FDEP Biology Laboratory - Toxicity Section
Test Instrument Page
Method: EPA-821-R-02-012

Test ID: **Dates:**

METER / DEVICE	Instrument Code
DO Meter	
pH Meter	
Conductivity Meter	
Ammonia Kit	
Traceable Thermometer	
Chlorine Kit	
Alkalinity Kit	
Hardness Kit	

Entered by and date:

Comments:

Effective Date: 08/19/2022
Revision Date: 08/10/2022
Revision Author(s): B. Cesaroni

FDEP Biology Laboratory - Toxicity Section
Acute Bioassay Facility Bench Sheet

Method: EPA-821-R-02-012

TA-ACUTE-BENCH-1.5

Sample Collection: **Date:**_____ **Time:**_____ **Test 1 of 2 Start Date:**_____ **Time:**_____ **Test 1 of 2 End Date:**_____ **Time:**_____
Hold Time Start: **Date:**_____ **Time:**_____ **Test 2 of 2 Start Date:**_____ **Time:**_____ **Test 2 of 2 End Date:**_____ **Time:**_____

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

Test Type
☐ Screen
☐ Definitive
☐ Static
☐ Flow-through
Test Duration
☐ 48 hours
☐ 96 hours
☐ ___ hours

Initial Sample Handling:							
pH adjustment:		**Aeration:**		**Dechlorination:**		**Salinity:**	
Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Initial pH:		**Initial DO:**		**Initial TRC:**		**Initial Salinity:**	
_____		_____mg/L		_____ mg/L		_____ ppt	
NaOH:		**Final DO:**		_____ mL of 0.025 N Sodium Thiosulfate per liter of sample.		**Final Salinity:**	
_____N		_____mg/L				_____ ppt	
Hcl:		**Duration:**		**Final TRC:**		**Salts Hypersaline brine**	
_____N		_____minutes		_____mg/L			
_____Drops ml		**Rate:** ~ _____ bubbles per min					
Final pH:							
_____							

Sample Validation:		
Temperature Shipped ≤ 6°C:	**Yes**	**No**
If Hand Delivered, Cooling:	**Yes**	**No**
Received: _____ °C **Collected:** _____ °		
Holding Time ≤ 36 Hours:	**Yes**	**No**
(Composite: End of collection; Grab: When collected; 4 in 24: Time last sample collected)		
Light Intensity: 50-100 ft candles (recommended) Photoperiod:16 hr light, 8 hr dark (recommended)		

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	

Reviewer_____

Comments:

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

Method: EPA-821-R-02-012

LIMS Sample #: _____

Water Quality Parameters	MHWCD LIMS ID # _____ Batch # _____	MHWCD LIMS ID # _____ Batch # _____	MHW LIMS ID # _____ Batch # _____	MHW LIMS ID # _____ Batch # _____	ASW LIMS ID # _____ Batch # _____	Sample LIMS # _____	SOP	Measured By:	Transcription Checked by:
Field Total Residual Cl_2 (mg/L)	N/A	N/A	N/A	N/A	N/A				
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 Bioassay Water Quality Information Sheet

Method: EPA-821-R-02-012

FDEP Biology Laboratory - Toxicity Section
Acute Bioassay Information Sheet

Method: EPA-821-R-02-012

Test 1 of 2

LIMS Sample #: _____

Start Date: _____ **Time:** _____

End Date: _____ **Time:** _____

Concentrations Prepared by:_____	Diluent	Batch #/LIMS #	Days Used
Test Loaded by:_____			
Loading Verified by:_____			

Chamber Size _____**mL**

Test Volume _____**mL**

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

Feeding Times	
AM	**PM**
0 hr * _____	**0 hr** _____
24 hr_____	**24 hr**_____
48 hr * _____	**48 hr** _____
72 hr _____	**72 hr** _____

***0 hr AM is prior to test and 48 hr AM is 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 -Toxicity Section
Acute Bioassay Survival Sheet
Method: EPA-821-R-02-012

LIMS Sample #: ____________________

Concentration (%)	Replicate	Chamber #	Test Hour					
			0 hr	**24 hr**	**48 hr BR**	**48 hr AR**	**72 hr**	**96 hr**
Control								
Organisms loaded by: _____		**Checked by:**						

Verified by: _____

Concentrations at 48 hrs by: _______

BR = before renewal **AR = after renewal** **hr = hour** **M = missing**

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute Bioassay Parameter Sheet

Method: EPA-821-R-02-012

Test 1 of 2

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

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

	Concentration (%)	**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 Bioassay Parameter Sheet

Method: EPA-821-R-02-012

Test 1 of 2

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

	Concentration (%)	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
Acute Bioassay Information Sheet

Method: EPA-821-R-02-012

Test 1 of 2

LIMS Sample #: _____

Start Date: _____ **Time:** _____

End Date: _____ **Time:** _____

Concentrations Prepared by:_____	Diluent	Batch #/LIMS #	Days Used
Test Loaded by:_____			
Loading Verified by:_____			

Chamber Size _____mL
Test Volume _____mL

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

Batch #:_____ Age: _____

Randomizer # _____

Feeding Times	
AM	PM
0 hr * _____	0 hr _____
24 hr_____	24 hr_____
48 hr * _____	48 hr _____
72 hr _____	72 hr _____

*0 hr AM is prior to test and 48 hr AM is 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 -Toxicity Section
Acute Bioassay Survival Sheet
Method: EPA-821-R-02-012

LIMS Sample #: ____________________

			Test Hour					
Concentration (%)	**Replicate**	**Chamber #**	**0 hr**	**24 hr**	**48 hr BR**	**48 hr AR**	**72 hr**	**96 hr**
Control								
Organisms loaded by: ____		**Checked by:**						

Verified by: _____

Concentrations at 48 hrs by: _______

BR = before renewal **AR = after renewal** **hr = hour** **M = missing**

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute Bioassay Parameter Sheet

Method: EPA-821-R-02-012

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

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

	Concentration (%)	**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 Bioassay Parameter Sheet

Method: EPA-821-R-02-012

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

	Concentration (%)	**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
Method: EPA-821-R-02-012

Test ID: **Dates:**

METER / DEVICE	Instrument Code
DO Meter	
pH Meter	
Conductivity Meter	
Ammonia Kit	
Traceable Thermometer	
Chlorine Kit	
Alkalinity Kit	
Hardness Kit	

Entered by and date:

Comments: