2	24.8	24.0
Dissolved Oxygen mg/L	7.0	5.3	6.1	6.1	4.1	6.2
Conductivity µmhos (mmhos)	32.8	34.6	36.2	32.4	33.5	33.2
(initials) Measured by:	BA	BA	BA	BA/SF	BA	JD
(initials) Recorded by:	BA	BA	BA	SF	BA	JD

Comments:

Concentration Salt Ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.3	8.1	8.4	8.2	8.4
Temperature °C	24.1	24.4	24.5	24.2	24.8	24.0
Dissolved Oxygen mg/L	7.4	5.2	6.0	6.3	5.3	6.3
Conductivity µmhos (mmhos)	32.1	33.0	33.4	32.1	34.0	33.7
(initials) Measured by:	BA	BA	BA	BA/SF	BA	JD
(initials) Recorded by:	BA	BA	BA	SF	BA	JD

Comments:

Concentration KX0%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.0	8.0	8.0	7.5	7.8	8.2
Temperature °C	24.2	24.5	24.6	24.0	25.2	24.0
Dissolved Oxygen mg/L	7.4	5.2	5.7	6.6	4.2	6.5
Conductivity µmhos (mmhos)	32.1	32.9	33.6	32.0	33.4	34.1
(initials) Measured by:	BA	BA	BA	BA/SF	BA	JD
(initials) Recorded by:	BA	BA	BA	SF	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A BA					
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

000024

V 2.0 2/24/04

Page

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 913475 **Test #:** 2 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	C	D	A
pH (S.U.)	8.4	8.2	8.2	8.3 8.5 (BA)	8.2	8.2
Temperature °C	24.0	25.5	24.7	24.0	25.4	24.2
Dissolved Oxygen mg/L	7.2	6.2	5.8	6.6	6.8	6.5
Conductivity µmhos (mmhos)	32.9	33.8	34.0	31.6	33.2	35.3
(initials) Measured by:	BA	BA	BA	[illegible]	BA	JD
(initials) Recorded by:	BA	BA	BA	[illegible]	BA	JD

Comments: 8.3 transcription error SP

Concentration Salt ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.4	8.3	8.5	8.3	8.3
Temperature °C	24.1	24.6	24.3	24.1	25.0	25.9
Dissolved Oxygen mg/L	7.3	6.0	6.0	6.5	7.2	7.0
Conductivity µmhos (mmhos)	32.2	32.7	33.0	32.0	33.8	34.8
(initials) Measured by:	BA	BA	BA	SP	BA	JD
(initials) Recorded by:	BA	BA	BA	SP	BA	JD

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.1	8.0	8.1	6.8	8.1 8.9 (BA)	8.0
Temperature °C	24.0	24.5	25.4	24.6	24.8	25.0
Dissolved Oxygen mg/L	7.3	5.8	6.1	6.4	7.2	7.4
Conductivity µmhos (mmhos)	32.0	32.5	33.0	32.2	33.6	33.1
(initials) Measured by:	BA	BA	BA	SP	BA	JD
(initials) Recorded by:	BA	BA	BA	SP	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

V 2.0 2/24/04

[redacted]

FDEP Biology Section - Acute Screen 4/24 Bioassay Bench Sheets

Facility: USN Mayport Naval Station WWTF
Address: Building 285 Bon-Homme Richard Street
City: Mayport County: Duval
Contact/District: Tom Kallemeyn / Northeast District
NPDES Permit #: FL 0000922
LIMS Job #: TL4-2006-021-04-01 LIMS Sample #: 913476
Lims Data Entry: 4-12-06 MK Data Entry Verification: 4-12-06 SP

Sample Collection: Date: 4-2-06 Time: 23:50
Hold Time Start: Date: 4-3-06 Time: 11:00
Sample: 2 of 4

Comments: Sample salinity increased to ≈ 20 parts per thousand with artificial crystals per test requirements MF 4-4-06

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

Test 1 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No
Test 1: SOP TA 07_ 03

Test 2 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No
Test 2: SOP TA 07_ 04

Initial sample handling:
pH adjustment: yes (no) Initial pH: ___ NaOH N HCl N ___ Drops ml Final pH: ___
Aeration (yes) no Initial DO: 10.7 mg/L Final DO: 7.3 mg/L Duration: 15 minutes Rate: ~ 100 bubbles/min
Salinity adjusted (Test 1) (yes) no Initial Salinity: 6.24 Final Salinity: ~20 ppth (Salts) Hypersaline brine
Salinity adjusted (Test 2): (yes) no Initial Salinity: 6.24 Final Salinity: ~20 ppth (Salts) Hypersaline brine
Dechlorination: yes (no) ___ mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC: ___

Sample Validation:
Temperature: Shipped ≤6°C (Yes) No Hand Delivered: Cooling (received °C < collected °C) Yes No
Holding Time: ≤36 Hours (Yes) No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures
Sarah Pritchard
Bruce Hardesty
Jason Dunk
Tim Perry
Marshall Faircloth
Bruce Anning
Heidi Wellenhof
REVIEWER

Water Quality Parameters	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	–	–	–	SP
Lab Total Residual Cl2 (mg/L):	<0.02	HACH	SP	EW
Alkalinity (mg/L as $CaCO_3$):	146	HACH	SB	SP
Hardness (mg/L as $CaCO_3$):	–	HACH	–	–
Total Ammonia (mg/L as N):	<0.034	DENVER	MF	SP
Salinity (ppt):	6.24	YSI / Mettler	PJB	MF

V 2.0 4/1/2005

Page
0000026

Appendix 2. (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 913476 Test #: 1 Test Started: Date 4-4-06 Time: 13:14
Organism: A. bahia SOP #: TA 07_03 Test Ended: Date 4.8.06 Time: 13:00
Organism Batch: 13-060 Diluent/ Batch: ASW 1.6-06
Organism Age: 4 days Food: YCT P. subcapitata Artemia
Chamber Size: 400 mL Batch: – – GSL 536-90
Test Volume: 250 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	Tox 5	5	5	5	5	5	5
	B	Tox 6	5	5	5	5	5	5
	C	Tox 9	5	5	5	5	4 D	4
	D	Tox 18	5	5	5	5	5	5
Salt CTRL	A	Tox 26	5	5	5	5	5	5
	B	Tox 30	5	5	5	5	5	5
	C	Tox 32	5	5	5	5	4 D	4
	D	Tox 45	5	5	5	5	5	4 D
100%	A	Tox 100	5	5	3 D	3	2 D	2
	B	Tox 101	5	5	5	5	2 D	2
	C	Tox 111	5	5	5	5	3 D	2 D
	D	Tox 135	5	5	5	5	3 D	3
Organisms loaded by: JD		Checked by: [redacted]	JD	SP	JJ	JD	JD	
Loading Verified by: SP								

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

Comments:

Test Results:
% mortality in 100% sample: 55 %
LC_{50}: < 100 % If Calculated: 95% CI_____ Method:_____

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

V 2.1 11/01/2005

Page 000027

Appendix 2. (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 913476 Test #: 2 Test Started: Date 4-4-06 Time: 1420
Organism: M.beryllina SOP #: TA 07_04 Test Ended: Date 4806 Time: 13:00
Organism Batch: 94-06 Diluent/ Batch: ASW 1 6-06
Organism Age: 10 days Food: YCT P. subcapitata Artemia
Chamber Size: 1000 mL Batch: – – GSL 536-90
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	E13	5	5	5	5	5	5
	B	E14	5	5	5	5	5	4 1D
	C	E15	5	5	5	5	5	5
	D	E16	5	5	5	5	5	5
Salt CTRL	A	E17	5	5	5	5	5	5
	B	E18	5	5	5	5	5	5
	C	E19	5	4 1D	(A) ~~5~~ 4	4	4	4
	D	E20	5	5	5	5	5	5
100%	A	E21	5	5	(A) ~~3~~ 5	5	5	5
	B	E22	5	5	5	5	5	5
	C	E23	5	5	5	5	5	5
	D	E24	5	5	5	5	5	5
Organisms loaded by: BK		Checked by:	[redacted]	JD	SP	JD	JD	JD

Loading Verified by: EW

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

Comments: transcription error SP

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

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

V 2.1 11/01/2005

Page 000028

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 913476 Test #: 1 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	C	D	A
pH (S.U.)	8.9	8.1	8.0	8.3	8.0	8.1
Temperature °C	24.0	24.4	24.6	24.0	24.5	25.1
Dissolved Oxygen mg/L	7.2	5.8	5.8	6.3	5.3	5.6
Conductivity µmhos (mmhos)	32.9	33.9	34.3	32.2	33.2	34.8
(initials) Measured by:	BA	BA	BA	[illegible]	BA	JD
(initials) Recorded by:	BA	BA	BA	[illegible]	BA	JD

Comments:

Concentration Salt ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.3	8.2	8.4	8.2	8.1
Temperature °C	24.0	24.5	24.6	24.0	25.0	25.7
Dissolved Oxygen mg/L	7.3	5.9	5.7	6.2	5.0	5.5
Conductivity µmhos (mmhos)	32.1	33.1	33.4	32.3	33.4	34.4
(initials) Measured by:	BA	BA	BA	[illegible]	BA	JD
(initials) Recorded by:	BA	BA	BA	[illegible]	BA	JD

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	7.8	7.9	7.9	7.4	7.8	7.8
Temperature °C	24.2	24.5	24.6	25.1	25.3	25.7
Dissolved Oxygen mg/L	7.3	5.9 (BA)	5.5	6.5	5.1	5.0
Conductivity µmhos (mmhos)	31.8	33.1	33.4	32.1	33.1	34.9
(initials) Measured by:	BA	BA	BA	[illegible]	BA	JD
(initials) Recorded by:	BA	BA	BA	[illegible]	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

0000029

V 2.0 2/24/04

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 913476 **Test #:** 2 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	C	D	A
pH (S.U.)	8.9	8.2	8.2	8.3	8.3	8.3
Temperature °C	24.0	24.6	24.8	24.0	24.1	25.6
Dissolved Oxygen mg/L	7.3	5.9	6.0	6.7	6.3	6.6
Conductivity µmhos (mmhos)	32.7	33.6	33.4	32.1	33.4	35.3
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration Salt Ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.4	8.3	8.5	8.4	8.3
Temperature °C	24.1	25.8	25.3	24.0	24.7	24.3
Dissolved Oxygen mg/L	7.4	6.3	6.2	6.3	6.5	6.5
Conductivity µmhos (mmhos)	32.1	33.1	32.9	32.2	33.3	33.3
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	7.8	7.9	8.1	7.3	7.8	7.9
Temperature °C	24.0	24.8	24.3	24.0	24.2	24.7
Dissolved Oxygen mg/L	7.3	5.9	6.2	6.7	6.4	6.1
Conductivity µmhos (mmhos)	31.8	33.0	32.8	32.0	33.4	33.8
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

V 2.0 2/24/04

FDEP Biology Section - Acute Screen 4/24 Bioassay Bench Sheets

Facility: USN Mayport Naval Station WWTF
Address: Building 285 Bon-Homme Richard Street
City: Mayport County: Duval
Contact/District: Tom Kallemeyn / Northeast
NPDES Permit #: FL 0000922
LIMS Job #: TLH-20060404-01 LIMS Sample #: 913477
Lims Data Entry: 4-12-06 MK Data Entry Verification: 4-12-06 SP

Sample Collection: Date: 4-3-06 Time: 0535
Hold Time Start: Date: 4-3-06 Time: 1100
Sample: 3 of 4

Comments:
aeration after 72 hrs due to low D.O. - D.O.
For Abalone only pH 8.3
Waterbath Temperature for Abalone: 24.1-24.2 D.O.
Sample salinity adjusted to ~ 20 parts per thousand with artificial seasalts per test requirement MK 4-4-06

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

Test 1 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No
Test 1: SOP TA 07_ 03

Test 2 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No
Test 2: SOP TA 07_ 04

Initial sample handling:
PH adjustment: yes (no) Initial pH: ____ NaOH N HCl N ____ Drops mL Final pH ____
Aeration (yes) no Initial DO: 10.1 mg/L Final DO: 7.3 mg/L Duration: 15 minutes Rate: ~ 100 bubbles/min
Salinity adjusted (Test 1) (yes) no Initial Salinity: 5.96 Final Salinity ~20 ppt (Salts) Hypersaline brine
Salinity adjusted (Test 2) (yes) no Initial Salinity: 5.96 Final Salinity ~20 ppt (Salts) Hypersaline brine
Dechlorination: yes (no) ____mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC ____

Sample Validation:
Temperature: Shipped ≤6°C (Yes) No Hand Delivered: Cooling (received °C < collected °C) Yes No
Holding Time: ≤36 Hours (Yes) No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures
Sarah Pickard
Bruce Anderson
Jason Stahl
Erin Lutz
Meredith Faircloth
Dave Cowden
Nicole Willenoff
REVIEWER

Water Quality Parameters	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	-	-	-	SP
Lab Total Residual Cl2 (mg/L):	<0.05	HACH	SP	GW
Alkalinity (mg/L as $CaCO_3$):	137	HACH	SP	GW
Hardness (mg/L as $CaCO_3$):	-	HACH	-	-
Total Ammonia (mg/L as N):	<0.024	DENVER	MK	SP
Salinity (ppt)	5.96	YSI / Mettler	GJ	MK

V 2.0 4/12/06

Page
000031

Appendix 2. (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 913477 Test #: 1 Test Started: Date 4-4-06 Time: 1340
Organism: A. bahia SOP #: TA 07_03 Test Ended: Date 4.8.06 Time: 1300
Organism Batch: 13-06 Diluent/ Batch: ASW 1 6-06
Organism Age: 4 days Food: YCT *P. subcapitata* *Artemia*
Chamber Size: 400 mL Batch: – – GSL536-90
Test Volume: 250 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	Tox 1	5	5	5	5	5	5
	B	Tox 36	5	5	5	5	5	5
	C	Tox 41	5	5	5	5	5	4 D
	D	Tox 102	5	5	5	5	5	5
Salt CTRL	A	Tox 112	5	5	5	5	5	5
	B	Tox 113	5	5	5	5	5	5
	C	Tox 118	5	5	5	5	5	5
	D	Tox 119	5	5	5	5	5	5
100%	A	Tox 120	5	4 D	4	4	4	4
	B	Tox 121	5	5	4 D	4	2 2D	2
	C	Tox 123	5	5	5	5	4 D	4
	D	Tox 132	5	5	5	5	4 D	3 D
Organisms loaded by: JD	Checked by:		JD	JD	JD	JD	JD	
Loading Verified by: JD								

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

Comments:

Test Results:
% mortality in 100% sample: 35%
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

Page 000032

Appendix 2. (continued)

[redacted]

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 913477 Test #: 2 Test Started: Date 4-4-06 Time: 1310
Organism: Mysidopsis Test Ended: Date 4.8.06 Time: 1300
Organism Batch: 14-06 Diluent/ Batch: ASW 16-06
Organism Age: 1C days Food: YCT P. subcapitata Artemia
Chamber Size: 1000 mL Batch: - - GSL 536-90
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	B1	5	5	5	5	5	5
	B	B2	5	5	5	5	5	5
	C	B3	5	5	5	5	5	5
	D	B4	5	5	5	5	5	5
Salt CTRL	A	B5	5	5	5	5	5	5
	B	B6	5	5	5	5	5	5
	C	B7	5	5	5	5	5	5
	D	B8	5	5	5	5	5	5
100%	A	B9	5	5	d4→5	5	5	5
	B	B10	5	5	d4→5	5	5	5
	C	B11	5	5	5	5	5	5
	D	B12	5	5	5	5	5	5
Organisms loaded by: [redacted]		Checked by: [redacted]		JJ	JD	JS	JJ	JD
Loading Verified by: [redacted]								

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

Comments:
A) transcription error - JJ

Test Results:
% mortality in 100% sample: Ø
LC_{50}: >100% If Calculated: 95% CI _____ Method: _____

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

V 2.1 11/01/2005

Page 000033

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 913477 Test #: 1 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	C	D	A
pH (S.U.)	8.4	8.0	7.9	8.3	8.0	8.2
Temperature °C	24.3	24.7	24.7	24.1	24.8	24.0
Dissolved Oxygen mg/L	7.2	8.0 (5.0)	6.2	6.2	4.3	6.8
Conductivity µmhos (mmhos)	32.2	33.2	34.7	32.4	33.4	33.4
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration Salt ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	BA	B	C	C	D	A
pH (S.U.)	8.7	8.3	8.0	8.4	8.0	8.3
Temperature °C	24.2	24.7	24.6	24.0	24.9	24.0
Dissolved Oxygen mg/L	7.3	5.1	5.8	6.1	4.4	6.9
Conductivity µmhos (mmhos)	32.8	32.7	33.3	32.3	33.6	33.5
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.0	7.9	8.0	7.5	7.8	8.1
Temperature °C	24.4	24.7	24.5	24.0	24.9	24.8
Dissolved Oxygen mg/L	7.5	5.0	5.3	6.5	4.5	7.0
Conductivity µmhos (mmhos)	32.0	32.5	34.1	32.9	33.8	33.5
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

000034

V 2.0 2/24/04

Page

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 913477 Test #: 2 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	C	D	A
pH (S.U.)	8.4	8.2	8.1	8.3	8.3	8.3
Temperature °C	24.0	24.5	24.3	24.0	25.8	24.1
Dissolved Oxygen mg/L	7.1	6.2	5.8	6.7	6.2	5.4
Conductivity µmhos mmhos	32.4	33.2	35.1	32.1	34.4	33.8
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration Salt ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.4	8.3	8.5	8.3	8.3
Temperature °C	24.3	24.8	24.2	24.0	24.8	25.1
Dissolved Oxygen mg/L	7.2	6.3	5.9	6.4	6.3	6.5
Conductivity µmhos mmhos	32.2	32.6	33.2	32.3	33.8	35.4
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.1	8.0	8.1	7.5	7.8	8.0
Temperature °C	24.3	24.6	24.3	24.0	24.5	25.4
Dissolved Oxygen mg/L	7.3	6.1	6.1	6.8	6.5	6.2
Conductivity µmhos mmhos	31.8	32.6	33.2	32.1	33.8	34.7
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

V 2.0 2/24/04

FDEP Biology Section - Acute Screen 4/24 Bioassay Bench Sheets

Facility: USN Mayport Naval Station WWTF
Address: Building 285 Bon-Homme Richard Street
City: Mayport County: Duval
Contact/District: Tom Kallemeyn / Northeast District
NPDES Permit #: FL 0000922
LIMS Job #: TLH-2006-04-04-01 LIMS Sample #: 91210L6
Lims Data Entry: 4-12-06 MF Data Entry Verification: 4-12-06 SP

Sample Collection: Date: 4-3-06 Time: 11:00
Hold Time Start: Date: 4-3-06 Time: 11:00
Sample: 4 of 4

Comments: Sample salinity adjusted to ~20ppts per theresa with artificial sea salts per test requirement MF 4-4-06

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

Test 1 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No
Test 1: SOP TA 07_ 03

Test 2 validation:
Control survival ≥90%: (Yes) No MF
Temperature Range ≤3°C: (Yes) No
Test 2: SOP TA 07_ 04

Initial sample handling:
PH adjustment: yes (no) Initial pH: ____ NaOH N HCl N ____ Drops mL Final pH: ____
Aeration (yes) no Initial DO: 9.6 mg/L Final DO: 7.3 mg/L Duration: 15 minutes Rate: ~ 100 bubbles/min
Salinity adjusted (Test 1): (yes) no Initial Salinity: 6.63 Final Salinity: ~20ppt (Salts) Hypersaline brine
Salinity adjusted (Test 2): (yes) no Initial Salinity: 6.63 Final Salinity: ~20ppt (Salts) Hypersaline brine
Dechlorination: yes (no) ____ mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC: ____

Sample Validation:
Temperature: Shipped ≤6°C (Yes) No Hand Delivered: Cooling (received °C < collected °C) Yes No
Holding Time: ≤36 Hours (Yes) No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures
Sarah Pickland
Bruce Neville
James Daniel
Eric Leif
Marshall Faircloth
Ann Anderson
Nicole Wellendorf
REVIEWER

Water Quality Parameters	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	–	–	–	SP
Lab Total Residual Cl2 (mg/L):	<0.03	HACH	SP	SP
Alkalinity (mg/L as $CaCO_3$):	137	HACH	SP	SP
Hardness (mg/L as $CaCO_3$):	–	HACH	–	–
Total Ammonia (mg/L as N):	<0.034	DENVER	MF	SP
Salinity (ppt):	6.63	YSI / Mettler	SP	MF

V 2.0 4/12/05



Appendix 2. (continued)

[redacted]

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 912106 Test #: 1 Test Started: Date 4-4-06 Time: 1330
Organism: A. bahia SOP #: TA 07_03 Test Ended: Date 4.7.06 Time: 1300
Organism Batch: 13-06 Diluent/ Batch: ASW / 6-06
Organism Age: 4 days Food: YCT P. subcapitata Artemia
Chamber Size: 400 mL Batch: — — GSL 536-90
Test Volume: 250 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	Tox 10	5	5	5	5	5	4 10
	B	Tox 14	5	5	5	5	5	5
	C	Tox 17	5	5	5	5	5	5
	D	Tox 44	5	5	5	5	5	5
Salt CTRL	A	Tox 102	5	5	5	5	5	5
	B	Tox 107	5	5	5	5	5	5
	C	Tox 108	5	5	5	5	5	4 D
	D	Tox 109	5	5	5	5	5	5
100%	A	Tox 110	5	5	4 D	4	3 D	2 D
	B	Tox 113	5	5	5	5	5	4 D
	C	Tox 117	5	5	4 D	4	2 D	2
	D	Tox 136	5	4 D	3 D	3	1 D	1
Organisms loaded by: JJ		Checked by: [redacted]		SS	SS	JJ	JO	JJ
Loading Verified by: SS								

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

Comments:

Test Results:
% mortality in 100% sample: 55
LC_{50}: < 100 % If Calculated: 95% CI_____ Method:_____

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

V 2.1 11/01/2005

Page 000037

Appendix 2. (continued)



FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 912106 Test #: 2 Test Started: Date 4-4-06 Time: 1330
Organism: M. bahia SOP #: TA 07_ 04 Test Ended: Date 4.8.06 Time: 1300
Organism Batch: 14-06 Diluent/ Batch: ASW 1 60-06
Organism Age: 10 days Food: YCT P. subcapitata Artemia
Chamber Size: 1000 mL Batch: — — GSL 536-90
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	B13	5	5	5	5	5	5
	B	B14	5	5	5	5	5	5
	C	B15	5	5	5	5	5	5
	D	B16	5	5	5	5	5	5
Salt CTRL	A	B17	5	5	5	5	5	5
	B	B18	5	5	5	5	5	5
	C	B19	5	5	5	5	5	5
	D	B20	5	5	5	5	5	5
100%	A	B21	5	5	5	5	5	5
	B	B22	5	5	5	5	5	5
	C	B23	5	5	5	5	5	5
	D	B24	5	5	5	5	5	5
Organisms loaded by: SF		Checked by: [redacted]	JD	JD	JD	JD	JD	
Loading Verified by: DD								

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

Page 000038



FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 9/2106 Test #: 1 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	C	D	A
pH (S.U.)	8.4	8.0	7.9	8.3	8.0	7.9
Temperature °C	24.5	24.5	24.4	24.1	25.9	24.6
Dissolved Oxygen mg/L	7.5	5.6	6.2	6.2	5.1	4.8
Conductivity µmhos (mmhos)	32.5	33.0	33.5	32.5	33.9	34.7
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration Salt ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.3	8.1	8.4	8.1	8.1
Temperature °C	24.8	24.8	24.7	24.0	25.5	24.7
Dissolved Oxygen mg/L	6.8	5.5	5.8	6.1	5.1	4.8
Conductivity µmhos (mmhos)	32.3	32.7	33.1	32.2	33.5	35.8
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	7.8	7.9	7.9	7.4	7.8	7.9
Temperature °C	24.4	24.7	24.7	24.0	25.7	24.9
Dissolved Oxygen mg/L	7.1	5.7	5.5	6.4	5.1	5.1
Conductivity µmhos (mmhos)	32.0	32.5	33.9	32.5	33.4	34.9
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos (mmhos)						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

0000039

V 2.0 2/24/04

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 9/2/06 Test #: 1st 2 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	C	D	A
pH (S.U.)	8.4	8.2	8.2	8.3	8.3	8.3
Temperature °C	24.0	24.9	24.7	24.0	25.3	24.7
Dissolved Oxygen mg/L	7.2	5.9	5.4	6.6 BA	6.3	6.4
Conductivity µmhos (mmhos)	32.8	32.9	33.3	32.1	32.9	31.9
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration Salt ctrl	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	8.7	8.5	8.3	8.5	8.4	8.3
Temperature °C	24.6	24.8	25.7	24.0	24.8	24.2
Dissolved Oxygen mg/L	7.3	6.0	6.0	6.4	6.4	7.4
Conductivity µmhos (mmhos)	32.1	32.1	33.0	32.3	33.1	33.4
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration 100 %	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C	C	D	A
pH (S.U.)	7.9	7.9	8.1	8.3 BA	7.9	8.0
Temperature °C	24.4	24.7	24.5	24.0	25.4	25.2
Dissolved Oxygen mg/L	7.3	6.0	5.8	6.8	6.4	6.2
Conductivity µmhos (mmhos)	31.9	32.2	32.9	32.2	33.7	34.5
(initials) Measured by:	BA	BA	BA	BA	BA	JD
(initials) Recorded by:	BA	BA	BA	BA	BA	JD

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

V 2.0 2/24/04

Appendix 3. SRT Bench Sheets and Statistical Analysis

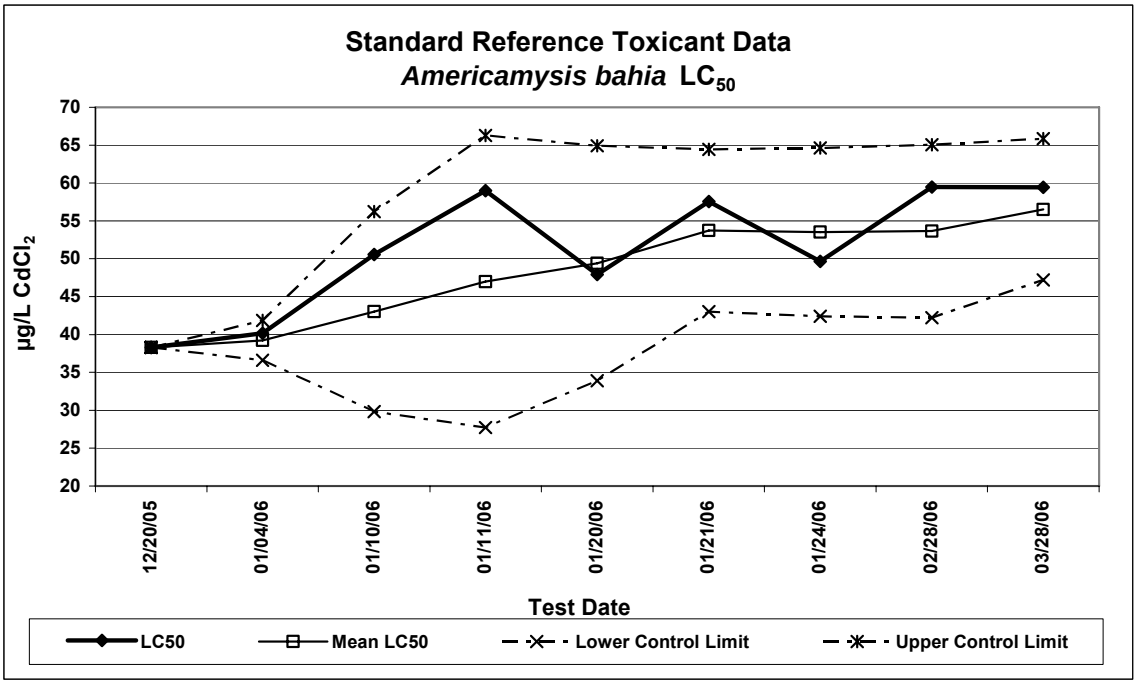
Florida Department of Environmental Protection
Bureau of Laboratories

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
12/20/05	38.30	38.30	-	38.30	38.30
01/04/06	40.16	39.23	1.32	36.60	41.86
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	49.40	7.76	33.88	64.92
01/21/06	57.54	53.75	5.36	43.03	64.46
01/24/06	49.65	53.52	5.55	42.42	64.62
02/28/06	59.46	53.64	5.71	42.22	65.06
03/28/06	59.42	56.52	4.67	47.19	65.85

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

CV = 10.37
EPA reference 75th quartile CV = 26%



*Fewer than 20 points are charted due to recent initiation of SRT testing using $CdCl_2$.

Appendix 3. (continued)

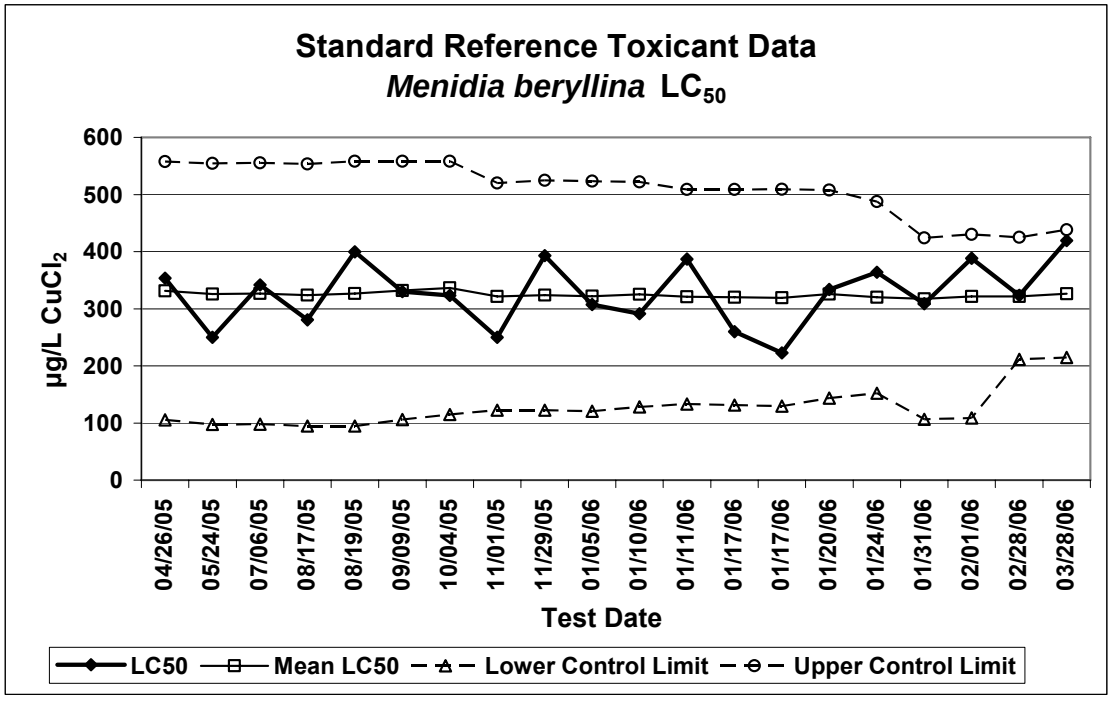
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 48-hour Acute Toxicity
Menidia beryllina (inland silverside) - Copper Chloride ($CuCl_2$)

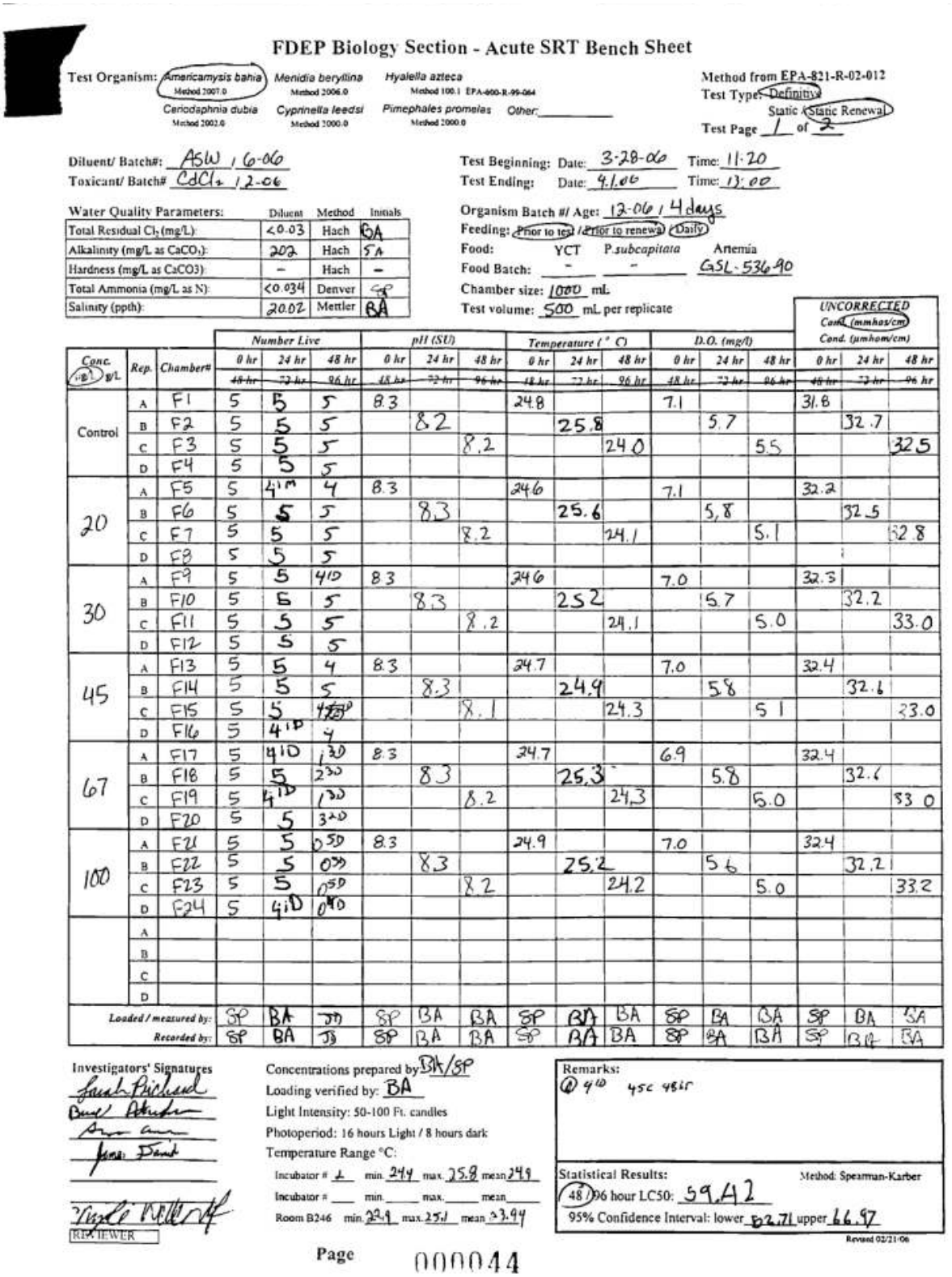
Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
04/26/05	353.55	331.47	113.10	105.27	557.67
05/24/05	250.00	325.88	114.28	97.32	554.44
07/06/05	341.51	326.46	114.33	97.80	555.12
08/17/05	280.62	324.00	114.78	94.43	553.56
08/19/05	399.46	326.40	115.88	94.63	558.16
09/09/05	329.88	331.94	113.09	105.75	558.13
10/04/05	323.49	336.45	110.73	115.00	557.90
11/01/05	250.00	321.21	99.50	122.21	520.21
11/29/05	392.98	323.59	100.67	122.25	524.94
01/05/06	307.20	321.88	100.64	120.60	523.16
01/10/06	291.06	325.02	98.52	127.97	522.07
01/11/06	386.80	320.91	93.81	133.29	508.53
01/17/06	259.80	319.91	94.38	131.15	508.67
01/17/06	222.49	319.26	95.03	129.21	509.32
01/20/06	333.67	325.74	91.10	143.54	507.94
01/24/06	363.93	319.79	83.89	152.01	487.57
01/31/06	308.77	317.37	53.27	106.55	423.91
02/01/06	388.25	321.30	54.32	108.63	429.94
02/28/06	323.38	321.41	52.79	211.18	425.04
03/28/06	419.50	326.32	55.87	214.59	438.05

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

CV = 16.79
EPA reference 75th quartile CV = 21%



Appendix 3. (continued)



FDEP Biology Section - Acute SRT Bench Sheet

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

Method from EPA-821-R-02-012
Test Type: Definitive
Static (Static Renewal)
Test Page 1 of 2

Diluent/ Batch#: ASW / 6-06
Toxicant/ Batch# $CdCl_2$ / 2-06

Test Beginning: Date: 3-28-06 Time: 11:20
Test Ending: Date: 4.1.06 Time: 13:00

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	203	Hach	SA
Hardness (mg/L as CaCO3):	–	Hach	–
Total Ammonia (mg/L as N):	<0.034	Denver	SP
Salinity (ppth):	20.02	Mettler	BA

Organism Batch #/ Age: 13-06 / 4 days
Feeding: (Prior to test) / (Prior to renewal) (Daily)
Food: YCT P.subcapitata Artemia
Food Batch: – – GSL-536.90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

UNCORRECTED
Cond. (mmhos/cm)
Cond. (µmhos/cm)

Conc. (%) g/L	Rep.	Chamber#	Number Live 0 hr (48 hr)	Number Live 24 hr (72 hr)	Number Live 48 hr (96 hr)	pH (SU) 0 hr (48 hr)	pH (SU) 24 hr (72 hr)	pH (SU) 48 hr (96 hr)	Temperature (° C) 0 hr (48 hr)	Temperature (° C) 24 hr (72 hr)	Temperature (° C) 48 hr (96 hr)	D.O. (mg/l) 0 hr (48 hr)	D.O. (mg/l) 24 hr (72 hr)	D.O. (mg/l) 48 hr (96 hr)	Cond. 0 hr (48 hr)	Cond. 24 hr (72 hr)	Cond. 48 hr (96 hr)
Control	A	F1	5	5	5	8.3			24.8			7.1			31.8		
	B	F2	5	5	5		8.2			25.8			5.7			32.7	
	C	F3	5	5	5			8.2			24.0			5.5			32.5
	D	F4	5	5	5												
20	A	F5	5	4 IM	4	8.3			24.6			7.1			32.2		
	B	F6	5	5	5		8.3			25.6			5.8			32.5	
	C	F7	5	5	5			8.2			24.1			5.1			32.8
	D	F8	5	5	5												
30	A	F9	5	5	4 ID	8.3			24.6			7.0			32.3		
	B	F10	5	5	5		8.3			25.2			5.7			32.2	
	C	F11	5	5	5			8.2			24.1			5.0			33.0
	D	F12	5	5	5												
45	A	F13	5	5	4	8.3			24.7			7.0			32.4		
	B	F14	5	5	5		8.3			24.9			5.8			32.6	
	C	F15	5	5	4 ID			8.1			24.3			5.1			33.0
	D	F16	5	4 ID	4												
67	A	F17	5	4 ID	1 3D	8.3			24.7			6.9			32.4		
	B	F18	5	5	2 3D		8.3			25.3			5.8			32.6	
	C	F19	5	4 ID	1 3D			8.2			24.3			5.0			33.0
	D	F20	5	5	3 2D												
100	A	F21	5	5	0 5D	8.3			24.9			7.0			32.4		
	B	F22	5	5	0 3D		8.3			25.2			5.6			32.2	
	C	F23	5	5	0 5D			8.2			24.2			5.0			33.2
	D	F24	5	4 ID	0 4D												
	A																
	B																
	C																
	D																
Loaded / measured by:			SP	BA	JD	SP	BA	BA	SP	BA	BA	SP	BA	BA	SP	BA	BA
Recorded by:			SP	BA	JB	SP	BA	BA	SP	BA	BA	SP	BA	BA	SP	BA	BA

Investigators' Signatures
Sarah Pickland
Brad Adams
Ana Ann
Jane Dent
Mike Mettler
REVIEWER

Concentrations prepared by BA/SP
Loading verified by: BA
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 1 min. 24.4 max. 25.8 mean 24.9
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 22.9 max. 25.1 mean 23.94

Remarks:
@ 4D 4SC 4BC

Statistical Results: Method: Spearman-Karber
(48) 96 hour LC50: 59.42
95% Confidence Interval: lower 52.71 upper 66.97

Revised 02/21/06

Page 000044

Appendix 3. (continued)

FDEP Biology Section - 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: Definitive
Static / Static Renewal
Test Page 2 of 2

Diluent/ Batch#: ASW / 6-06
Toxicant/ Batch# $CdCl_2$ / 12-06

Test Beginning: Date: 3-28-06 Time: 11:20
Test Ending: Date: 4.06 Time: 1300

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	202	Hach	SA
Hardness (mg/L as CaCO3):	–	Hach	–
Total Ammonia (mg/L as N):	<0.034	Denver	SP
Salinity (ppth):	20.02	Mentler	BA

Organism Batch #/ Age: 12-061 4 days
Feeding: ~~Prior to test~~/ ~~Prior to renewal~~/ Daily
Food: YCT P.*subcapitata* Artemia
Food Batch: – – GSL-536-90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. (ppb) g/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 Cond. (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	Cond. (µmhom/cm) 48 hr	72 hr	96 hr
Control	A	F1	5	5	4 1D			8.1	7		25.4			6.1	~~31.8~~		32.9
	B	F2	5	5	4 1D												
	C	F3	5	5	5	8.3			24.0			6.0			31.6		
	D	F4	5	5	5		8.2			25.1			6.0			31.7	
20	A	F5	4	4	3 1D			8.1			25.1			6.4			32.7
	B	F6	5	5	5												
	C	F7	5	4 1D	4	8.3			24.1			6.4			32.2		
	D	F8	5	5	5		8.2			24.0			5.9			32.0	
~~30~~ 30	A	F9	4	4	4			8.1			24.9			6.8			32.7
	B	F10	5	5	4 1D												
	C	F11	5	3 2D	3	8.3			24.7			6.6			32.2		
	D	F12	5	4 1D	4		8.2			25.3			5.9			32.4	
45	A	F13	4	4	2 2D			8.1			24.9			6.8			33.1
	B	F14	5	4 1D	1 3D												
	C	F15	4	4	2 3D	8.3			24.2			6.6			32.1		
	D	F16	4	1 3D	1		8.2			24.5			5.3			31.9	
67	A	F17	1	1	0 1D			8.2			24.9			7.2			32.1
	B	F18	2	0 2D	–												
	C	F19	1	0 1D	–	8.3			24.1			6.6			32.0		
	D	F20	3	0 3D	–		8.2			24.6			5.7			31.9	
100	A	F21	–	–	–												
	B	F22	–	–	–												
	C	F23	–	–	–	–			–			–			–		
	D	F24	–	–	–		–			–			–			–	
	A																
	B																
	C																
	D																
Loaded / measured by:			SP	BA	JD	JD	SP	JD	JD	BA	JD	JD	JD	JD	JD	JD	JD
Recorded by:			~~BA~~ JD	BA	JD	JD	JD	JD	JD	BA	JD	JD	JD	JD	JD	JD	JD

Investigators' Signatures
Sarah Pinchard
Brent Alverson
Jason Davis
Andy Anderson
Virgil Mitchell
REVIEWER

Concentrations prepared by BA / SP
Loading verified by: BA
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 24.4 max. 25.8 mean 24.9
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 22.9 max. 25.1 mean 23.94

Remarks:

Statistical Results: Method: Spearman-Karber
48 / ~~96~~ hour LC50: 39.19
95% Confidence Interval: lower 34.65 upper 44.32

Revised 02/21/06

Page 0000045

Appendix 3. (continued)

FDEP Biology Section - 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: Definitive
Static (Static Renewal)
Test Page 1 of 2

Diluent/ Batch#: ASW / 6-06
Toxicant/ Batch#: $CuCl_2$ / 1-06

Test Beginning: Date: 3-28-06 Time: 13:00
Test Ending: Date: 4.1.06 Time: 13:00

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl: (mg/L)	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$)	202	Hach	SA
Hardness (mg/L as CaCO3)	–	Hach	–
Total Ammonia (mg/L as N)	<0.054	Denver	SP
Salinity (ppth)	20.02	Mettler	BA

Organism Batch #/ Age: 13-06 / 10 days
Feeding: (Prior to test) / Prior to renewal / Daily
Food: YCT P.*subcapitata* Artemia
Food Batch: – – GSL-536-90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. (ug/L)	Rep.	Chamber#	Number Live 0 hr (48 hr)	Number Live 24 hr (72 hr)	Number Live 48 hr (96 hr)	pH (SU) 0 hr (48 hr)	pH (SU) 24 hr (72 hr)	pH (SU) 48 hr (96 hr)	Temperature (° C) 0 hr (48 hr)	Temperature (° C) 24 hr (72 hr)	Temperature (° C) 48 hr (96 hr)	D.O. (mg/l) 0 hr (48 hr)	D.O. (mg/l) 24 hr (72 hr)	D.O. (mg/l) 48 hr (96 hr)	UNCORRECTED Cond. (mmhos/cm) 0 hr (48 hr)	UNCORRECTED Cond. (mmhos/cm) 24 hr (72 hr)	UNCORRECTED Cond. (mmhos/cm) 48 hr (96 hr)
Control	A	C13	10	9 1D	9	8.3		8.2	24.8		24.6	7.0		5.6	32.0		32.9
	B	C14	10	9 1D	9		8.2			26.0			5.2			32.1	
	C																
	D																
100	A	C15	10	10	10	8.3		8.2	24.7		24.9	7.0		5.5	32.2		32.6
	B	C16	10	8 2D	8		8.2			25.7			5.0			32.1	
	C																
	D																
200	A	C17	10	9 1D	9	8.3		8.2	24.8		24.7	6.9		5.6	32.4		32.8
	B	C18	10	8 2D	8		8.2			26.0			5.0			32.6	
	C																
	D																
300	A	C19	10	9 1D	8 1D	8.3		8.2	24.9		24.8	7.0		5.8	32.3		32.9
	B	C20	10	7 3D	7		8.2			25.8			4.9			32.9	
	C																
	D																
400	A	C21	10	6 4D	6	8.3		8.2	24.9		24.9	6.9		5.7	32.2		32.6
	B	C22	10	6 4D	6		8.2			25.9			5.0			32.2	
	C																
	D																
500	A	C23	10	3 7D	0 3D	8.3		8.2	25.1		26.1	7.1		5.8	32.3		32.7
	B	C24	10	7 3D	3 4D		8.2			25.7			4.9			32.4	
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			BA	BA	JD	SP	BA	BA	SP	BA	BA	SP	BA	BA	SP	DA	BA
Recorded by:			SP	BA	JD	SP	BA	BA	SP	BA	BA	SP	BA	BA	SP	BA	BA

Investigators' Signatures
Sarah Pickard
Bryce Ahrendsen
Jason Smith
Bryce Ahrendsen
Mandy Nettenhoff
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. 24.4 max. 25.9 mean 24.9
Incubator # ____ min. ____ max. ____ mean ____
Room B246 min. 22.9 max. 25.1 mean 23.94

Remarks:

Statistical Results: Method: Spearman-Karber
(48) 96 hour LC50: 419.85
95% Confidence Interval: lower 382.4 upper 460.31

Revised 02/21/06

Page 000046

Appendix 3. (continued)

FDEP Biology Section - 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: Definitive
Static (Static Renewal)
Test Page 2 of 2

Diluent/ Batch#: ASW 16-06
Toxicant/ Batch#: $CuCl_2$ I-06

Test Beginning: Date: 3-28-06 Time: 13:00
Test Ending: Date: 4.1.06 Time: 13.00

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	202	Hach	SA
Hardness (mg/L as CaCO3):	-	Hach	-
Total Ammonia (mg/L as N):	<0.034	Denver	SP
Salinity (ppth):	26.02	Mettler	BA

Organism Batch #/ Age: 13-06 / 10 days
Feeding: (Prior to test) Prior to renewal) Daily
Food: YCT P.*subcapitata* Artemia
Food Batch: - - GSL-536-90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. µg/L g/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 Cond. (mmhos/cm) Cond. (µmhos/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	C13	9	9	9	8.3		8.1	25.0		24.3	6.5		5.9	31.6		34.1
	B	C14	9	9	9		8.2			24.0			5.8			33.2	
	C																
	D																
100	A	C15	10	10	10	8.3		8.1	24.9		24.3	6.6		6.6	32.0		32.5
	B	C16	8	8	8		8.2			24.0			5.5			33.1	
	C																
	D																
200	A	C17	9	9	9	8.3		8.1	24.9		24.2	6.6		6.9	32.1		32.7
	B	C18	8	8	8		8.2			24.1			5.7			32.8	
	C																
	D																
300	A	C19	8	8	8	8.3		8.1	24.8		24.1	6.5		7.3	32.0		33.3
	B	C20	7	7	7		8.2			24.3			6.0			32.5	
	C																
	D																
400	A	C21	6	6	6	8.3		8.2	24.7		24.1	6.3		7.2	31.9		33.1
	B	C22	6	5	5		8.2			24.3			6.2			32.5	
	C																
	D																
500	A	C23	-	-	-	8.3			24.7			6.4			31.9		
	B	C24	3	3	3		8.2	8.2		25.0	24.3		6.4	7.1		32.7	33.2
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			JD	BA	JD	JD	JD	JD	JD	BA	JD	JD	JD	JD	JD	JD	JD
Recorded by:			JD	BA	JD	JD	JD	JD	JD	BA	JD	JD	JD	JD	JD	JD	JD

Investigators' Signatures
Sarah Pinchard
Bruce Thompson
Jessie Dandy
Trevor Anderson
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. 24.4 max. 25.8 mean 24.9
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 23.9 max. 25.1 mean 24.4

Remarks:

Statistical Results: Method: Spearman-Karber
48 (96) hour LC50: 410.71
95% Confidence Interval: lower 373.45 upper 451.70

Revised 01/24/06

Page 00017

Appendix 3. (continued)

Americamysis bahia Acute Standard Reference Toxicant Test

DATE: 3/28/06 DURATION: 96 h TOXICANT : $CdCl_2$
SPECIES: *A. bahia*

RAW DATA: Concentration (ug/L)	Number Exposed	Mortalities
0.00	20	2
20.00	20	3
30.00	20	5
45.00	20	14
67.00	20	20
100.00	20	20

SPEARMAN-KARBER TRIM: 5.56%

SPEARMAN-KARBER ESTIMATES: LC_{50}: 39.19
95% LOWER CONFIDENCE: 34.65
95% UPPER CONFIDENCE: 44.32

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

Menidia beryllina Acute Standard Reference Toxicant Test

DATE: 3/28/06 DURATION: 96 h TOXICANT : $CuCl_2$
SPECIES: *M.beryllina*

RAW DATA: Concentration (ug/L)	Number Exposed	Mortalities
.00	20	2
100.00	20	2
200.00	20	3
300.00	20	5
400.00	20	9
500.00	20	17

SPEARMAN-KARBER TRIM: 16.67%

SPEARMAN-KARBER ESTIMATES: LC_{50}: 410.71
95% LOWER CONFIDENCE: 373.45
95% UPPER CONFIDENCE: 451.70

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

Appendix 4. Test Organism Receipts

Aquatic Indicators, Inc.
P.O. Box 632 • St. Augustine, FL 32085-0632 • (904) 829-2780

Date 3-27-06

Species:
1. M. bahia
2. M. beryllina
3.

Total Supplied:
1. 150
2. 150
3.

Brood Description:
1. EGA
2. EGA
3.

Age:
1. 3 days
2. 9 days
3.

Environmental Regime	Feeding:	Zooplankton Artemia NH ✓	Photo:	L 16	D 8
P.H.: 8.1	Temp:	25°C	Salinity:	20‰	

Comments:
Thanks.

Appendix 4. (continued)

Aquatic Indicators, Inc.

P.O. Box 632 • St. Augustine, FL 32085-0632 • (904) 829-2780

Date 04-03-06

Species:

1. M. Gahia
2. M. beryllina
3.

Total Supplied:

1. 250
2. 250
3.

Brood Description:

1. EPA
2. EPA
3.

Age:

1. 3
2. 9
3.

Environmental Regime

Feeding: Zooplankton, Artemia NH —

Photo: L 16 D 8

P.H.: 8.1

Temp: 25°C

Salinity: 20‰

Comments:

Thanks!

Appendix 5. Chemical Analyses performed on the effluent from the USN Mayport Wastewater Treatment Facility Outfall D-001, sampled on April 2 and 3, 2006.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 11:00	USN MAYPORT	Bio-AGP/LimNut	Algal Growth Potential	634	mg DryWt/L		0.3	0.9
04/03/06 11:00	USN MAYPORT	Bio-BOD	Biochemical Oxygen Demand-5 Day, N-Inhib	5.2	mg/L		0.2	2.0
04/03/06 11:00	USN MAYPORT	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
04/03/06 11:00	USN MAYPORT	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	1.5	ug/L	U	1.5	4.5
04/02/06 17:45	EFFLUENT 1	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
04/02/06 17:45	EFFLUENT 1	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	K		
04/02/06 23:50	EFFLUENT 2	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
04/02/06 23:50	EFFLUENT 2	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	K		
04/03/06 5:35	EFFLUENT 3	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
04/03/06 5:35	EFFLUENT 3	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	L		
04/03/06 11:00	USN MAYPORT	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
04/03/06 11:00	USN MAYPORT	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	K		
04/03/06 11:00	USN MAYPORT	BNA-Water	1,2,4-Trichlorobenzene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	1,2-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	1,3-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	1,4-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2,4,6-Trichlorophenol	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2,4-Dichlorophenol	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2,4-Dimethylphenol	54	ug/L	U	54	220
04/03/06 11:00	USN MAYPORT	BNA-Water	2,4-Dinitrophenol	16	ug/L	UJ	16	65
04/03/06 11:00	USN MAYPORT	BNA-Water	2,4-Dinitrotoluene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2,6-Dinitrotoluene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2-Chloronaphthalene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2-Chlorophenol	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	2-Methyl-4,6-dinitrophenol	3.2	ug/L	U	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	2-Nitrophenol	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	3,3'-Dichlorobenzidine	43	ug/L	U	43	170
04/03/06 11:00	USN MAYPORT	BNA-Water	4,4'-DDD	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	4,4'-DDE	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	4,4'-DDT	1.6	ug/L	UJ	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	4-Bromophenyl phenyl ether	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	4-Chloro-3-methylphenol	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	4-Chlorophenyl phenyl ether	2.2	ug/L	U	2.2	8.6
04/03/06 11:00	USN MAYPORT	BNA-Water	4-Nitrophenol	16	ug/L	U	16	65
04/03/06 11:00	USN MAYPORT	BNA-Water	Acenaphthene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Acenaphthylene	1.1	ug/L	U	1.1	4.3

Appendix 5. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 11:00	USN MAYPORT	BNA-Water	Aldrin	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	alpha-BHC	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Anthracene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Benzidine	110	ug/L	U	110	430
04/03/06 11:00	USN MAYPORT	BNA-Water	Benzo(a)anthracene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Benzo(a)pyrene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Benzo(b)fluoranthene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Benzo(g,h,i)perylene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Benzo(k)fluoranthene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	beta-BHC	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Bis(2-chloroethoxy)methane	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Bis(2-chloroethyl)ether	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Bis(2-chloroisopropyl)ether	3.2	ug/L	U	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	Bis(2-ethylhexyl)phthalate	16	ug/L	U	16	65
04/03/06 11:00	USN MAYPORT	BNA-Water	Butyl benzyl phthalate	5.4	ug/L	U	5.4	22
04/03/06 11:00	USN MAYPORT	BNA-Water	Chrysene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	delta-BHC	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Dibenzo(a,h)anthracene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Dieldrin	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Diethyl phthalate	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Dimethyl phthalate	54	ug/L	U	54	220
04/03/06 11:00	USN MAYPORT	BNA-Water	Di-n-butyl phthalate	5.4	ug/L	U	5.4	22
04/03/06 11:00	USN MAYPORT	BNA-Water	Di-n-octyl phthalate	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Endosulfan I	4.3	ug/L	U	4.3	17
04/03/06 11:00	USN MAYPORT	BNA-Water	Endosulfan II	4.3	ug/L	U	4.3	17
04/03/06 11:00	USN MAYPORT	BNA-Water	Endosulfan sulfate	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Endrin	1.6	ug/L	UJ	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Endrin aldehyde	4.3	ug/L	U	4.3	17
04/03/06 11:00	USN MAYPORT	BNA-Water	Fluoranthene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Fluorene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	gamma-BHC	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Heptachlor	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Heptachlor epoxide	1.6	ug/L	U	1.6	6.5
04/03/06 11:00	USN MAYPORT	BNA-Water	Hexachlorobenzene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Hexachlorobutadiene	3.2	ug/L	U	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	Hexachlorocyclopentadiene	3.2	ug/L	U	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	Hexachloroethane	3.2	ug/L	U	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	Indeno(1,2,3-cd)pyrene	1.1	ug/L	U	1.1	4.3

Appendix 5. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 11:00	USN MAYPORT	BNA-Water	Isophorone	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Naphthalene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Nitrobenzene	2.2	ug/L	U	2.2	8.6
04/03/06 11:00	USN MAYPORT	BNA-Water	N-Nitrosodimethylamine	2.2	ug/L	U	2.2	8.6
04/03/06 11:00	USN MAYPORT	BNA-Water	N-Nitrosodi-n-propylamine	2.2	ug/L	U	2.2	8.6
04/03/06 11:00	USN MAYPORT	BNA-Water	N-Nitrosodiphenylamine	3.2	ug/L	UJ	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	Pentachlorophenol	3.2	ug/L	U	3.2	13
04/03/06 11:00	USN MAYPORT	BNA-Water	Phenanthrene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Phenol	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	Pyrene	1.1	ug/L	U	1.1	4.3
04/03/06 11:00	USN MAYPORT	BNA-Water	TRPH	0.26	mg/L	U	0.26	1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	1,2,4-Trichlorobenzene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	1,2-Dichlorobenzene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	1,3-Dichlorobenzene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	1,4-Dichlorobenzene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2,4,6-Trichlorophenol	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2,4-Dichlorophenol	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2,4-Dimethylphenol	51	ug/L	U	51	200
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2,4-Dinitrophenol	15	ug/L	UJ	15	61
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2,4-Dinitrotoluene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2,6-Dinitrotoluene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2-Chloronaphthalene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2-Chlorophenol	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	3	ug/L	U	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	2-Nitrophenol	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	3,3'-Dichlorobenzidine	40	ug/L	U	40	160
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4,4'-DDT	1.5	ug/L	UJ	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4-Bromophenyl phenyl ether	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4-Chloro-3-methylphenol	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4-Chlorophenyl phenyl ether	2	ug/L	U	2	8.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	4-Nitrophenol	15	ug/L	U	15	61
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Acenaphthene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Acenaphthylene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Aldrin	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Anthracene	1	ug/L	U	1	4

Appendix 5. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Benzidine	100	ug/L	U	100	400
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Benzo(a)anthracene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Benzo(a)pyrene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Benzo(b)fluoranthene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Benzo(g,h,i)perylene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Benzo(k)fluoranthene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroethoxy)methane	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroethyl)ether	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	3	ug/L	U	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	61
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Butyl benzyl phthalate	5.1	ug/L	U	5.1	20
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Chrysene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Dibenzo(a,h)anthracene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Diethyl phthalate	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Dimethyl phthalate	51	ug/L	U	51	200
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Di-n-butyl phthalate	5.1	ug/L	U	5.1	20
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Di-n-octyl phthalate	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Endosulfan I	4	ug/L	U	4	16
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Endosulfan II	4	ug/L	U	4	16
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Endrin	1.5	ug/L	UJ	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Endrin aldehyde	4	ug/L	U	4	16
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Fluoranthene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Fluorene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	6.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Hexachlorobenzene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Hexachlorobutadiene	3	ug/L	U	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Hexachlorocyclopentadiene	3	ug/L	U	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Hexachloroethane	3	ug/L	U	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Isophorone	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Naphthalene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Nitrobenzene	2	ug/L	U	2	8.1

Appendix 5. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	N-Nitrosodimethylamine	2	ug/L	U	2	8.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	N-Nitrosodi-n-propylamine	2	ug/L	U	2	8.1
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	N-Nitrosodiphenylamine	3	ug/L	UJ	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Pentachlorophenol	3	ug/L	U	3	12
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Phenanthrene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Phenol	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	Pyrene	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	BNA-Water	TRPH	0.28	mg/L	U	0.28	1.1
04/03/06 11:00	USN MAYPORT	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
04/03/06 11:00	USN MAYPORT	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
04/03/06 11:00	USN MAYPORT	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
04/03/06 11:00	USN MAYPORT	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8
04/03/06 11:00	USN MAYPORT	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
04/03/06 11:00	USN MAYPORT	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
04/03/06 11:00	USN MAYPORT	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
04/03/06 11:00	USN MAYPORT	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
04/03/06 11:00	USN MAYPORT	GC-Water	Diazinon	0.05	ug/L	UJ	0.05	0.2
04/03/06 11:00	USN MAYPORT	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
04/03/06 11:00	USN MAYPORT	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
04/03/06 11:00	USN MAYPORT	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
04/03/06 11:00	USN MAYPORT	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
04/03/06 11:00	USN MAYPORT	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
04/03/06 11:00	USN MAYPORT	GC-Water	Malathion	0.15	ug/L	UJ	0.15	0.6
04/03/06 11:00	USN MAYPORT	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
04/03/06 11:00	USN MAYPORT	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
04/03/06 11:00	USN MAYPORT	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
04/03/06 11:00	USN MAYPORT	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
04/03/06 11:00	USN MAYPORT	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
04/03/06 11:00	USN MAYPORT	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
04/03/06 11:00	USN MAYPORT	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
04/03/06 11:00	USN MAYPORT	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
04/03/06 11:00	USN MAYPORT	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
04/03/06 11:00	USN MAYPORT	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
04/03/06 11:00	USN MAYPORT	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8

Appendix 5. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Diazinon	0.05	ug/L	UJ	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Malathion	0.15	ug/L	UJ	0.15	0.6
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
04/03/06 12:15	EQUIPMENT BLANK	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
04/03/06 11:00	USN MAYPORT	Metals-Water	Aluminum	135	ug/L		5	20
04/03/06 11:00	USN MAYPORT	Metals-Water	Arsenic	4	ug/L	U	4	16
04/03/06 11:00	USN MAYPORT	Metals-Water	Cadmium	0.5	ug/L	U	0.5	2
04/03/06 11:00	USN MAYPORT	Metals-Water	Calcium	130	mg/L		0.05	0.2
04/03/06 11:00	USN MAYPORT	Metals-Water	Chromium	2	ug/L	U	2	8
04/03/06 11:00	USN MAYPORT	Metals-Water	Copper	66.4	ug/L		2.5	10
04/03/06 11:00	USN MAYPORT	Metals-Water	Iron	349	ug/L		10	40
04/03/06 11:00	USN MAYPORT	Metals-Water	Lead	1	ug/L	I	0.75	3
04/03/06 11:00	USN MAYPORT	Metals-Water	Magnesium	257	mg/L		0.1	0.4
04/03/06 11:00	USN MAYPORT	Metals-Water	Nickel	32.1	ug/L		1	4
04/03/06 11:00	USN MAYPORT	Metals-Water	Selenium	5	ug/L	U	5	20
04/03/06 11:00	USN MAYPORT	Metals-Water	Silver	0.25	ug/L	U	0.25	1
04/03/06 11:00	USN MAYPORT	Metals-Water	Zinc	59	ug/L		3	12
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Arsenic	4	ug/L	U	4	16
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2

Appendix 5. (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Copper	0.25	ug/L	U	0.25	1
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Iron	10	ug/L	U	10	40
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Nickel	1	ug/L	U	1	4
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
04/03/06 12:15	EQUIPMENT BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
04/03/06 11:00	USN MAYPORT	Nutrients-Liquid	Ammonia-N	0.11	mg N/L	A	0.01	0.02
04/03/06 11:00	USN MAYPORT	Nutrients-Liquid	Kjeldahl Nitrogen	2.7	mg N/L	J	0.16	0.4
04/03/06 11:00	USN MAYPORT	Nutrients-Liquid	NO2NO3-N	12	mg N/L		0.08	0.2
04/03/06 11:00	USN MAYPORT	Nutrients-Liquid	O-Phosphate-P	3.1	mg P/L		0.16	0.4
04/03/06 11:00	USN MAYPORT	Nutrients-Liquid	Total-P	3.8	mg P/L		0.2	0.6
04/03/06 11:00	USN MAYPORT	Nutrients-Liquid	TSS	17	mg/L		4	16
04/03/06 12:15	EQUIPMENT BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
04/03/06 12:15	EQUIPMENT BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.08	mg N/L	U	0.08	0.2
04/03/06 12:15	EQUIPMENT BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
04/03/06 12:15	EQUIPMENT BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
04/03/06 12:15	EQUIPMENT BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
04/03/06 11:00	USN MAYPORT	Overflow	MBAS	0.19	mg/L	JV		
04/03/06 11:00	USN MAYPORT	Overflow	Oil and Grease	7.4	mg/L	J		
04/03/06 12:15	EQUIPMENT BLANK	Overflow	MBAS	0.064	mg/L	IV		
04/03/06 12:15	EQUIPMENT BLANK	Overflow	Oil and Grease	2.1	mg/L	I		

The Bioassay of USN Mayport Naval Station Wastewater Treatment Plant effluent sampled on April 2 and 3, 2006. NPDES #FL0000922.

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

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 0 0 9 2 2 11	12 0 6 0 4 0 3	18 **B**	19 **S**	20 1

Remarks

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The Priority Pollutants Analysis of USN Mayport Naval Station Wastewater Treatment Plant effluent sampled on April 3, 2006. NPDES #FL0000922.

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

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 0 0 9 2 2 11	12 0 6 0 4 0 3	18 **X**	19 **S**	20 1

Remarks

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Biological Analyses of USN Mayport Naval Station Wastewater Treatment Plant effluent sampled on April 3, 2006. NPDES #FL0000922.

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

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 0 0 9 2 2 11	12 0 6 0 4 0 3	18 **S**	19 **S**	20 1

Remarks

66