FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Test Information Sheet

***Sample Collection (Hold Time Start): Date:_____Time:_____** **Test Start Date:_____ Time:_____** **Test End Date:_____ Time:_____**

Organism Age: _____
Batch #: _____

Circle one:

P. promelas (SOP:TA-07.09, Method: EPA-821-R-02-013 1000.0)

M. beryllina (SOP: TA-07.14, Method: EPA-821-R-02-014 1006.0)

Facility:_____

Address:_____

County:_____

NPDES Permit #: FL _____

Contact: _____ **District:**_____

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

LIMS Entry / Date:_____

Authorized / Date:_____

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

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

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

Sample Validation:		
Holding Time ≤ 36 Hours:	**Yes**	**No**

*** Composite Sample time is end of collection;**
Grab Sample time is when sample was collected;
4 in 24 sampling time is when the last sample was collected

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** _____

****"First" feeding is 2 hours prior to test intiation/renewal.**

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

Chamber Size: 1000 mL
Test Volume: 500 mL

Reviewer: _____

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Information Sheet

Method from EPA-821-R-02-013 (*P. promelas*) and EPA-821-R-02-014 (*M. beryllina*)

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

Start Date: _____ **Time:** _____

End Date: _____ **Time:** _____

Randomizer #: _____

Diluent	Batch #/LIMS ID #	Days Used

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

Stats run by/Date: _____

Stats verified by/Date: _____

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

Circle one:

P. promelas PMSD Bounds for Growth: Lower 12 Upper 30

M. beryllina PMSD Bounds for Growth: Lower 11 Upper 28

Test Acceptability Criteria		
Control Survival ≥ 80%:	**Yes**	**No**
Test Temperature Range ≤ 3° C:	**Yes**	**No**
≥ Required Mean Weight / Conc.*	**Yes**	**No**

**P. promelas* ≥ 0.25 mg *M. beryllina* ≥ 0.5 mg

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Water Quality Sheet

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

Circle one:
Method from EPA-821-R-02-013 (*P. promelas* SOP TA-07.09) / EPA-821-R-02-014 (*M. beryllina* SOP TA-07.14)

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	LIMS ID # _____ Batch # _____	LIMS ID # _____ Batch # _____	LIMS ID # _____ Batch # _____	Sample 1 LIMS Sample # _____	Sample 2 LIMS Sample # _____	Sample 3 LIMS Sample # _____	SOP	Transcribed By:	Transcription Checked by:
pH (SU)							TA-06.43		
DO (mg/L**)**							TA-06.39		
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		
Conductivity: □ µmhos □ mmhos							TA-06.36		
Salinity (ppt)							TA-06.36		
Days Used:									

* MHW used for *P. promelas* ASW used for *M. beryllina*

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Survival Benchsheet

LIMS Sample Number:
_____ (From Lab sample 1)

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

Test Species: (circle one) *P. promelas (*SOP TA-07.09, Method: EPA-821-R-02-013*)*
*M.beryllina (*SOP TA-07.14, Method: EPA-821-R-02-014*)*

Conc. = Concentration **Rep = Replicate** **D = dead M=missing**

			TEST DAY							
Conc. (%)	Rep	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 Bioassay Parameters Benchsheet

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

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

Method from EPA-821-R-02-013 (*P. promelas*) and EPA-821-R-02-014 (*M. beryllina*)

Conc = concentration (%) **Rep = Replicate** **Temp = Temperature** **DO = Dissolved oxygen** **Circle umhos or mmhos**

Test Day ↓	Concentration (%)	Before Renewal: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (umhos/mmhos)	Salinity (ppth)	After Renewal: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (umhos/mmhos)	Salinity (ppth)
Day 0 (Sample 1)	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 (Sample 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 (Sample 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 (Sample 2)	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 Bioassay Parameters Benchsheet

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

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

Method from EPA-821-R-02-013 (*P. promelas*) and EPA-821-R-02-014 (*M. beryllina*)

Conc = concentration **Rep = replicate** **Temp = Temperature** **DO = Dissolved oxygen** **Circle umhos or mmhos**

Test Day ↓	Concentration (%)	Before Renewal: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (umhos/mmhos)	Salinity (ppth)	After Renewal: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (umhos/mmhos)	Salinity (ppth)
Day 4 (Sample 3)	Control	A						A					
		A						A					
		A						A					
		A						A					
		A						A					
		A						A					
		A						A					
	Measured by:												
	Recorded by:												
	Conc.	**Rep**	**pH**	**Temp**	**DO**	**Conductivity**	**Salinity**	**Rep**	**pH**	**Temp**	**DO**	**Conductivity**	**Salinity**
Day 5 (Sample 3)	Control	B						B					
		B						B					
		B						B					
		B						B					
		B						B					
		B						B					
		B						B					
	Measured by:												
	Recorded by:												
	Conc.	**Rep**	**pH**	**Temp**	**DO**	**Conductivity**	**Salinity**	**Rep**	**pH**	**Temp**	**DO**	**Conductivity**	**Salinity**
Day 6 (Sample 3)	Control	C						C					
		C						C					
		C						C					
		C						C					
		C						C					
		C						C					
		C						C					
	Measured by:												
	Recorded by:												
	Conc.	**Rep**	**pH**	**Temp**	**DO**	**Conductivity**	**Salinity**	**Rep**	**pH**	**Temp**	**DO**	**Conductivity**	**Salinity**
Day 7 (Sample 3)	Control	D											
		D											
		D											
		D											
		D											
		D											
		D											
	Measured by:												
	Recorded by:												

Comments:

Facility:_____

LIMS Sample ID: _____ (from Lab sample 1)

wt.= Weight Conc. = Concentration

			Mean wt. = Fish wt. divided by 10					
Concentration (%)	Replicate	Pan #	Pan wt. (g)	Pan + Fish (g)	Fish wt. (g)	Original # of fish	Mean wt. (mg.)	Mean wt./Conc. (mg)
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 Bioassay Weight
Quality Control Benchsheet

Weighing chronic *P. promelas* and *M. beryllina* tests: SOP TA-06.21

Facility:_____

LIMS Sample #:_____(for Lab Sample # 1)

Test Species: (circle one) *P.promelas* (SOP TA-07.09) *M. beryllina* (07.14)

Empty Pan Weights Date: _____ By:_____

Weights in grams	1st Pan wt.	1st Pan initial wt.
after 5th Pan	@	
after 10th Pan	@	
after 15th Pan	@	
after 20th Pan	@	
after 24th Pan	@	

	Measured Value (g)	Class 1 weight Value (g)
Class 1 weights	@	0.01
	@	0.05

Class 1 Weights: BIO-S-WEIGHTS-01

Balance: Mettler Toledo XA105

Ser# B314195659

Fish + Pan Weights Date: _____ By:_____

Weights in grams	1st Pan wt.	1st Pan initial wt.
after 5th Pan	@	
after 10th Pan	@	
after 15th Pan	@	
after 20th Pan	@	
after 24th Pan	@	

	Measured Value (g)	Class 1 weight Value (g)
Class 1 weights	@	0.01
	@	0.05

Drying Oven ID: Oven #1 (42073712)

Temperature °C: 60 °C

Drying Hours: 24 Hrs

Date/Time Organisms in oven:_____

Date/Time Organisms out of oven: _____

Comments:

FDEP Biology Laboratory-Toxicity Section
Chronic Bioassay Instrument Code Sheet

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: