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 Lab-Toxicity Section
Test Instrument Serial Number Page

Method: EPA-821-R-02-012

FDEP Biology Laboratory-Toxicity Section
Chronic PT Bench Sheet

Method: EPA-821-R-02-012

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

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

Test Species: *Ceriodaphnia dubia*
(SOP: TA-07.01, Method:2002.0)

Organism Age:
Organism Batch #:

PT Sample ID:_____
Chamber Size _____mL
Test Volume _____mL

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

Diluent	Batch #/LIMS ID #	Days Used

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. YCT= yeast, cereal leaves and trout chow

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

Results	
Control % CV:	
Dunnetts PMSD:	
ICP25:	
Reproduction NOEC:	
Reproduction LOEC:	
Survival NOEC:	
Survival LOEC:	

Concentration	Mean neonates	% survival
Control		

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

Comments:

FDEP Biology Laboratory-Toxicity Section
PT Water Quality Information Sheet

Method: EPA-821-R-02-012

Water Quality Parameters	MHWCD LIMS lab # _____ Batch # _____	MHWCD LIMS lab # _____ 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)			DENVER	TA-06.35 or TA-06.33		
Conductivity □ µmhos □ mmhos			YSI/Mettler	TA-06.36		
Days Used						

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

Comments:

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet

Ceriodaphnia dubia Reproduction and Survival Page

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

		Replicate Number										Total neonates	Surviving original organisms	Neonates per female
Conc.	Day	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)

Conc. = Concentration of PT sample in %

Comments:

Test acceptability	
Mean control reproduction 15/female	yes no
3rd brood in 60% of surviving females	yes no
Control survival ≥ 80%	yes no

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet

Ceriodaphnia dubia Reproduction and Survival Page

Conc. : %

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													

Comments:

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

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet

Ceriodaphnia dubia Reproduction and Survival Page

Conc. : %

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													

Comments:

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

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet
Ceriodaphnia dubia Parameters

Test Day ↓	Conc. %	New Sample Replicate	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/cm)	Old Sample Replicate	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/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:										

Comments:

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

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet
Ceriodaphnia dubia Parameters

Test Day ↓	Conc. %	New Sample Replicate	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/cm)	Old Sample Replicate	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/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:										
Day 8	**Control**	**M**									
		M									
		M									
		M									
		M									
		M									
	Measured by:										
	Recorded by:										

Comments:

Replicate M=Indicates water quality parameters were taken from a surrogate 'Meter' cup

FDEP Biology Laboratory-Toxicity Section

Chronic PT Bench Sheet

Ceriodaphnia dubia Instrument Code Page

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:	