FDEP Biology Lab- Toxicity Section
Test Instrument Serial Number Page

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 electrionic and non-mercury filled thermometers.
Insert other device information in blank spaces as needed.

FDEP Biology Lab- Toxicity Section
Test Instrument Serial Number Page

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
C. dubia SRT Bench Sheet

Test Type	Acute Test Duration	Test Organism:
☐ Screen ☐ Definitive ☐ Static ☐ Flow-through	☐ 48 hours ☐ 96 Hours ☐ ___ Hours	Ceriodaphnia dubia (SOP: TA-07.05 & SOP: TA-07.01)
		Organism Age: < 24 hrs
Test 1 of 2: Start Date:_____ Time:_____ End Date: _____ Time:_____		Organism Batch #: _____

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

Test Randomizer:	
Replicate	Culture Vial
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Food	Days Used	*C. dubia* fed 0.2 ml of *YCT and and *P. subcapitata* in a 1:1 ratio. *
YCT Batch # _____		*YCT= yeast, cereal leaves and trout chow. **Pipet P1 used for C. dubia feeding.
YCT Batch # _____		
P. subcapitata Batch # _____		Light Intensity: 50-100 ft candles (recommended) Photoperiod:16 hr light, 8 hr dark (recommended)
P. subcapitata Batch # _____		REVIEWER:_____

Comments:

FDEP Biology Laboratory -Toxicity Section
C. dubia SRT Bench Sheet

FDEP Biology Laboratory-Toxicity Section
SRT Water Quality Information Sheet

Water Quality Parameters	MHWCD LIMS ID # _____ Batch # _____	MHWCD LIMS ID # _____ Batch # _____	Method	SOP	Measured By:	Transcription Checked by:
Lab Total Residual Cl_2 (mg/L)			HACH	TA-06.22		
Alkalinity (mg/L as $CaCO_3$)			HACH	TA-06.08		
Hardness (mg/L as $CaCO_3$)			HACH	TA-06.08		
Total Ammonia (mg/L as N)			HACH	TA-06.35 or TA-06.33		
Conductivity (µmhos)			FISCHER	TA-06.36		
Days Used						

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Information Bench Sheet

Test 1 of 2

Start Date: _____ **Time:** _____

End Date: _____ **Time:** _____

Test Species
Ceriodaphnia dubia **(SOP: TA-07.01)**

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

Chamber Size 30 mL
Test Volume 20 mL

Feeding Times	
First	**Second**
0 hr * _____	**0 hr _____**
48 hr * _____	**48 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

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

FDEP Biology Laboratory - Toxicity Section
Acute SRT Parameter Sheet

Test 1 of 2

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity (µmhos/cm)**
0 Hours	Control	**M**				
		M				
		M				
		M				
		M				
		M				
		Measured by:				
		Recorded by:				

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (µmhos/cm)
24 Hours	Control	**M**				
		M				
		M				
		M				
		M				
		M				
		Measured by:				
		Recorded by:				

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

Comments:

FDEP Biology Laboratory - Toxicity Section
Acute SRT Parameter Sheet

Test 1 of 2

	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (µmhos/cm)
48 Hours After Renewal	Control	**M**				
		M				
		M				
		M				
		M				
		M				
	Measured by:					
	Recorded by:					
	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (µmhos/cm)
72 Hours	Control	**M**				
		M				
		M				
		M				
		M				
		M				
	Measured by:					
	Recorded by:					
	Concentration (g/L)	**Test Replicate**	**pH** (SU)	**Temperature** (°C)	**DO** (mg/L)	**Conductivity** (µmhos/cm)
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
Chronic SRT Information Bench Sheet

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

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

Test Species: *Ceriodaphnia dubia*
(SOP: TA-07.05, Method:2002.0)

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

Toxicant	Batch/LIMS ID #	Days Used

Chamber Size: 30 mL
Test Volume: 20 mL

Diluent	Batch #/LIMS ID #	Days Used

Concentration (g/L)	Mean neonates per female	% Survival
Control		

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

Results:	
Control % CV:	
Dunnetts PMSD (%):	
ICP25 (g/L):	
Reproduction NOEC (g/L):	
Reproduction LOEC (g/L):	
Survival NOEC (g/L):	
Survival LOEC (g/L):	
Stats by/Date:_____	
Stats verified by/Date:_____	

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

Reviewer:_____

Comments:

FDEP Biology Laboratory - Toxicity Section

Chronic SRT Bench Sheet

Ceriodaphnia dubia Survival and Reproduction

Conc. (g/L)	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. (g/L)	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. = Concentration

s=split brood

(#) = 4th brood; not counted

*Day 0 is test initiation day

X = Dead (original organism)

Pipet used for feeding = P1

Loaded By: _____

Comments:

FDEP Biology Laboratory - Toxicity Section

Chronic SRT Bench Sheet

Ceriodaphnia dubia Survival and Reproduction

Conc. = Concentration

Conc. (g/L)	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. (g/L)	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													

Comments:

s= split brood
(#) =4th brood; not counted
*Day 0 is test initiation day

X = Dead (original organism)

FDEP Biology Laboratory - Toxicity Section

Chronic SRT Bench Sheet

Ceriodaphnia dubia Survival and Reproduction

Conc. = Concentration

Conc. (g/L)	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. (g/L)	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													

Comments:

s=split brood
(#) =4th brood; not counted
*Day 0 is test initiation day
X = Dead (original organism)

FDEP Biology Laboratory - Toxicity Section

Chronic SRT Parameter Sheet

Ceriodaphnia dubia Parameters

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

Test Day ↓	Conc. g/L	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	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 1	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 2	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 3	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										

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

Comments:

FDEP Biology Laboratory - Toxicity Section
Chronic SRT Parameter Sheet
Ceriodaphnia dubia Parameters

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

Test Day ↓	Conc. g/L	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	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 5	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 6	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 7	Control	M									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										

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

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: