FDEP Biology Lab-Toxicity Section
Test Instrument Serial Number Page
Method: EPA-821-R-02-012

METER / DEVICE	ID	SOP	Parameter	Method	Benchsheet Code
YSI Model 58 Dissolved Oxygen Meter	90H018262	TA-06.04	Dissolved Oxygen	SM 4500 O G	DO1
Thermo Scientific Orion Star A213 Benchtop RDO/DOMeter	SN X49117 Probe: 019059	TA-06.39	Dissolved Oxygen	SM 4500 O G	DO2
Accumet AR-10 pH Meter	93312105	TA-06.23	pH	SM 4500 H+	PH1
Fisherbrand FE150 pH Meter	SN 2753630 Probe: S35932 Temp: S35934	TA-06.37	pH	SM 4500 H+	PH2
Mettler-Toledo SevenMulti Conductivity Meter	SN 1225117049 Probe H04257	TA-06.25	Conductivity Salinity	SM 2510 B SM 2520 B	COND1
Traceable Bench Conductivity Meter	SN 170814827	TA-06.36	Conductivity Salinity	SM 2510 B SM 2520 B	COND2
Hach Ammonia Mid-Range Kit for freshwater	Kit Lot # A6070	TA-06.33	Ammonia	SM 4500 NH3	NH32
Hach Ammonia Kit NI-SA for saltwater	Kit Lot # A6055	TA-06.33	Ammonia	SM 4500 NH3	NH31
Hach Ammonia Nitrogen Pocket Colorimeter II	Kit Lot # A8051	TA-06.35	Ammonia	SM 4500 NH4	NH34
Traceable Thermometer	#7-SN 160858747 Probe #181156302	TA-06.05	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#7
Traceable Thermometer	#6-SN150057760 Probe #181156300	TA-06.05	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#6B
Hach Chlorine Pocket Colorimeter II	#2-05050C026378	TA-06.22	Total Residual Chlorine	EPA 330.5 SM 4500 CL G	#2
Alkalinity (Hach Kit)	No SN	TA-06.08	Alkalinity	SM 2320 B	ALK1
Hardness (Hach Kit)	No SN	TA-06.08	Hardness	SM 2340 C	HARD1
Mettler Toledo XA105	B314195659	PCR-2.2	Weight	-	BAL1
Mettler Toledo 403TS/00	B815673069	TA-06.34	Weight	-	BAL2
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	S01

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Test Information Sheet

Sample Collection: Date:_____Time:_____
Hold Time Start: Date:_____Time:_____

Test Start Date:_____ Time:_____
Test End Date:_____Time:_____

Organism Age: _____
Batch #: _____

Facility:_____
_____
Address:_____
_____
County:_____
NPDES Permit #: FL _____
Contact/District: _____
LIMS Job #:_____**LIMS Sample #:**_____
LIMS Entry:_____**Verified:**_____
Reviewer:_____

Organism: ***Americamysis bahia***
(SOP TA-07.15, Method: EPA-821-R-02-014 1007.0)

Test Type
☐ Screen
☐ Definitive
☐ Static
☐ Flow-through

Light Intensity: 50-100 ft candles (recommended)
Photoperiod:16 hr light, 8 hr dark (recommended)

Initial Sample Handling:								Sample Validation:		
pH adjustment:		Aeration:		Dechlorination:		Salinity adjustment:		Temperature Shipped ≤ 6°C:	Yes	No
Yes	No	Yes	No	Yes	No	Yes	No			
Initial pH: _____		Initial DO: _____mg/L		Initial TRC: _____ mg/L		Initial Salinity: _____ ppt		If Hand Delivered, Cooling:	Yes	No
								Received: _____ °C Collected: _____ °C		
NaOH: _____N		Final DO: _____mg/L		_____ mL of 0.025 N Sodium Thiosulfate per liter of sample.		Final Salinity: _____ ppt		Holding Time ≤ 36 Hours:	Yes	No
HCl: _____N		Duration: _____minutes		Final TRC: _____mg/L		Circle one: Salts / Hypersaline brine		(Composite: End of collection; Grab: When collected; 4 in 24: Time last sample collected)		
_____ ml		Rate: ~ _____ bubbles per min				Amount: _____				
Final pH: _____										

Chamber Size: 500 mL
Test Volume:_____ mL

Feeding Times	
First	Second
Day 0 *_____	Day 0 _____
Day 1 _____	Day 1 _____
Day 2 _____	Day 2 _____
Day 3 _____	Day 3 _____
Day 4 _____	Day 4 _____
Day 5 _____	Day 5 _____
Day 6 _____	Day 6 _____
* Day 0 first feeding is 2 hours prior to test intiation.	

Artemia Batch #'s
Day 0 _____
Day 1 _____
Day 2 _____
Day 3 _____
Day 4 _____
Day 5 _____
Day 6 _____
Artemia Lot # _____

Comments:

FDEP Biology Laboratory - Toxicity Section

Chronic Bioassay Information Sheet

Method: EPA-821-R-02-014-1007.0 *A. bahia* SOP TA-07.15

LIMS Sample #: _____ (for lab sample # 1)

Start Date: _____ **Time:** _____ Randomizer #: _____

End Date: _____ **Time:** _____

Diluent	Batch #/LIMS ID #	Days Used

Temperature Range (°C)	
Incubator #_____	
Min._____	**Max._____**
Test	
Min._____	**Max._____**
Room B246	
Min._____	**Max._____**

Stats run by/Date: _____

Stats verified by/Date: _____

Results	
Control % CV:	
Dunnetts PMSD (%)**:**	
IC25 (%)**:**	
Growth NOEC (%)**:**	
Growth LOEC (%)**:**	
Survival NOEC (%)**:**	
Survival LOEC (%)**:**	

Test Acceptability Criteria		
Control Survival ≥ 80%:	**Yes**	**No**
Temperature Range ≤ 3° C:	**Yes**	**No**

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Water Quality Information Sheet

LIMS Sample #: _____(for lab sample # 1)

Method: EPA-821-R-02-014-1007.0 *A. bahia* SOP TA-07.15

Sample Received	LAB Sample #	LIMS JOB #	LIMS SAMPLE #	Collection Date/Time	Received Date/Time
Test Day 0	**1**	TLH-			
Test Day 2	**2**	TLH-			
Test Day 4	**3**	TLH-			

Water Quality Parameters	ASW LIMS ID # _____ Batch # _____	ASW LIMS ID # _____ Batch # _____	Sample 1 LIMS Sample # _____	Sample 2 LIMS Sample # _____	Sample 3 LIMS Sample # _____	SOP	Measured By:	Transcription Checked by:
Field Total Residual Cl_2 (mg/L)	N/A	N/A				TA-06.22		
Lab Total Residual Cl_2 (mg/L)						TA-06.22		
Alkalinity (mg/L as $CaCO_3$)						TA-06.08		
Hardness (mg/L as $CaCO_3$)						TA-06.08		
Total Ammonia (mg/L as N)						TA-06.35 or TA-06.33		
Conductivity: □ µmhos □ mmhos						TA-06.36		
Salinity (ppt)						TA-06.36		
Days Used:								

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Survival Benchsheet

Facility:_____ **Start Date:**_____ **Start Time:**_____

LIMS Sample #:_____ (for lab sample # 1) Organism: *A. bahia* (SOP TA-07.15) **End Date:**_____ **End Time:**_____

Loaded by (0 hour): _____ **Verified by (0 hour):** _____ Method: EPA-821-R-02-014- 1007.0 **D = dead** **M = missing**

Concentration (%)	Replicate	TEST DAY 0	1	2	3	4	5	6	7	Concentration (%)	Replicate	TEST DAY 0	1	2	3	4	5	6	7
	A	5									A	5							
	B	5									B	5							
	C	5									C	5							
	D	5									D	5							
Control	E	5									E	5							
	F	5									F	5							
	G	5									G	5							
	H	5									H	5							
	A	5									A	5							
	B	5									B	5							
	C	5									C	5							
	D	5									D	5							
	E	5									E	5							
	F	5									F	5							
	G	5									G	5							
	H	5									H	5							
	A	5									A	5							
	B	5									B	5							
	C	5									C	5							
	D	5									D	5							
	E	5									E	5							
	F	5									F	5							
	G	5									G	5							
	H	5									H	5							
	A	5									A	5							
	B	5									B	5							
	C	5									C	5							
	D	5									D	5							
	E	5									E	5							
	F	5									F	5							
	G	5									G	5							
	H	5									H	5							
	A	5									A	5							
	B	5									B	5							
	C	5									C	5							
	D	5									D	5							
	E	5									E	5							
	F	5									F	5							
	G	5									G	5							
	H	5									H	5							
	A	5									A	5							
	B	5									B	5							
	C	5									C	5							
	D	5									D	5							
	E	5									E	5							
	F	5									F	5							
	G	5									G	5							
	H	5									H	5							
Checked by:										Checked by:									
Concentrations prepared by:										Concentrations prepared by:									

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Parameters Benchsheet

Facility:_____ Organism: *A. bahia* (SOP TA-07.15) **Start Date:** _____ **Time:** _____

LIMS Sample #: _____ Method: EPA-821-R-02-014- 1007.0 **End Date:** _____ **Time:** _____

(for lab sample # 1)

Rep = Replicate **Temp = Temperature** **DO = Dissolved oxygen** **Cond = Conductivity**

		Before Renewal						After Renewal					
Test Day		**Test**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**	**Test**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**
↓	**Concentration (%)**	**Rep**	(su)	(°C)	(mg/L)	(mmhos-cm)	(ppth)	**Rep**	(su)	(°C)	(mg/L)	(mmhos-cm)	(ppth)
Day 0 (Sample 1)	Control												
	Measured by:												
	Recorded by:												
	Concentration (%)	**Rep**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**	**Rep**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**
Day 1 (Sample 1)	Control												
	Measured by:												
	Recorded by:												
	Concentration (%)	**Rep**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**	**Rep**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**
Day 2 (Sample 2)	Control												
	Measured by:												
	Recorded by:												
	Concentration (%)	**Rep**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**	**Rep**	**pH**	**Temp**	**DO**	**Cond**	**Salinity**
Day 3 (Sample 2)	Control												
	Measured by:												
	Recorded by:												

Comments:

FDEP Biology Laboratory-Toxicicty Section

Chronic Bioassay Parameter Sheet

Facility:_____ Organism: *A. bahia* (SOP TA-07.15) **Start Date:** _____ **Time:** _____

LIMS Sample #: _____ Method: EPA-821-R-02-014-1007.0 **End Date:** _____ **Time:** _____

(for lab sample #1)

Rep = Replicate **Temp = Temperature** **DO = Dissolved oxygen** **Cond = Conductivity**

Test Day ↓		Before Renewal						After Renewal					
	Concentration (%)	Test Rep	pH (su)	Temp (°C)	DO (mg/L)	Cond (mmhos-cm)	Salinity (ppth)	Test Rep	pH (su)	Temp (°C)	DO (mg/L)	Cond (mmhos-cm)	Salinity (ppth)
Day 4 (Sample 3)	Control												
	Measured by:												
	Recorded by:												
	Concentration (%)	Rep	pH	Temp	DO	Cond	Salinity	Rep	pH	Temp	DO	Cond	Salinity
Day 5 (Sample 3)	Control												
	Measured by:												
	Recorded by:												
	Concentration (%)	Rep	pH	Temp	DO	Cond	Salinity	Rep	pH	Temp	DO	Cond	Salinity
Day 6 (Sample 3)	Control												
	Measured by:												
	Recorded by:												
	Concentration (%)	Rep	pH	Temp	DO	Cond	Salinity	Rep	pH	Temp	DO	Cond	Salinity
Day 7 (Sample 3)	Control												
	Measured by:												
	Recorded by:												

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Weight Benchsheet

Facility:_____

LIMS Sample ID: _____ (from Lab sample 1)

wt.= Weight Conc. = Concentration

Concentration: %

Concentration	Replicate	Pan #	Pan wt. (g)	Pan + Mysid (g)	Mysid wt. (g)	Original # of mysid	Mean wt. (mg.)	Mean wt./Conc. (mg)
			Mean wt. = Mysid wt. divided by 10					
Control	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	Weighed by initials:							

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Weight
Quality Control Benchsheet

SOPs TA-07.5 and TA-06.21
Method: EPA-821-R-02-014-2006.0

Empty Pan Weights Date: _____ By:_____

Weights in grams	Pan 1 wt.	Pan 1 initial wt.
after Pan 5	@	
after Pan 10	@	
after Pan 15	@	
after Pan 20	@	
after Pan 25	@	
after Pan 30	@	
after Pan 35	@	
after Pan 40	@	
after Pan 45	@	
after Pan 50	@	

	Measured Value (g)	S-weight Value (g)
S-weights	@	
	@	

S-Weights: BIO-S-WEIGHTS-01
Balance: Mettler Toledo XA105
Ser# B314195659

Fish + Pan Weights Date: _____ By:_____

Weights in grams	Pan 1 wt.	Pan 1 initial wt.
after Pan 5	@	
after Pan 10	@	
after Pan 15	@	
after Pan 20	@	
after Pan 25	@	
after Pan 30	@	
after Pan 35	@	
after Pan 40	@	
after Pan 45	@	
after Pan 50	@	

	Measured Value (g)	S-weight Value (g)
S-weights	@	
	@	

Drying Oven ID: _____
Temperature °C: _____
Drying Hours: _____

Date/Time in oven:_____

Date/Time out of oven:_____

Note: Pan number (5, 10, etc.) refers to the replicate that goes with the A. bahia in each pan.

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay
Instrument Code Benchsheet

Test ID: Dates:

METER / DEVICE	Instrument Code
DO Meter	
pH Meter	
Conductivity Meter	
Ammonia Kit	
Traceable Thermometer	
Chlorine Kit	
Alkalinity Kit	
Hardness Kit	
Balances used:	
Weights used:	
Entered by and date:	