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
Thermoscientific Orion Star A213	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	SN 2753630 Probe: 01X218988	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	$NH_3$2
Hach Ammonia Kit NI-SA for saltwater	Kit Lot # A6055	TA-06.33	Ammonia	SM 4500 NH3	$NH_3$1
Hach Ammonia Nitrogen Pocket Colorimeter II	Kit Lot # A8051	TA-06.35	Ammonia	SM 4500 NH3	$NH_3$4
Traceable Thermometer	#12 - SN 200815417 Probe SN 200815417	TA-06.13	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#12
Traceable Thermometer	#13- SN 210217473 Probe SN 210217473	TA-06.13	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#13
Traceable Thermometer	#14- SN 210233584 Probe P1/P2 SN 210233584	TA-06.13	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#14
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	BB-36	Weight	-	BAL1
Mettler Toledo MS403TS/00	B815673069	TA-06.34	Weight	-	BAL3
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	S01

SM-2503B modified to allow use of electronic and non-mercury filled thermometers.
Insert other device information in blank spaces as needed.

FDEP Biology Lab - Toxicity Section
Test Instrument Serial Number Page

Method: EPA-821-R-02-012

METER / DEVICE	ID	SOP	Parameter	Method	Benchsheet Code
Fisher Scientific Timer	SN 80686096	-	Time	-	T-A
Fisher Scientific Timer	SN 80686202	-	Time	-	T-B
Fisher Scientific Timer	SN 200757674	-	Time	-	T-C
Fisher Scientific Timer	SN 20075766	-	Time	-	T-D
Mechanical Pipet - C. dubia 200 µL	M634224	TA-06.32	Volume	-	P1
Mechanical Pipet - Artemia 200 µL	GH41872	TA-06.32	Volume	-	P2
Mechanical Pipet - Artemia 1000 µL	F23899	TA-06.32	Volume	-	P3
Mechanical Pipet - AGP 100 µL	T50346	TA-06.32	Volume	-	P4
Mechanical Pipet - AGP 1000 µL	GH45893	TA-06.32	Volume	-	P5
Mechanical Pipet - AGP 200-1000 µL	V18439	TA-06.32	Volume	-	P6

FDEP Biology Laboratory -Toxicity Section
Acute SRT Bench Sheet

Method: EPA-821-R-02-012

Test Type	Test Duration	
☐ Screen	☐ 48 hours	All species fed 2 hrs prior to test, mysids fed daily.
☐ Definitive	☐ 96 hours	
☐ Static	☐ ___ hours	
☐ Flow-through		

Test 1 of 2: Start Date:_____ Time:_____
End Date: _____ Time:_____

Diluent	Batch #/LIMS ID #	Days Used

Toxicant	Batch #/LIMS ID #	Days Used

Test 2 of 2: Start Date:_____ Time:_____
End Date: _____ Time:_____

Diluent	Batch #/LIMS ID #	Days Used

Toxicant	Batch #/LIMS ID #	Days Used

***Artemia* Batch #'s**

0 hr _____

24 hr _____

48 hr _____

72 hr _____

Artemia Lot #
_____

Food	Days Used
YCT Batch # _____	
YCT Batch # _____	
P. subcapitata Batch # _____	
P. subcapitata Batch # _____	

C. dubia **fed 0.2 ml of *YCT and and *P. subcapitata* in a 1:1 ratio. ****
C. leedsi **, *P. promelas*** **, *M. beryllina*** **, and *A. bahia*** **fed 0.2 ml of *Artemia*** **.**
***YCT= yeast, cereal leaves and trout chow.**
****Pipet P1 used for C. dubia feeding.**

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

REVIEWER:_____

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Information Sheet

Method: EPA-821-R-02-012

Water Quality Parameters	MHWCD LIMS ID # _____ Batch # _____	MHWCD LIMS ID # _____ Batch # _____	MHW LIMS ID # _____ Batch # _____	MHW LIMS ID # _____ Batch # _____	ASW LIMS ID # _____ Batch # _____	ASW LIMS ID # _____ Batch # _____	SOP	Measured By:	Transcription Checked by:
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
Acute SRT Information Bench Sheet

Method: EPA-821-R-02-012

Test 1 of 2

SOP: TA-07.____

Start Date: _____ Time: _____

End Date: _____ Time: _____

Concentrations Prepared by:_____
Test Loaded by:_____
Loading Verified by:_____

Chamber Size _____mL
Test Volume _____mL

Randomizer #___

Test Species	
☐	***Ceriodaphnia dubia*** **(SOP: TA-07.01)**
☐	***Pimephales promelas*** **(SOP TA-07.02)**
☐	***Menidia beryllina*** **(SOP TA-07.04)**
☐	***Americamysis bahia*** **(SOP TA-07.03)**

