FDEP Biology Laboratory-Toxicity Section
Chronic PT 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:	

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

P. promelas (SOP:TA-07.09, Method: 1000.0)
M. beryllina (SOP: TA-07.04, Method: 1006.0)

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

Organism Age: _____
Batch #: _____

Feeding Times	
First	Second
Day 0 * _____	Day 0_____
Day 1 _____	Day 1 _____
Day 2 _____	Day 2 _____
Day 3 _____	Day 3 _____
Day 4 _____	Day 4 _____
Day 5 _____	Day 5 _____
Day 6 _____	Day 6 _____

*** Day 0 first feeding is 2 hours prior to test intiation.**

Artemia Batch #'s
Day 0 _____
Day 1 _____
Day 2 _____
Day 3 _____
Day 4 _____
Day 5 _____
Day 6 _____
Artemia Lot #
_____

Stats run by/Date: _____
Stats verified by/Date: _____

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

P. promelas PMSD Bounds for Growth: Lower 12 Upper 30
M. beryllina PMSD Bounds for Growth: Lower 11 Upper 28

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

REVIEWER:_____

Comments:

FDEP Biology Laboratory-Toxicity Section
PT Water Quality Information Sheet

Method: EPA-821-R-02-012

Water Quality Parameters	MHW LIMS lab # _____ Batch # _____	MHW LIMS lab # _____ Batch # _____	ASW LIMS lab # _____ Batch # _____	ASW 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 Survival Benchsheet

D = dead M = missing

Concentration: % PT solution			TEST DAY							
Concentration	Replicate	Chamber	0	1	2	3	4	5	6	7
Control	A		10							
	B		10							
	C		10							
	D		10							
	A		10							
	B		10							
	C		10							
	D		10							
	A		10							
	B		10							
	C		10							
	D		10							
	A		10							
	B		10							
	C		10							
	D		10							
	A		10							
	B		10							
	C		10							
	D		10							
	A		10							
	B		10							
	C		10							
	D		10							
	A		10							
	B		10							
	C		10							
	D		10							
Loaded by (0 hr): _____		Checked by:								
Verified by (0 hr): _____										
Concentrations prepared by:										

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic PT Parameter Page

Concentration: % PT Solution Conc = concentration Rep = replicate Circle: µmhos or mmhos

Test Day ↓		Before Renewal						After Renewal					
	Conc.	Test Rep.	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity umhos mmhos	Salinity (ppth)	Test Rep.	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity umhos mmhos	Salinity (ppth)
Day 0	Control	A											
		A											
		A											
		A											
		A											
		A											
		A											
	Measured by												
	Recorded by												
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 1	Control	B						B					
		B						B					
		B						B					
		B						B					
		B						B					
		B						B					
		B						B					
	Measured by												
	Recorded by												
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 2	Control	C						C					
		C						C					
		C						C					
		C						C					
		C						C					
		C						C					
		C						C					
	Measured by												
	Recorded by												
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 3	Control	D						D					
		D						D					
		D						D					
		D						D					
		D						D					
		D						D					
		D						D					
	Measured by												
	Recorded by												

Comments:

FDEP Biology Laboratory -Toxicity Section
Chronic PT Parameter Page

Concentration: % PT Solution Conc = Concentration Rep = Replicate Circle: µmhos or mmhos

Test Day		Before Renewal						After Renewal					
↓	Conc.	Test Rep.	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity umhos mmhos	Salinity (ppth)	Test Rep.	pH (SU)	Temp (°C)	DO (mg/L)	Conductivity umhos mmhos	Salinity (ppth)
Day 4	Control	A						A					
		A						A					
		A						A					
		A						A					
		A						A					
		A						A					
		A						A					
	Measured by												
	Recorded by												
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 5	Control	B						B					
		B						B					
		B						B					
		B						B					
		B						B					
		B						B					
		B						B					
	Measured by												
	Recorded by												
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 6	Control	C						C					
		C						C					
		C						C					
		C						C					
		C						C					
		C						C					
		C						C					
	Measured by												
	Recorded by												
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 7	Control	D											
		D											
		D											
		D											
		D											
		D											
		D											
	Measured by												
	Recorded by												

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic PT Weight Benchsheet

wt.= Weight Conc. = Concentration

Concentration: %
PT Solution

Concentration	Replicate	Pan #	Pan wt. (g)	Pan + Fish (g)	Fish wt. (g)	Original # of fish	Mean wt. (mg.)	Mean wt./Conc. (mg)
			Mean wt. = Fish wt. divided by 10 Convert g to mg: move decimal 3 places to right					
Control	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
	Weighed by initials:							

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic PT Weight Benchsheet

Note: Pan number (#) refers to actual Pan number

FDEP Biology Laboratory-Toxicity Section
Chronic PT Weight Quality Control

Empty Pan Weights Date: _____ Weighed by:

Weights in grams	Pan 1 wt.	Pan 1 initial wt.
after Pan 5	@	
after Pan 10	@	
after Pan 15	@	
after Pan 20	@	
after Pan 25	@	
after Pan 30	@	
after Pan 35	@	
after Pan 40	@	
after Pan 45	@	
after Pan 48	@	

	Measured Value (g)	S-weight Value (g)
S-weights	@	
	@	

S-Weights: BIO-S-WEIGHTS-01
Balance: Mettler Toledo XA105
Ser# B314195659

Fish + Pan Weights Date: _____ Weighed by:

Weights in grams	Pan 1 wt.	Pan 1 initial wt.
after Pan 5	@	
after Pan 10	@	
after Pan 15	@	
after Pan 20	@	
after Pan 25	@	
after Pan 30	@	
after Pan 35	@	
after Pan 40	@	
after Pan 45	@	
after Pan 48	@	

	Measured Value (g)	S-weight Value (g)
S-weights	@	
	@	

Drying Oven ID: _____
Temperature °C: _____
Drying Hours: _____
Date/Time Organisms in oven: _____
Date/Time Organisms out of oven: _____

Note: Pan number (5, 10, etc.) refers to sequence of weighing as actual Pan #s may differ.

Comments: