FDEP Biology Laboratory - YCT Suitability Bench Sheet

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

Test Species: *Ceriodaphnia dubia*
(SOP: TA-07.05 and TA-01.1, EPA821-r-02-013, Method:2002.0)

Diluent	Batch #/LIMS ID #	Days Used
MHWCD		
MHWCD		

Food	Days Used
Reference YCT Batch # _____	
New YCT Batch # _____	
P. subcapitata Batch # _____	
P. subcapitata Batch # _____	

Feeding: Prior to test and daily. C. dubia fed 0.2 ml of *YCT and *P. subcapitata* in a 1:1 ratio. YCT= yeast, cereal leaves and trout chow

Organism Age: _____

Organism Batch #: _____

Stats	Mean neonates per female	% survival
Reference YCT		
New YCT		

Stats done by: **Verified by:**

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

Test Randomizer #:	
Replicate	Loaded from culture vial
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Chamber Size: 30 mL
Test Volume: 20 mL

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

Reviewer:_____

Comments:

FDEP Biology Laboratory-Toxicity Section
SRT Water Quality Information Sheet

Method: EPA-821-R-02-012

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						

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

Comments:

FDEP Biology Laboratory - Chronic C. dubia YCT QC Bench Sheet

Ceriodaphnia dubia Survival and Reproduction
SOP TA07_05

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

YCT Batch	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Surviving orginal organisms	Neonates per female
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

YCT Batch	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Surviving orginal organisms	Neonates per female
	0*													
	1													
	2													
	3													
	4													
	5													
	6													
	7													
	8													
	Total													

Organisms loaded by:_____

Day	Counted/ verified by:	Concentrations prepared by:	Fed by/time
0			
1			
2			
3			
4			
5			
6			
7			
8			

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

Comments:

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

FDEP Biology Laboratory - Chronic C. dubia YCT QC Bench Sheet

Ceriodaphnia dubia

Parameters

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

Test Day ↓	YCT Batch	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		M									
		M									
	Measured by:										
	Recorded by:										
Day 1	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 2	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 3	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 4	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 5	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 6	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										
Day 7	YCT Batch	M									
		M									
		M									
	Measured by:										
	Recorded by:										

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:

Instrument ID

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 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	$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	#7 - SN 160858748 Probe SN 192321162	TA-06.13	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#7
Traceable Thermometer	#10- SN 200353477 Probe SN 192321162	TA-06.13	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#10
Traceable Thermometer	#11- SN 200501357 Probe SN 181597158	TA-06.13	Temperature	SM-2530B modified & DEP SOP-001/01 FT1400	#11
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 MS403TS/00	B815673069	TA-06.34	Weight	-	BAL3
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	S01

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