Batch #:_____ Age: _____

Feeding Times	
First	**Second**
0 hr * _____	**0 hr _____**
24 hr_____	**24 hr_____**
48 hr * _____	**48 hr _____**
72 hr _____	**72 hr _____**

*0 hr 'First' is 2 hours prior to test and 48 hr 'First' is 2 hours prior to renewal

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

Test Results

Method: EPA		95% Confidence Intervals		% mortality in 100%
Statistics:	**LC50**	**Lower**	**Upper**	
48 hour:				
96 hour:				

Test Validation

Control Survival ≥ 90%:	**Yes**	**No**
Temperature Range ≤ 3° C:	**Yes**	**No**

Stats Calculated by/Date:_____ Stats Verified by/Date:_____

Comments:

FDEP Biology Laboratory - Toxicicty Section
Acute SRT Survival Sheet

Method: EPA-821-R-02-012

Test 1 of 2

Concentration (g/L)	Replicate	Chamber #	Test Hour					
			0 hr	**24 hr**	**48 hr BR**	**48 hr AR**	**72 hr**	**96 hr**
Control								
Loaded by:_________		**Checked by:**						
Verified by:_________								

Concentrations at 48 hrs by: ________

BR = Before Renewal **AR = After Renewal** **hr = Hour** **M = Missing** **D = Dead**

Comments:

FDEP Biology Laboratory - Toxicicty Section

Acute SRT Survival Sheet

Method: EPA-821-R-02-012

FDEP Biology Laboratory - Toxicity Section
Acute SRT Parameter Sheet

Method: EPA-821-R-02-012

Test 1 of 2

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos) Circle one	**Salinity** (ppt)
0 Hours	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
24 Hours	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
48 Hours Before Renewal	Control						
	Measured by:						
	Recorded by:						

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Parameter Sheet

Method: EPA-821-R-02-012

Test 1 of 2

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos) Circle one	**Salinity** (ppt)
48 Hours After Renewal	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
72 Hours	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
96 Hours	Control						
	Measured by:						
	Recorded by:						

Comments:

FDEP Biology Laboratory
Toxicity Section
Test Instrument Page

Test 1 of 2

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:

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Information Bench Sheet

Method: EPA-821-R-02-012

Test 2 of 2

SOP: TA-07.____

Start Date: _____ Time: _____
End Date: _____ Time: _____

Concentrations prepared by:_____
Test Loaded by:_____
Loading Verified by:_____

Chamber Size _____mL
Test Volume _____mL

Randomizer #____

Test Species	
☐	*Ceriodaphnia dubia* (SOP: TA-07.01)
☐	*Pimephales promelas* (SOP TA-07.02)
☐	*Menidia beryllina* (SOP TA-07.04)
☐	*Americamysis bahia* (SOP TA-07.03)
Batch #:_____	Age: _____

Feeding Times	
First	Second
0 hr * _____	0 hr _____
24 hr_____	24 hr_____
48 hr * _____	48 hr _____
72 hr _____	72 hr _____

*0 hr 'First' is 2 hours prior to test and 48 hr 'First' is 2 hours prior to renewal

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

Test Results				
Method: EPA		95% Confidence Intervals		% mortality in 100%
Statistics:	LC50	Lower	Upper	
48 hour:				
96 hour:				

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

Stats Calculated by/Date:_____ Stats Verified by/Date:_____

Comments:

FDEP Biology Laboratory - Toxicicty Section
Acute SRT Survival Sheet
Method: EPA-821-R-02-012

Test 2 of 2

Concentration (g/L)	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
Control								
Loaded by:_________		Checked by:						
Verified by:_________								

Concentrations at 48 hrs by: ________

BR = Before Renewal **AR = After Renewal** **hr = Hour** **M = Missing** **D = Dead**

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Parameter Sheet

Method: EPA-821-R-02-012

Test 2 of 2

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos) Circle one	**Salinity** (ppt)
0 Hours	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
24 Hours	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
48 Hours Before Renewal	Control						
	Measured by:						
	Recorded by:						

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Parameter Sheet

Method: EPA-821-R-02-012

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos) Circle one	**Salinity** (ppt)
48 Hours After Renewal	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
72 Hours	Control						
	Measured by:						
	Recorded by:						

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (umhos/mmhos)	**Salinity** (ppt)
96 Hours	Control						
	Measured by:						
	Recorded by:						

Comments:

FDEP Biology Laboratory
Toxicity Section
Test Instrument Page

Test 2 of 2

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: