FDEP Biology Lab-Toxicity Section
Test Instrument Serial Number Page

Method: EPA-821-R-02-012

METER / DEVICE	ID	SOP	Parameter
YSI Model 58 Dissolved Oxygen Meter	90H018262	TA-06.04	Dissolved Oxygen
Thermoscientific Orion Star A213	SN X49117 Probe: 019059	TA-06.39	Dissolved Oxygen
Accumet AR-10 pH Meter	93312105	TA-06.23	pH
Fisherbrand FE150	SN 2753630 Probe: 01X218988	TA- 06.37	pH
Mettler-Toledo SevenMulti Conductivity Meter	SN: 1225117049 Probe: H04257	TA-06.25	Conductivity Salinity
Traceable Bench Conductivity Meter	SN 170814827	TA-06.36	Conductivity Salinity
Hach Ammonia Mid-Range Kit for freshwater	Kit Lot # A6070	TA-06.33	Ammonia
Hach Ammonia Kit NI-SA for saltwater	Kit Lot # A6055	TA-06.33	Ammonia
Hach Ammonia Nitrogen Pocket Colorimeter II	Kit Lot # A8051	TA-06.35	Ammonia
Traceable Thermometer	#12 - SN 200815417 Probe SN 200815417	TA-06.13	Temperature
Traceable Thermometer	#13- SN 210217473 Probe SN 210217473	TA-06.13	Temperature
Traceable Thermometer	#14- SN 210233584 Probe P1/P2 SN 210233584	TA-06.13	Temperature
Hach Chlorine Pocket Colorimeter II	#2-05050C026378	TA-06.22	Total Residual Chlorine
Alkalinity (Hach Kit)	No SN	TA-06.08	Alkalinity
Hardness (Hach Kit)	No SN	TA-06.08	Hardness
Mettler Toledo XA105	B314195659	BB-36	Weight
Mettler Toledo MS403TS/00	B815673069	TA-06.34	Weight
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check

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

METER / DEVICE	ID	SOP	Parameter
Fisher Scientific Timer	SN 80686096	-	Time
Fisher Scientific Timer	SN 80686202	-	Time
Fisher Scientific Timer	SN 200757674	-	Time
Fisher Scientific Timer	SN 20075766	-	Time
Mechanical Pipet - C. dubia 200 µL	M634224	TA-06.32	Volume
Mechanical Pipet - Artemia 200 µL	GH41872	TA-06.32	Volume
Mechanical Pipet - Artemia 1000 µL	F23899	TA-06.32	Volume
Mechanical Pipet - AGP 100 µL	T50346	TA-06.32	Volume

FDEP Biology Lab-Toxicity Section
Test Instrument Serial Number Page

Method: EPA-821-R-02-012

Mechanical Pipet - AGP 1000 µL	GH45893	TA-06.32	Volume
Mechanical Pipet - AGP 200-1000 µL	V18439	TA-06.32	Volume

FDEP Biology Lab-Toxicity Section
Test Instrument Serial Number Page

Method: EPA-821-R-02-012

Method	Benchsheet Code
SM 4500 O G	DO1
SM 4500 O G	DO2
SM 4500 H+	PH1
SM 4500 H+	PH2
SM 2510 B SM 2520 B	COND1
SM 2510 B SM 2520 B	COND2
SM 4500 NH3	$NH_3$2
SM 4500 NH3	$NH_3$1
SM 4500 NH3	$NH_3$4
SM-2530B modified & DEP SOP-001/01 FT1400	#12
SM-2530B modified & DEP SOP-001/01 FT1400	#13
SM-2530B modified & DEP SOP-001/01 FT1400	#14
EPA 330.5 SM 4500 CL G	#2
SM 2320 B	ALK1
SM 2340 C	HARD1
-	BAL1
-	BAL3
-	S01

Method	Benchsheet Code
-	T-A
-	T-B
-	T-C
-	T-D
-	P1
-	P2
-	P3
-	P4

FDEP Biology Lab-Toxicity Section
Test Instrument Serial Number Page

Method: EPA-821-R-02-012

-	P5
-	P6

FDEP Biology Laboratory - Toxicity Section
Chronic Bioassay Facility Bench Sheet

Method: EPA-821-R-02-013

Sample Collection: **Date:**_____ **Time:**_____

Hold Time Start: **Date:**_____ **Time:**_____

Test Species: ***Ceriodaphnia dubia***
(SOP: TA-07,05, Method: 2002.0)

Test Start Date:_____ **Time:**_____

Test End Date:_____ **Time:**_____

Organism Age: _____

Organism Batch #: _____

Facility:_____

_____

Address:_____

_____

County:_____

NPDES Permit #: FL _____

Contact/District: _____

LIMS Job #:_____ **LIMS Sample #:**_____

LIMS Entry:_____ **Verified:**_____

Reviewer:_____

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

Chamber Size: 30 mL
Test Volume: 20 mL

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

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

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 prior to test and daily. YCT= yeast, cereal leaves and trout chow	

Comments:

FDEP Biology Laboratory - Toxicity Section
Chronic Bioassay Information Sheet

Method: EPA-821-R-02-013
SOP TA-07.05

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

Start Date: _____ **Time:** _____

End Date: _____ **Time:** _____

Randomizer #: _____	
Test Replicates	**Culture vial**
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

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

Diluent	Batch #/LIMS ID #	Days Used

Stats by/Date: _____

Stats verified by/Date: _____

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

Test Acceptability Criteria:		
Mean control reproduction ≥ 15 neonates per female:	Yes	No
3rd brood in 60% of surviving females:	Yes	No
Control Survival ≥ 80%:	Yes	No
Temperature Range ≤ 3° C:	Yes	No

Concentration	Mean neonates per female	% Survival
Control		

Comments:

FDEP Laboratory-Toxicity Section
Chronic Water Quality Benchsheet

Method: EPA-821-R-02-13 SOP TA-07.05

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	MHWCD LIMS ID # _____ Batch # _____	MHWCD LIMS ID # _____ Batch # _____	Sample 1 LIMS Sample #: _____	Sample 2 LIMS Sample #: _____	Sample 3 LIMS Sample #: _____	Other: LIMS ID # _____ Batch # _____	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)							TA-06.36		
Salinity (ppt)							TA-06.36		
Days Used									

Comments:

FDEP Biology Laboratory-Toxicicty Section
Chronic Bioassay Survival Benchsheet

SOP TA-07.05 Method: EPA 821-R-02-013

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

Facility: _____

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

Conc.	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Surviving original organisms	Neonates per female	Counts by:	Conc. prep by:	Fed by/Time fed:
Control	0*																
	1																
	2																
	3																
	4																
	5																
	6																
	7																
	8																
	Total																

Conc. (%)	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Surviving original organisms	Neonates per female
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

Loaded by: _____
Verified by:_____

s = split brood

(#) = 4th brood (not counted)

*Day 0 is test initiation day

X = Dead (original organism)

Pipet used for feeding = P1

Comments:

FDEP Biology Laboratory-Toxicicty Section
Chronic Bioassay Survival Benchsheet

SOP TA-07.05 Method: EPA 821-R-02-013

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

LIMS Sample #:_____ (for lab sample #1) **End Date:** _____ **Time:** _____

Conc. (%)	Day	Replicate Number										Total neonates	Surviving original organisms	Neonates per female
		1	2	3	4	5	6	7	8	9	10			
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

Conc. (%)	Day	Replicate Number										Total neonates	Surviving original organisms	Neonates per female
		1	2	3	4	5	6	7	8	9	10			
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

s = split brood

(#) = 4th brood (not counted)

*Day 0 is test initiation day

X = Dead (original organism)

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Survival Benchsheet

SOP TA-07.05 Method: EPA 821-R-02-013

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

Facility: _____

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

Conc. (%)	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Surviving original organisms	Neonates per female
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

Conc. (%)	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Surviving original organisms	Neonates per female
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

s = split brood

(#) = 4th brood (not counted)

*Day 0 is test initiation day

X = Dead (original organism)

Comments:

FDEP Biology Laboratory- Chronic Bioassay Parameter Benchsheet

Method: EPA 821-R-02-013
S OP TA-07.05

Facility:_____

LIMS Sample #:_____ (for lab sample # 1) *Ceriodaphnia dubia* Parameters

Replicate M = "Meter" vial, a surrogate vial for parameters

Test Day ↓	Conc. %	New Sample Replicate	New Sample pH (su)	New Sample Temp (°C)	New Sample DO (mg/L)	New Sample Conductivity (µmhos/cm)	Old Sample Replicate	Old Sample pH (su)	Old Sample Temp (°C)	Old Sample DO (mg/L)	Old Sample Conductivity (µmhos/cm)
Day 0 (Sample 1)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 1 (Sample 1)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 2 (Sample 2)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 3 (Sample 2)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										

Conc. = Concentration, Temp = Temerature, DO = Dissolved oxygen

Comments:

FDEP Biology Laboratory-Chronic Bioassay Parameter Benchsheet

Method: EPA 821-R-02-013
SOP TA-07.05

LIMS Sample #_____ (for lab sample # 1) *Ceriodaphnia dubia* Parameters

Replicate M = "Meter" vial, a surrogate vial for parameters

Test Day ↓	Conc. %	New Sample Replicate	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm)	Old Sample Replicate	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm)
Day 4 (Sample 3)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 5 (Sample 3)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 6 (Sample 3)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 7 (Sample 3)	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 8 (Sample 3)	Control										
	Measured by:										
	Recorded by:										

Comments:

Conc. = Concentration
Temp = Temperature
DO = Dissolved oxygen

FDEP Laboratory-Toxicity Section
Chronic Bioassay Instrument Code Sheet

Method: EPA 821-02-013
SOP TA-07.05

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: