BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

N THE MATTER OF:		
PROPOSED AMENDMENTS TO:)	
35 Ill. Adm. Code 302.102 and 302.208(g))	R18-032
WATER QUALITY STANDARDS)	
FOR CHLORIDES)	

NOTICE OF FILING

TO: Attached Service List

PLEASE TAKE NOTICE that on May 29, 2018 I have filed with the Office of the Clerk of the Illinois Pollution Control Board Huff & Huff, Inc.'s Motion for Leave to File Instanter Additional Bioassay Report, a copy of which are herewith served upon you.

Respectfully submitted,

Huff & Huff, Inc.

Senior Consultant

Dated: May 29, 2018

James E. Huff, P.E.
HUFF & HUFF, INC.
915 Harger Road, Suite 330
Oak Brook, IL 60523
James.huff@gza.com
630-684-4444

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:		
PROPOSED AMENDMENTS TO:)	
35 III. Adm. Code 302.102 and 302.208(g))	R18-032
WATER QUALITY STANDARDS)	
FOR CHLORIDES)	

MOTION FOR LEAVE TO FILE ADDITIONAL ATTACHMENT TO PETITION

Now comes Huff & Huff, Inc. by its Senior Consultant, James E. Huff, P.E., to move the Illinois Pollution Control Board for Leave to File Instanter Additional Attachment to the Petition. In support of this motion, Huff & Huff states as follows:

- 1) This bioassay report was inadvertently omitted from the Petition.
- 2) This document completes the analysis for one species to provide the Board with the full extent of completed research.

Wherefore Huff & Huff respectfully requests the Illinois Pollution Control Board grant leave to file the attached Additional Comments instanter for the reasons set forth herein.

Respectfully submitted, Huff & Huff, Inc.

James E. Huff, P.E.

Dated: May 29, 2018

James E. Huff, P.E. HUFF & HUFF, INC. 915 Harger Road, Suite 330 Oak Brook, IL 60523

James.huff@gza.com

630-684-4444

CERTIFICATE OF SERVICE

I, James E. Huff, the undersigned, on oath state the following: That I have served the attached MOTION FOR LEAVE TO FILE ATTACHMENT TO PETITION TO AMEND 35 ILL. ADM. CODE 302.102 and 302.208(g) WATER QUALITY STANDARDS FOR CHLORIDES, via electronic mail upon:

Don Brown
Clerk of the Board
Illinois Pollution Control Board
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601
Don.Brown@illinois.gov

Division Chief of Environmental Enforcement Office of the Attorney General 100 West Randolph Street, Suite 1200 Chicago, Illinois 60601 enviro@atg.state.il.us

Sara Terranova
Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
Sara.Terranova@illinois.gov

Office of Legal Services
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702-1271
Eric.Lohrenz@illinois.gov
Virginia.Yang@illinois.gov

That my email address is James. Huff@gza.com.

Dated: May 29, 2018

That the number of pages in the email transmission is 159.

That the email transmission took place before 5:00 p.m. on the date of May 29, 2018.

HUFF & HUFF, INC.

10000

Page 3 of 159



A Division of GZA

GEOTECHNICAL

ENVIRONMENTAL

_

CONSTRUCTION MANAGEMENT

77 Batson Drive
Manchester, CT 06042
T: 860.643.9560
F: 860.646.7169
www.nebio.com

AQUATIC TOXICITY TEST REPORT

Acute & Chronic Toxicity Testing at 10°C and 25°C Using Ceriodaphnia dubia

Report date: November 13, 2017

Report Prepared by:

New England Bioassay

A Division of GZA GeoEnvironmental, Inc.

77 Batson Dr.

Manchester, CT 06042

Report Submitted to:

Huff & Huff, a Subsidiary of GZA 915 Harger Road, Suite 330 Oak Brook, IL 60523

November 13, 2017

Huff & Huff, a Subsidiary of GZA 915 Harger Road, Suite 330 Oak Brook, IL 60523-1486

RE:

Results of Acute & Chronic Tests

Sample ID: Reagent Grade NaCl

NEB Project Number: 81.0220523.00

Dear Mr. Huff:

This report provides you with the results of the experimental acute and chronic toxicity tests performed at New England Bioassay (NEB) laboratory for Huff and Huff. The toxicity tests were performed using the freshwater organism *Ceriodaphnia dubia* as the aquatic test species.

Acute Toxicity Test

The specific details of the C.dubia acute toxicity test system are based on EPA guidelines (EPA-821-R-02-012 Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 2002). For the acute toxicity test, young C.dubia (\leq 24-h old at test initiation) were continuously exposed for 48 hours under static conditions to concentrations of reagent grade sodium chloride. One test was set at 10 degrees Celsius with testing concentrations of 2.0 g/L, 2.25 g/L, 2.5 g/L, 2.75 g/L, 3.0 g/L, 3.25 g/L, 3.5 g/L, 3.75 g/L, 4.0 g/L and 4.25 g/L NaCl mixed with laboratory-prepared moderately hard synthetic water. A second test was set at 25 degrees Celsius with testing concentrations of 0.25 g/L, 0.5 g/L, 0.75 g/L, 1.0 g/L, 1.25 g/L, 1.5 g/L, 1.75 g/L and 2.0 g/L. A synthetic laboratory water control was also set concurrently with the tests.

C. dubia were individually exposed in 30-mL plastic cups containing 25 mL of test solution or control water. Four replicate beakers were used for each test concentration and the dilution-water control (20 animals per concentration or control).

Electronics witing aiReceived; Gerk's Officet 5/29/2018 temperature of 10° ± 1°C and 25° ± 1°C; photoperiod 16 h light and 8 h dark) in an environmentally controlled testing room.

Temperature, dissolved oxygen and pH were measured daily on one replicate at 0 and 24 hrs, and on each replicate at 48 hours. Observations on the number of live and dead animals were made daily. A summary of the acute testing protocols can be found in Attachment A. The results of the toxicity tests can be found in Table 1. Raw data sheets and statistical analysis are found in Attachment B.

TABLE 1. RESULTS OF 48-HR CERIODAPHNIA DUBIA ACUTE TESTS USING REAGENT GRADE SODIUM CHLORIDE

Test Date	Test Species	Test ID	Test Temperature	48hr LC50	48 hr NOAEL
11/8/17	C.dubia	17-1702	10°C	3.62 g/L	3.0 g/L
11/8/17	C.dubia	17-1703	25°C	1.92 g/L	1.25 g/L

Chronic Toxicity Test

The specific details of the *C.dubia* chronic toxicity test system are based on EPA guidelines (EPA-821-R-02-013 Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 2002). In these EPA methods, the standard toxicity test only runs for 7-days. However, in this experimental test, the test was extended to 35 days. For the chronic toxicity tests, young *C.dubia* (≤ 24-h old at test initiation) were continuously exposed for 35 days under static-renewal conditions to 11 concentrations of reagent grade sodium chloride [0.25 g/L, 0.5 g/L, 0.75 g/L, 1.0 g/L, 1.25 g/L, 1.5 g/L, 1.75 g/L, 2.0 g/L, 2.25 g/L, 2.5 g/L and 2.75 g/L NaCl] mixed with laboratory-prepared moderately hard synthetic water. A synthetic laboratory water control was also set concurrently with each test.

C. dubia were individually exposed in 30-mL plastic cups containing 15 mL of test solution or control water. Ten replicate beakers were used for each test concentration and the dilution-water control (10 animals per concentration or control). Daphnids used in testing were blocked by parentage for each replicate (i.e., young from a single female were used for all replicate #1, #2, etc).

Test beakers were maintained under the specified conditions (mean test temperature of either $25^{\circ} \pm 1^{\circ}$ C or $10^{\circ} \pm 1^{\circ}$ C; photoperiod 16 h light and 8 h dark for both tests) in commercial environmental test chambers. Surviving *Ceriodaphnia* were transferred daily with a large-bore pipette to newly prepared test solutions containing food.

Temperature, dissolved oxygen, pH, and specific conductivity were measured daily on composite samples of newly prepared solutions. Temperature, dissolved oxygen, and pH were measured on one replicate of the 24-h-old test solutions at each concentration. Observations on the number of live and dead (or immobilized) animals were made daily. Reproduction also was monitored daily by counting the number of live and dead young per female when the adults were transferred to new test solutions. Young were discarded after counting. A summary of the chronic testing protocols can be found in Attachment A. The results of the chronic toxicity tests at weekly intervals (days 7, 14, 21, 28 and 35) can be found in Tables 1 and 2. Raw data sheets and statistical analysis are found in Attachment B.

Table 2:	Table 2: 25 ° NaCl Ceriodaphnia dubia – Day 7			
Concentration (g/L)	Survival (%)	Reproduction (young/female)		
0 (Control)	90	26.1		
0.25	100	21.4		
0.5	80	17.1		
0.75	90	18.6		
1.0	100	18.3		
1.25	90	13.7*		
1.5	80	8.9*		
1.75	70	2.2*		
2	70	0.9*		
2.25	40	0.5*		
2.5	30	0*		
2.75	0*	0*		
* statistically significant at 0.05				

Electronic Filing: Re	Electronic Filing: Reseived Clerk's Office 5/29/2018			
Concentration (g/L)	Survival (%)	Reproduction (young/female)		
0 (Control)	60	64.8		
0.25	50	57.1		
0.5	40	44.4		
0.75	60	52		
1.0	50	57.2		
1.25	40	28.1*		
1.5	40	22.4*		
1.75	20	10.1*		
2	60	6.8*		
2.25	10	5*		
2.5	0*	0*		
2.75	0*	0*		

^{*} statistically significant at 0.05

Concentrations at which there was a significant survival effect were not included in the analysis of the reproduction NOEC per EPA protocols.

Table 4: 25 ° NaCl Ceriodaphnia dubia – Day 21			
Concentration (g/L)	Survival (%)	Reproduction (young/female	
0 (Control)	10	83	
0.25	20	71.4	
0.5	20	57.7	
0.75	10	65.8	
1.0	30	57.2	
1.25	0	32.3*	
1.5	20	27*	
1.75	10	12*	
2	40	10*	
2.25	0*	5*	
2.5	0*	0*	
2.75	0*	0*	

^{*} statistically significant at 0.05

Concentrations at which there was a significant survival effect were not included in the analysis of the reproduction NOEC per EPA protocols.

Table 5: 2	Table 5: 25 ° NaCl Ceriodaphnia dubia – Day 28			
Concentration (g/L)	Survival (%)	Reproduction (young/female)		
0 (Control)	0	83.7		
0.25	0	72.1		
0.5	0	60.0		
0.75	0	66.6		
1.0	0	57.9		
1.25	0	32.3		
1.5	0	27.7		
1.75	0	12		
2	0	10		
2.25	0	5		
2.5	0	0		
2.75	0	0		
No statistics run due to full mortali	ity			

Table 6	Table 6: 25 ° NaCl Ceriodaphnia dubia – Day 35			
Concentration (g/L)	Survival (%)	Reproduction (young/female)		
0 (Control)	0	83.7		
0.25	0	72.1		
0.5	0	60.0		
0.75	0	66.6		
1.0	0	57.9		
1.25	0	32.3		
1.5	0	27.7		
1.75	0	12		
2	0	10		
2.25	0	5		
2.5	0	0		
2.75	0	0		
To statistics run due to full mort	tality			

Table 7: 10 ° NaCl Ceriodaphnia dubia – Day 7			
Concentration (g/L)	Survival (%)	Reproduction (young/female	
0 (Control)	100	0	
0.25	100	0	
0.5	90	0	
0.75	100	0	
1.0	100	0	
1.25	100	0	
1.5	100	0	
1.75	90	0	
2	100	0	
2.25	60	0	
2.5	0*	0	
2.75	0*	0	

Concentration (g/L)	Survival (%)	Reproduction (young/female
0 (Control)	100	0
0.25	100	0
0.5	90	0
0.75	100	0
1.0	100	0
1.25	100	0
1.5	100	0
1.75	90	0
2	70	0
2.25	40*	0
2.5	0*	0
2.75	0*	0

Concentration (g/L)	Survival (%)	Reproduction (young/female)
0 (Control)	100	2.3
0.25	100	3.7
0.5	90	2.4
0.75	90	1.2
1.0	100	2.1
1.25	100	1.4
1.5	100	0.1*
1.75	90	0*
2	70	0.2*
2.25	20*	0*
2.5	0	0*
2.75	0	0*

^{*} statistically significant at 0.05

Concentrations at which there was a significant survival effect were not included in the analysis of the reproduction NOEC per EPA protocols.

Table 10: 10 ° NaCl Ceriodaphnia dubia – Day 28			
Concentration (g/L)	Survival (%)	Reproduction (young/female)	
0 (Control)	100	4.1	
0.25	100	6.4	
0.5	80	3.9	
0.75	70	2.4	
1.0	100	2.6	
1.25	80	1.7	
1.5	100	0.4*	
1.75	90	0*	
2	70	0.2*	
2.25	20*	0*	
2.5	0	0*	
2.75	0	0*	

^{*} statistically significant at 0.05

Concentrations at which there was a significant survival effect were not included in the analysis of the reproduction NOEC per EPA protocols.

Table 11:	10 °C NaCl Ceriodaphnia dub	ia – Day 35
Concentration (g/L)	Survival (%)	Reproduction (young/female)
0 (Control)	90	6.9
0.25	100	8.7
0.5	80	5.1
0.75	70	4.2
1.0	100	4.2
1.25	80	2.9
1.5	100	0.4*
1.75	90	0*
2	60	0.2*
2.25	20*	0*
2.5	0	0*
2.75	0	0*

^{*} statistically significant at 0.05

Concentrations at which there was a significant survival effect were not included in the analysis of the reproduction NOEC per EPA protocols.

Test duration	Survival LC50	Survival NOEC	Reproduction NOEC
7 days	2.16	2.5	1.0
14 days	1.81	2.25	1.0
21 days	2.08	2.0	1.0
28 days	N/A	N/A	N/A
35 days	N/A	N/A	N/A

LC50 = concentration at which it is estimated that 50% of the organisms will die

NOEC = no-observable effect concentration, the highest concentration at which there is no statistical reduction

Table 1	3: 10 °C NaCl Ceriodap	hnia dubia Chronic Te	st Results
Test duration	Survival LC50	Survival NOEC	Reproduction NOEC
7 days	2.17	2.25	N/A (no reproduction)
14 days	2.12	2.0	N/A (no reproduction)
21 days	2.08	2.0	1.25
28 days	2.12	2.0	1.25
35 days	2.09	2.0	1.25

LC50 = concentration at which it is estimated that 50% of the organisms will die

NOEC = no-observable effect concentration, the highest concentration at which there is no statistical reduction

Quality Assurance

Reference toxicant tests are conducted monthly for all routine in house organisms and test types to verify health of the organism. Results of the reference toxicant testing for the appropriate months during which this testing was performed can be found below in Table 14, and the reference toxicant summation charts can be found in Attachment C.

		Table 14: Refer	ence Toxicant Data	
Test Species	Test Type	Test Date	Result	Within ± 2 Std Dev range?
C.dubia	Chronic	9/5/17	IC25 = 1.06 g/L	Yes
C.dubia	Acute	11/1/17	LC50 = 1.23 g/L	Yes

Conclusions (re: experimental chronic test)

Both the 10 degree and 25 degree tests showed similar survival LC50 and survival NOEC results at days 7, 14 and 21. However the actual percent survival in each concentration by day 14 showed an increase in mortality in the 25 degree test compared with the 10 degree test. At day 14, survival in the 0-1.75 g/L concentrations in the 10 degree test was \geq 90%, where in the 25 degree test survival in the 0-1.75 g/L concentrations was only between 40-60%. A downward trend of mortality increased quickly in the 25 degree test with the highest test concentration survival at day 21 being 40%, with 100% mortality in all test concentrations noted by day 28. While the 10 degree test did experience complete mortality in the higher test concentrations, overall survival was much higher than the 25 degree test. Whereas even the control and lowest test concentrations had 0% survival in the 25 degree test by day 35, survival in the 0 – 1.75 g/L test concentrations in the 10 degree test was still between 70 – 100% at day 35. This might suggest that the lower test temperature was responsible for increased survival.

While the 10 degree test displayed a higher survival rate, it displayed a much lower reproduction rate than the 25 degree test. Reproduction began at day 3 in the 25 degree test, while reproduction did not begin until day 15 in the 10 degree test. The number of young per female produced was also much lower in the 10 degree test than the 25 degree test. At the end of 35 days, the young/female averages in the 25 degree test were 83.7, 72.1, 60.0, 66.6, 57.9, 32.3, 27.7, 12, 10, 5, 0, 0, respectively, in the 0, 0.25 g/L, 0.5 g/L, 0.75 g/L, 1.0 g/L, 1.25 g/L, 1.5 g/L, 1.75 g/L, 2.0 g/L, 2.25 g/L, 2.5 g/L and 2.75 g/L NaCl test concentrations. At the end of 35 days, the young/female averages in the 10 degree test were 6.9, 8.7, 5.1, 4.2, 4.2, 2.9, 0.4, 0, 0.2, 0, 0 and 0, respectively.

Technicians observed that the Ceriodaphnia in the 10 degree test often appeared smaller than they would normally appear in a standard 7-day, 25 degree chronic toxicity test. Also starting around day 12 it was often noted that the adults had a "fungus-like growth" on their bodies that was not noted on the organisms in the 25 degree test. It is not clear if this was actually fungus or another material. It is possible that since the adults in the 10 degree test remained small, and did not frequently reproduce, that they shed their carapace much less often which allowed material to build-up on the outside of it.

If you have any questions concerning this report, please contact the Lab Manager, Kim Wills at (860) 858-3153 or kimberly.wills@gza.com

Very truly yours,

Kim Wills

Manager – Aquatic Toxicity Laboratory

Attachment A

Chronic Toxicity Test Protocol Summary

Electronic Filings Roceix ed Holerk's 19th not 5/20/2018 MARY

Test Reference Manual: EPA 821-R-02-013, "Short-Term Methods for Estimating the

Chronic Toxicity of Effluents and Receiving Water to Freshwater

Organisms", Fourth Edition

<u>Test Method:</u> Ceriodaphnia dubia Survival and Reproduction Test – 1002.0

Test Type: Modified Chronic Static Renewal Freshwater Test

Temperature: $25 \pm 1^{\circ}\text{C}$ and $10 \pm 1^{\circ}\text{C}$

<u>Light Quality</u>: Ambient Laboratory Illumination

Photoperiod: 16 hours light, 8 hours dark

Test Chamber Size: 30 mL

Test Solution Volume: Minimum 15 mL

Renewal of Test Solutions: Daily, using most recent sample

Age of Test Organisms: Less than 24 hours

Number of Neonates

Par Test Chambers

Per Test Chamber: 1

Number of Replicate Test

Chambers Per Treatment: 10

Number of Neonates Per

Test Concentration: 10

Feeding Regime: Fed 0.1 mL each of YCT and algal suspension per exposure

chamber daily.

Aeration: None

<u>Dilution Water</u>: Moderately hard synthetic freshwater

Test Duration: Until 60% of control females have three broods - ___7_ days

End Points: Survival and reproduction.

<u>Test Acceptability:</u> Control Survival: $\geq 80\%$ Yes X No

Control Reproduction: Average \geq 15/control female Yes _ No \underline{X}

<u>Test Organism Source</u>: New England Bioassay in-house cultures

Test Reference Manual: EPA 821-R-02-012, "Methods for Measuring the Acute Toxicity of

Effluents and Receiving Waters to Freshwater Organisms and Marine

Organisms", Fifth Edition

Test Method:

Ceriodaphnia dubia Acute Toxicity Test – Method 2002.0

Test Type:

Acute Static Non-Renewal Freshwater Test

Temperature:

 25 ± 1 °C and 10 ± 1 °C

Light Quality:

Ambient Laboratory Illumination

Photoperiod:

16 hours light, 8 hours dark

Test Chamber Size:

30 mL

Test Solution Volume:

Minimum 25 mL

Age of Test Organisms:

1-24 hours (neonates)

Number of Daphnids

Per Test Chamber:

5

Number of Replicate Test

Chambers Per Treatment: 4

Total Number of Daphnids

Per Test Concentration:

20

Feeding Regime:

Fed YCT and Selanastrum while holding prior to initiating test as per

manual.

Aeration:

None

Dilution Water:

Moderately hard synthetic freshwater

Test Duration:

48 hours

Effect measured:

Mortality – no movement of body/appendages on gentle prodding.

Test Acceptability:

 \geq 90% survival of test organisms in control solution Yes X No _

Test Organism Source:

New England Bioassay in-house cultures

NEW ENGLAND BIOASSAY ACUTE TOXICITY DATA FORM COVER SHEET

CLIENT:	Huff and	Huff		(C.dubia TES	ST ID:	17-1702	
ADDRESS:	915 Harger Roa	ad, Suite 330				_		
	Oak Brook, IL							
SAMPLE TYPE:	10 °C Sodiun	n Chloride						
		TEST S	OLUTION PRE	PERATION	ſ			
Test Sol'n Vol:	200	ml						
Control:	0	ml						
2.0 g/L	4	ml	NaCl Lo	ot Number:	NaC	C117(11-8)		
2.25 g/L	4.5	ml	NaCl Stock Co	ncentration:		100g/L	=	
2.5 g/L	5	ml	Stock Solution	on Volume:		1000	ml	
2.75 g/L	5.5	ml	NaCl	Calculated:		100	g	
3.0g/L	6	ml	NaC	l Weighed:	1	00.004	g	
3.25 g/L	6.5	ml						
3.5 g/L	7	ml	DILUTION WATE	R: MODERATI	ELY HARD	RECONSTITUTE	D FRESHWA	ΓER
3.75 g/L	7.5	ml						
4.0 g/L	8	ml		HRCF Lot #_	C37-M			
4.25 g/L	8.5	ml	Ha	rdness _	84	mg/L as Ca		
			All	calinity _	60	mg/L as Ca	CO_3	
				-				
Invertebrate								
Type of Test	Defini							
Test Species	Ceriodaphn			START D	ATE:	11/8/17	AT _	1330
NEB Lot#	Cd17(1							
Age	<24 ho	ours		END DA	TE;	11/10/17	AT	1328
TEST SOLUTION		30 ml						
	S PER TEST CH		5	TEST SE	ETUP TECH	INICIAN:	KO	
	S PER CONCEN		20					
# ORGANISMS	S PER CONTRO	DL	20					
DESILITS OF	Cariodanknia d	ubia 48 hr LC50 Te	e#					
RESULTS OF	сеновирини в	<i>unu</i> 48 m EC30 16	St					
Method	LC50 (g/L)	95% Confidence I	Limits (g/L)					
Binomial	3.62	3.56 - 3.8	33					
Probit								
Trimmed								
Spearman	1							
Karber								
Karber								
NOAEL	3.0							
NOAEL: No Oł	oserved Acute Ef	ffect Level						
Comments:								
			-					_
			-	/			1	_
DEMIEWED DV			-//	-	DATE:	111	12/1-)
REVIEWED BY:		/ /	7/11	/	MIE:	- 111	1211	1

Page 19 of 159

Electronic Filing: Received, Clerk's Office 5/29/2018 NEW ENGLAND BIOASSAY Toxicity Test Data Sheet

NEB Test #:	17-1702	Organism Age:	<24 hc	urs
Facility Name:	New England Bioassay	Test Duration:	48	(hours)
Test Organism:	Ceriodaphnia dubia	Beginning Date:	11/8/17	Time:1330
Sample ID:	10 °C Sodium Chloride	Dilution Water Sour	ce: <u>Moder</u>	ately Hard Lab Water
		Silvitian Handman	0.4	nom as CaCO

Dilution Hardness: 84 ppm as CaCO₃

NaCl Conc. g/L	;	lumber o Surviving Organism	3		Dissolved Oxygen (mg/L)		Te	emperatu (°C)	ire		рН	
Initials	КО	TBP	СВ	КО	TBP	СВ	KO	TBP	CB	KO	TBP	CE
	0	24	48	0	24	48	0	24	48	0	24	48
Control A	5	5	5	9.0	10.8	10.7	11.0	11.0	11.0	8.1	7.9	7.8
В	5	5	5			10.6			11.0			7.
С	5	5	5			10.8			11.0			7.
D	5	5	5			10.8			11.0			8.
2.0 g/L A	5	5	5	9.1	10.9	10.9	11.0	11.0	11.0	8.0	8.0	7.
В	5	5	5			10.9			11.0			7.
С	5	5	5			10.9			11.0			7.
D	5	5	5			10.9			11.0			7.
2.25 g/L A	5	5	4	9.1	10.9	11.0	11.0	11.0	11.0	8.0	8.0	7.
В	5	5	5			10.9			11.0			7.
С	5	5	5			10.9			11.0			7.
D	5	5	5			10.9			11.0			7.
2.5 g/L A	5	5	5	9.2	10.9	10.9	11.0	11.0	11.0	8.0	8.0	7.
В	5	5	5			10.9			11.0	V.		7.
С	5	5	5			10.9			11.0			7.
D	5	5	5		V	10.8			11.0			7.
2.75 g/L A	5	5	5	9.1	11.8	10.9	11.0	11.0	11.0	8.0	8.0	7.
В	5	5	4			10.9			11.0			7.
С	5	5	4		لمسلل	10.7			11.0			7.
D	5	5	4			10.8			11.0			8.
3.0 g/L A	5	5	5	9.1	10.9	10.7	11.0	11.0	11.0	8.0	8.0	7.
В	5	5	3			10.7			11.0			7.
С	5	5	4			10.7			11.0			7.
D	5	4	4		/	10.7			11.0	4		7.

LC50	Confidence Interval	A-NOEC	Computational Method
3.62	3.56 - 3.83	3.0	Binomial

Electronic Filing: Received, Clerk's Office 5/29/2018 NEW ENGLAND BIOASSAY Toxicity Test Data Sheet

NEB Test #:	17-1702	Organism Age:	<24 hc	ours	
Facility Name:	New England Bioassay	Test Duration:	48	(hours)	
Test Organism:	Ceriodaphnia dubia	Beginning Date: _	11/8/17	Time:	1330
Sample ID:	10 °C Sodium Chloride	Dilution Water Sou	rce: <u>Moder</u>	ately Hard L	ab Water
		St. P 111	0.4	(2-00

Dilution Hardness: 84 ppm as CaCO₃

NaCl Conc. g/L		lumber o Survivinç Organism	g is		Dissolved Oxygen (mg/L)		Te	emperatu (°C)	ire		рН	
Initials	KO	TBP	СВ	KO	TBP	CB	KO	TBP	CB	КО	TBP	CE
The state of	0	24	48	0	24	48	0	24	48	0	24	48
3.25 g/L A	5	3	3	9.7	11.1	10.6	11.0	11.0	11.0	8.0	7.8	7.
В	5	3	3			10.5			11.0			7.
С	5	3	3			10.6			11.0			7.
D	5	4	4			10.8			11.0			7.
3.5 g/L A	5	3	3	9.7	11.1	10.9	11.0	11.0	11.0	8.0	7.8	7.
В	5	4	4			10.9			11.0			7.
С	5	5	5		-= 1	10.9			11.0			7.
D	5	4	3			10.9			11.0			7.
3.75 g/L A	5	1	1	9.7	11.2	10.8	11.0	11.0	11.0	8.0	7.8	7.
В	5	3	3			10.9		1	11.0			7.
С	5	1	1			10.9			11.0			7.
D	5	1	1			10.9			11.0			7.
4.0 g/L A	5	0	0	9.6	11.1	10.9	11.0	11.0	11.0	8.0	7.8	7.
В	5	1	1			10.9			11.0			7.
С	5	1	1			10.9			11.0		71	7.
D	5	1	1			11.0			11.0			7.
4.25 g/L A	5	1	0	9.5	11.1	11.0	11.0	11.0	11.0	8.0	7.8	7.
В	5	0	0			10.9			11.0			7.
С	5	0	0			10.9			11.0			7.
D	5	2	0			11.0			11.0			7.

LC50	Confidence Interval	A-NOEC	Computational Method
3.62	3.56 - 3.83	3.0	Binomial

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:42 (p 1 of 3)

Test Code:

17-1702 | 12-7867-5657

Ceriodaphnia	48-h Acute Su	rvival Tes	st						N	ew Englan	d Bioass
Analysis ID:	10-0471-7401	E	ndpoint:	48h Survival F	Rate		CETI	S Version	: CETISv1	.9.2	
Analyzed:	10 Nov-17 15	:42	nalysis:	Parametric-Co	ontrol vs Trea	itments	Offic	ial Result	s: Yes		
Batch ID:	01-9909-9748	Т	est Type:	Survival (48h)			Anal	vst:			
Start Date:	08 Nov-17 13:		rotocol:	EPA/821/R-02	2-012 (2002)		Dilue		boratory Wat	er	
Ending Date:	10 Nov-17 13:2		pecies:	Ceriodaphnia	, ,		Brine		t Applicable		
Duration:	48h		ource:	In-House Cult			Age:				
Sample ID:	15-8014-9700		ode:	5E2F2BC4			Clier	st. G7	'A GeoEnviro	nmental	
Sample ID. Sample Date:			Material:	Sodium chlori	40		Proje	-	A Geochiviic	minicilai	
Receipt Date:		-	ource:	Huff & Huff	40		110,0				
Sample Age:			tation:	Tidii G Tidii							
							NOTI	1.051	T051	711	51100
Data Transfor Angular (Corre		Alt Hy C > T	р				NOEL 3	3.25	3.122	TU	20.349
Angular (Corre		0 / 1					<u> </u>	3.25	3.122		20.347
Dunnett Multi	ple Compariso	n Test									
	vs Conc-g	m/L	Test S	Stat Critical	MSD DF	P-Type	P-Value	Decision	· · ·		
Dilution Water			0	2.537	0.242 6	CDF	0.9000	-	nificant Effect		
	2.25		0.623		0.242 6	CDF	0.6973	_	nificant Effect		
	2.5		0	2.537	0.242 6	CDF	0.9000	-	nificant Effect		
	2.75		1.869	2.537	0.242 6	CDF	0.1739	_	nificant Effect		
	3		2.448	2.537	0.242 6	CDF	0.0601	_	nificant Effect	t	
	3.25*		4.228	2.537	0.242 6	CDF	7.9E-04	Significa			
	3.5*		3.026	2.537	0.242 6	CDF	0.0169	Significa			
	3.75*		8,123	2.537	0.242 6	CDF	<1.0E-37	Significa			
	4*		9.851	2.537	0.242 6	CDF	<1.0E-37	Significa	nt Effect		
T4 A4-L											
lest Acceptat	oility Criteria		CLimits								
Attribute	Test Sta	t Lower	Upper		Decision						
Attribute	-			Overlap Yes	Decision Passes C	riteria					
Attribute Control Resp	Test Sta	t Lower	Upper			riteria					
Attribute Control Resp ANOVA Table	Test Sta	t Lower 0.9	Upper >>			riteria F Stat	P-Value	Decision	n(α:5%)		
Attribute Control Resp ANOVA Table Source	Test Sta	t Lower 0.9	Upper >>	Yes Square	Passes C		P-Value <1.0E-37	Decision Significal	<u> </u>		
Attribute Control Resp ANOVA Table Source Between	Test Sta 1 Sum Squ	0.9	Upper >> Mean	Yes Square	Passes C	F Stat			<u> </u>		
Attribute Control Resp ANOVA Table Source Between Error	Test Sta 1 Sum Squ 3.97668	0.9	Upper >> Mean 0.4418	Yes Square	Passes C	F Stat			<u> </u>		
Attribute Control Resp ANOVA Table Source Between Error Total	Test Sta 1 Sum Squ 3.97668 0.547638 4.52432	0.9	Upper >> Mean 0.4418	Yes Square	Passes Co	F Stat			<u> </u>		
Attribute Control Resp ANOVA Table Source Between Error Total Distributional	Test Sta 1 Sum Squ 3.97668 0.547638 4.52432	0.9	Upper >> Mean 0.4418	Yes Square	Passes Co	F Stat 24.21			nt Effect		
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute	Test Sta 1 Sum Sqi 3.97668 0.547638 4.52432 Tests Test	t Lower 0.9 uares	Upper >> Mean 0.4418	Yes Square 354 2546	Passes Control of the	F Stat 24.21	<1.0E-37	Significa	nt Effect n(α:1%)		
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances	Test Sta 1 Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E	t Lower 0.9 uares 3	Vpper >> Mean 0.4418 0.0182	Yes Square 354 2546	Passes Control of the	F Stat 24.21 Critical	<1.0E-37	Signification Si	nt Effect n(α:1%) uriances		
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances	Test Sta 1 Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve	t Lower 0.9 uares 3 Equality of ene Equality	Upper	Yes Square 354 2546 Test	Passes C DF 9 30 39 Test Stat 3.044	F Stat 24.21 Critical 3.067	<1.0E-37 P-Value 0.0104	Decision Equal Va Equal Va	nt Effect n(α:1%) uriances	on	
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution	Test Sta 1 Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve	t Lower 0.9 uares Equality of ene Equality Wilk W No	Wean 0.4418 0.0182 Variance T	Yes Square 354 2546 Test	Passes C DF 9 30 39 Test Stat 3.044 0.9475	F Stat 24.21 Critical 3.067 3.067	<1.0E-37 P-Value 0.0104 0.5004	Decision Equal Va Equal Va	nt Effect n(α:1%) rriances rriances	on	
Attribute Control Resp ANOVA Table Source Between Error Fotal Distributional Attribute Variances Variances Distribution	Test Sta 1 Sum Sqi 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leven Shapiro-N	t Lower 0.9 uares Equality of ene Equality Wilk W No	Wean 0.4418 0.0182 Variance T	Yes Square 354 2546 Test	Passes Control of the second o	F Stat 24.21 Critical 3.067 3.067	<1.0E-37 P-Value 0.0104 0.5004	Decision Equal Va Equal Va	nt Effect n(α:1%) rriances rriances	on CV%	%Effect
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L	Test Sta 1 Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary	t Lower 0.9 uares Equality of ene Equality Wilk W No	Wean 0.4418 0.0182 Variance T ity of Varianmality Tes	Yes Square 354 2546 Test nce Test st	Passes Control of the second o	F Stat 24.21 Critical 3.067 3.067 0.9236	P-Value 0.0104 0.5004 0.0082	Decision Equal Va Equal Va Non-Non	nt Effect n(α:1%) uriances uriances mal Distributi		%Effec: 0.00%
Attribute Control Resp ANOVA Table Source Between Error Fotal Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equality Wilk W No	Variance Tity of Variality Tes	Yes Square 354 2546 Test nce Test st 95% LCL 0 1.0000	Passes Control of the	F Stat 24.21 Critical 3.067 3.067 0.9236	P-Value 0.0104 0.5004 0.0082	Decision Equal Va Equal Va Non-Non	nt Effect n(α:1%) nriances nriances mal Distributi	CV%	
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L 0 2 2.25	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equali Wilk W No Count 4	Variance Tity of Variatity Tes	Yes Square 354 2546 Fest Ince Test st 95% LCL 0 1.0000 0 1.0000	Passes Control Passes	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000	P-Value 0.0104 0.5004 0.0082 Min 1.0000	Decision Equal Va Equal Va Non-Non Max 1.0000	nt Effect n(α:1%) riances riances mal Distributi Std Err 0.0000	CV%	0.00%
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L 0 2 2.25	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equality Wilk W No Count 4 4	Variance T ity of Varial rmality Tes Mean 1,000 1,000	Yes Square 354 2546 Fest Ince Test 5t 95% LCL 0 1.0000 0 1.0000 0 0.7909	Passes Control Passes	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000 1.0000	P-Value 0.0104 0.5004 0.0082 Min 1.0000 1.0000	Decision Equal Va Equal Va Non-Non Max 1.0000 1.0000	nt Effect n(α:1%) uriances uriances mal Distributi Std Err 0.0000 0.0000	CV% 0.00% 0.00%	0.00% 0.00%
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L 0 2 2.25 2.5	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equality Wilk W No Count 4 4 4	Variance T ity of Variat irmality Tes Mean 1.0000 1.0000 0.9500	Yes Square 354 2546 Fest nce Test st 95% LCL 0 1.0000 0 1.0000 0 0.7909 0 1.0000	Passes Control Passes	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000 1.0000 1.0000	P-Value 0.0104 0.5004 0.0082 Min 1.0000 1.0000 0.8000	Decision Equal Va Equal Va Non-Non Max 1.0000 1.0000	nt Effect n(a:1%) uriances uriances mal Distributi Std Err 0.0000 0.0000 0.0500	CV% 0.00% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00%
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L 0 2 2.25 2.75	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equality Wilk W No Count 4 4 4 4	Variance Tity of Varianty Tes	Yes Square 354 2546 Fest nce Test st 95% LCL 0 1.0000 0 0.7909 0 1.0000 0 0.6909	Passes Control Passes	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000 1.0000 1.0000 1.0000	P-Value 0.0104 0.5004 0.0082 Min 1.0000 1.0000 0.8000 1.0000	Decision Equal Va Equal Va Non-Non Max 1.0000 1.0000 1.0000	nt Effect n(a:1%) uriances uriances mal Distributi Std Err 0.0000 0.0000 0.0500 0.0000	CV% 0.00% 0.00% 10.53% 0.00%	0.00% 0.00% 5.00% 0.00% 15.00%
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L 0 2 2.25 2.75 3	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equality Wilk W No Count 4 4 4 4 4 4	Variance T ity of Varianty Tes Mean 1,0000 1,0000 0,9500 1,0000 0,8500	Yes Square 354 2546 Fest nce Test st 95% LCL 0 1.0000 0 0.7909 0 1.0000 0 0.6909 0 0.5402	Passes Control Prince P	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000 1.0000 1.0000 0.8000	P-Value 0.0104 0.5004 0.0082 Min 1.0000 1.0000 0.8000 1.0000 0.8000	Decision Equal Va Equal Va Non-Non Max 1.0000 1.0000 1.0000 1.0000	nt Effect n(a:1%) riances riances mal Distributi Std Err 0.0000 0.0500 0.0500 0.0500 0.0500	CV% 0.00% 0.00% 10.53% 0.00% 11.76%	0.00% 0.00% 5.00% 0.00% 15.00% 20.00%
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Variances Distribution	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equali Wilk W No Count 4 4 4 4 4 4	Variance T ity of Varianty Tes Mean 1,0000 1,0000 0,8500 0,8500 0,8000	Yes Square 354 2546 Fest nce Test st 95% LCL 0 1.0000 0 1.0000 0 0.7909 0 1.0000 0 0.6909 0 0.5402 0 0.4909	Passes Control Passes	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000 1.0000 1.0000 0.8000 0.8000 0.8000	Value 0.0104 0.5004 0.0082 Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.6000	Decision Equal Va Equal Va Non-Non Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	nt Effect n(α:1%) uriances uriances mal Distributi Std Err 0.0000 0.0500 0.0500 0.0500 0.0500 0.0817	CV% 0.00% 0.00% 10.53% 0.00% 11.76% 20.41%	0.00% 0.00% 5.00% 0.00% 15.00% 20.00% 35.00%
Attribute Control Resp ANOVA Table Source Between Error Total Distributional Attribute Variances Distribution 48h Survival F Conc-gm/L 0 2 2.25 2.5 2.75 3 3.25	Sum Squ 3.97668 0.547638 4.52432 Tests Test Levene E Mod Leve Shapiro-N Rate Summary Code	t Lower 0.9 uares Equality of ene Equality Wilk W No Count 4 4 4 4 4 4 4	Variance T ity of Varianty Tes Mean 1.0000 1.0000 0.8500 0.8500 0.6500	Yes Square 354 2546 Fest nce Test st 95% LCL 0 1.0000 0 1.0000 0 0.7909 0 1.0000 0 0.6909 0 0.5402 0 0.4909 0 0.4453	Passes Control Passes	F Stat 24.21 Critical 3.067 3.067 0.9236 Median 1.0000 1.0000 1.0000 0.8000 0.8000 0.8000 0.6000	Value 0.0104 0.5004 0.0082 Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.6000 0.6000	Decisior Equal Va Equal Va Non-Norr Max 1.0000 1.0000 1.0000 1.0000 1.0000 0.8000	nt Effect n(α:1%) triances triances mal Distributi Std Err 0.0000 0.0500 0.0500 0.0500 0.0817 0.0500	0.00% 0.00% 10.53% 0.00% 11.76% 20.41% 15.38%	0.00% 0.00% 5.00%

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018_{10 Nov-17 15:42 (p 2 of 3)}

Test Code:

17-1702 | 12-7867-5657

							ies	t Code:		17-1702 1.	2-7007-00
Ceriodaphnia	48-h Acute Su	ırvival Tes	st						N	ew Englan	d Bioass
Analysis ID: Analyzed:	10-0471-7401 10 Nov-17 15			48h Survival Ra Parametric-Cor		tments		IS Version: cial Results:	CETISv1 Yes	.9.2	
Angular (Corr	rected) Transfo	rmed Sur	nmary								
Conc-gm/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effec
0	D	4	1.345	1.345	1.346	1.345	1.345	1.345	0	0.00%	0.00%
2		4	1.345	1.345	1.346	1.345	1.345	1,345	0	0.00%	0.00%
2.25		4	1.286	1.096	1.475	1.345	1.107	1.345	0.05953	9.26%	4.43%
2.5		4	1.345	1.345	1.346	1.345	1.345	1.345	0	0.00%	0.00%
2.75		4	1.167	0.9772	1.356	1.107	1.107	1.345	0.05953	10.21%	13.28%
3		4	1.111	0.813	1.41	1.107	0.8861	1.345	0.09377	16.87%	17.38%
3.25		4	0.9413	0.7655	1.117	0.8861	0.8861	1.107	0.05527	11.74%	30.03%
3.5		4	1.056	0.7075	1.405	0.9966	0.8861	1.345	0.1096	20.75%	21.49%
3.75		4	0.5693	0.2332	0.9053	0.4636	0.4636	0.8861	0.1056	37.10%	57.69%
4		4	0.4041	0.2147	0.5936	0.4636	0.2255	0.4636	0.05953	29.46%	69.96%
48h Survival I	Rate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4						
0	D	1.0000	1.0000	1.0000	1.0000						
2		1.0000	1.0000	1.0000	1.0000						
2.25		0.8000	1.0000	1.0000	1.0000						
2.5		1.0000	1.0000		1.0000						
2.75		1.0000	0.8000		0.8000						
3		1.0000	0.6000		0.8000						
3.25			0.6000		0.8000						
		0.6000									
3.5		0.6000	0.8000		0.6000						
3.75		0.2000	0.6000		0.2000						
4		0.0000	0.2000	0.2000	0.2000						
_	ected) Transfo	rmed Deta	ail								
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4						
0	D	1.345	1.345	1,345	1.345						
2		1,345	1.345	1,345	1,345						
2.25		1.107	1.345	1.345	1.345						
2.5		1.345	1.345	1.345	1.345						
2.75		1.345	1.107	1.107	1.107						
3		1.345	0.8861	1.107	1.107						
3.25		0.8861	0.8861	0.8861	1.107						
3.5		0.8861	1.107	1.345	0.8861						
3.75		0.4636	0.8861	0.4636	0.4636						
4		0.2255	0.4636		0.4636						
48h Survival F	Rate Binomials	<u> </u>									
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4						
0	D	5/5	5/5	5/5	5/5						
2		5/5	5/5	5/5	5/5						
2.25		4/5	5/5	5/5	5/5						
2.5		5/5	5/5	5/5	5/5						
2.75		5/5	4/5	4/5	4/5						
3		5/5	3/5	4/5	4/5						
3.25		3/5	3/5	3/5	4/5						
3.5		3/5	4/5	5/5	3/5						
3.75		1/5	3/5	1/5	1/5						
4		0/5	1/5	1/5	1/5						

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:42 (p 3 of 3)

Test Code:

17-1702 | 12-7867-5657

Ceriodaphnia 48-h Acute Survival Test

New England Bioassay

Analysis ID: Analyzed:

10-0471-7401

10 Nov-17 15:42 Analysis:

Endpoint: 48h Survival Rate

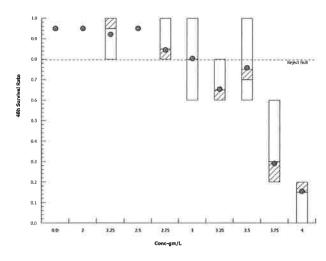
Parametric-Control vs Treatments

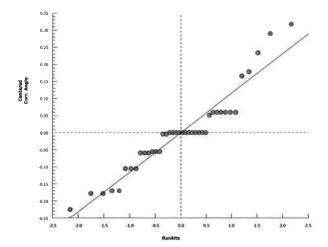
CETIS Version:

CETISv1.9.2

Official Results: Yes

Graphics





CETIS Analytical Report Flectronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 16:02 (p 1 of 2)

								Tes	t Code:		17-1702	12-7867-565
Ceriod	laphnia	48-h Acute Sur	vival Test							N	ew Engl	and Bioassay
Analys	is ID:	17-3392-0113	Enc	lpoint:	48h Survival Ra	ate		CET	'IS Versior	: CETISv1	1.9.2	
Analyz		10 Nov-17 15:2		lysis:	Linear Interpola	ation (ICPII	N)		cial Result			
Batch	ID:	01-9909-9748	Tes	t Type:	Survival (48h)			Ana	lyst:			
Start D		08 Nov-17 13:30		tocol:	EPA/821/R-02-	012 (2002))		-	boratory Wat	ter	
		10 Nov-17 13:28		cies:	Ceriodaphnia d			Brir		t Applicable		
Duratio	_	48h	-	ırce:	In-House Cultu			Age		4h		
Sample	e ID:	15-8014-9700	Cod	le:	5E2F2BC4			Clie	nt: GZ	ZA GeoEnviro	onmental	
Sample	e Date:	08 Nov-17	Mat	erial:	Sodium chlorid	е		Pro	ject:			
Receip	t Date:	08 Nov-17	Sou	гсе:	Huff & Huff							
Sample	e Age:	14h	Sta	tion:								
Linear	Interpo	olation Options										
X Tran	sform	Y Transform	n See	d	Resamples	Exp 95%	6 CL Met	thod				
Log(X)		Linear	687	036	200	Yes	Two	o-Point Inter	oolation			
Test A	cceptat	oility Criteria	TAC L	imits								
Attribu	ite	Test Stat		Uppe	r Overlap	Decision	1					
Control	Resp	1	0.9	>>	Yes	Passes (Criteria					
Point E	Estimat	es										
_evei	gm/L	95% LCL	95% UCL									
LC50	3.623	3.557	3.826									
48h Su	ırvival f	Rate Summary				Calc	ulated Vari	ate(A/B)				
Conc-g		Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
)		D	4	1.000		1.0000	0.0000	0.0000	0.00%	0.0%	20	20
2			4	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	20	20
2.25			4	0.950	0.8000	1.0000	0.0500	0.1000	10,53%	5.0%	19	20
2.5			4	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	20	20
2.75			4	0.850	0 0,8000	1,0000	0.0500	0.1000	11.76%	15.0%	17	20
3			4	0.800	0.6000	1.0000	0.0817	0.1633	20.41%	20.0%	16	20
3.25			4	0.650	0.6000	0.8000	0.0500	0.1000	15.38%	35.0%	13	20
3.5			4	0.750	0.6000	1.0000	0.0957	0.1915	25.53%	25.0%	15	20
3.75			4	0.300	0 0.2000	0.6000	0.1000	0.2000	66.67%	70.0%	6	20
ļ			4	0.150	0.0000	0.2000	0.0500	0.1000	66.67%	85.0%	3	20
1.25			4	0.000	0.0000	0.0000	0.0000	0.0000		100.0%	0	20
l8h Su	rvival F	Rate Detail										
Conc-g	ım/L	Code	Rep 1	Rep 2		Rep 4						
)		D	1.0000	1.000		1.0000						
2			1.0000	1.000	0 1.0000	1.0000						
2,25			0.8000	1.000	0 1.0000	1.0000						
2.5			1.0000	1.000	0 1.0000	1.0000						
.75			1.0000	0.800	0.8000	0.8000						
3			1.0000	0.600		0.8000						
3.25			0.6000	0.600		0.8000						
3.5			0.6000	0.800		0.6000						
3.75			0.2000	0.600		0.2000						
1			0.0000	0.200		0.2000						
1.25			0.0000	0.000		0.0000						
.20			3.0000	0.000	0.0000	3.0000						

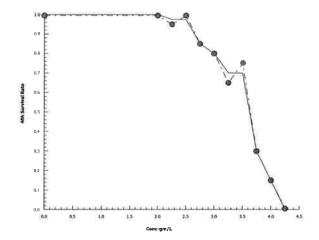
Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 16:02 (p 2 of 2)

Test Code:

17-1702 | 12-7867-5657

						TCSL GGGC.	17 1102 12 1007 0001
Ceriodaphnia	48-h Acute Su	ırvival Te	st				New England Bioassay
Analysis ID:	17-3392-0113	3 E	Endpoint: 48	3h Survival F	Rate	CETIS Version:	CETISv1.9.2
Analyzed:	10 Nov-17 15	:25	Analysis: Li	near Interpo	lation (ICPIN)	Official Results:	Yes
48h Survival	Rate Binomials	s					
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	D	5/5	5/5	5/5	5/5		
2		5/5	5/5	5/5	5/5		
2.25		4/5	5/5	5/5	5/5		
2.5		5/5	5/5	5/5	5/5		
2.75		5/5	4/5	4/5	4/5		
3		5/5	3/5	4/5	4/5		
3.25		3/5	3/5	3/5	4/5		
3.5		3/5	4/5	5/5	3/5		
3.75		1/5	3/5	1/5	1/5		
4		0/5	1/5	1/5	1/5		
4.25		0/5	0/5	0/5	0/5		

Graphics



NEW ENGLAND BIOASSAY ACUTE TOXICITY DATA FORM COVER SHEET

CLIENT:	Huff and	l Huff		C.du	ıbia TEST ID:	17-1703	
ADDRESS:	915 Harger Ro				_		
	Oak Brook, IL						
SAMPLE TYPE:	25 °C Sodiur	n Chloride	-				
			TEST SOLUTION PR	REPERATION			
Test Sol'n Vol:	200	ml					
Control:	0	ml					
0.25 g/L	0.5	ml	NaCl	Lot Number:	NaCl17(11-8)		
0.5 g/L	1	ml	NaCl Stock	Concentration:	100g/L		
0.75 g/L	1.5	ml	Stock Solu	tion Volume:	1000	ml	
1.0 g/L	2	ml	Na	Cl Calculated:	100	g	
1.25 g/L	2.5	ml	N	aCl Weighed:	100.004	g	
1.5 g/L	3	ml		2			
1.75 g/L	3.5	ml	DILUTION WAT	TER: MODERATELY	HARD RECONSTITUT	ED FRESHWA	ΓER
2.0 g/L	4	ml]	MHRCF Lot #	C37-MH033		
				Hardness	84 mg/L as C	CaCO ₂	
				Alkalinity	60 mg/L as C		
			•		mg L as C	aCO ₃	
Invertebrate							
Type of Test	Defini	tive					
Test Species	Ceriodaphr		-	START DAT	E: 11/8/17	AT	1308
NEB Lot#	Cd17(1		-	START DAT	11/6/17	^I _	1500
Age	<24 ho		-	END DATE	: 11/10/17	AT	1301
TEST SOLUTI			0 ml	END DITTE	11/10/17	···	1301
	S PER TEST CH		5	TEST SETI	JP TECHNICIAN:	KO	
	S PER CONCEN		20	TEST SETC	TECHNICIAN.	RO	
	S PER CONTRO		20				
010111111111	2 1 211 0 0 1 1 1 1 1 1	-					
RESULTS OF	Ceriodaphnia d	<i>ubia</i> 48 hr 1	LC50 Test				
Method	LC50 (g/L)	95% Con	fidence Limits (g/L)				
		2270 0011	(8.2)				
Binomial							
Probit	1.92		1.67 - 3.05				
Trimmed							
Spearman							
Karber		_					
NOAEL	1.25						
NOAEL: No O	bserved Acute E	ffect Level					
Comments:							
				11		1	
			207/	14	î l	12 1	7
REVIEWED BY	2	//	1////	DATDAT	E:	Π	
	//		V		1.1	1.01.	

Page 27 of 159

Electronic Filing: Received, Clerk's Office 5/29/2018 NEW ENGLAND BIOASSAY Toxicity Test Data Sheet

NEB Test #:	17-1703	Organism Age:	<24 h	ours
Facility Name:	New England Bioassay	Test Duration:	48	(hours)
Test Organism:	Ceriodaphnia dubia	Beginning Date: _	11/8/17	Time:1308
Sample ID:	25 °C Sodium Chloride	Dilution Water Sour	rce: Mode	erately Hard Lab Water
		St. Para Handara	0.4	0-00

Dilution Hardness: 84 ppm as CaCO₃

NaCI Conc. g/L	Number of Surviving Organisms				Dissolved Oxygen (mg/L)			Temperature (°C)			рН		
Initials	KO	PD	СВ	KO	PD	СВ	KO	PD	СВ	KO	PD	CE	
	0	24	48	0	24	48	0	24	48	0	24	48	
Control A	5	5	5	8.6	8.2	8.2	24.2	25.4	24.8	8.1	7.7	8.0	
В	5	5	4			8.2			24.8			8.0	
С	5	5	5			8.2			24.8			8.0	
D	5	5	5			8.2			24.9	1 1		8.	
0.25 g/L A	5	5	5	8.4	8.3	8.2	24.2	25.5	25.1	8.0	7.8	7.:	
В	5	5	4			8.2			25.2	1		7.4	
С	5	5	5			8.2			25.2	0		7.4	
D	5	5	4			8.2			25.1			7.	
0.5 g/L A	5	5	4	8.3	8.2	8.2	24.2	25.9	25.3	8.0	7.9	7.	
В	5	5	4			8.2			25.3			7.	
С	5	4	4			8.2			25.3			7.	
D	5	4	4			8.2			25.2			7.	
0.75 g/L A	5	5	5	8.3	8.2	8.2	24.4	26.0	25.3	8.0	7.9	7.	
В	5	5	5			8.1	1		25.3			7.	
С	5	5	4			8.1			25.3			7.	
D	5	5	5			8.1			25.2			7.	
1.0 g/L A	5	4	3	8.2	8.2	8.2	24.2	25.6	25.2	8.0	7.9	7.	
В	5	4	4			8.2			25.1			7.	
С	5	3	3			8.2			25.1			7.	
D	5	5	5			8.2			25.1			7.	
1.25 g/L A	5	4	3	8.3	8.3	8.2	24.2	25.3	25.5	8.0	7.8	7.5	
В	5	5	4			8.2			25.4			7.5	
С	5	5	5			8.2			25.3			7.	
D	5	5	5			8.2			25.2			7.	

LC50	Confidence Interval	A-NOEC	Computational Method
1.92	1.67 - 3.05	1.25	Probit

Electronic Filing: Received, Clerk's Office 5/29/2018 NEW ENGLAND BIOASSAY Toxicity Test Data Sheet

NEB Test #:	17-1703	Organism Age:	<24 ho	ours	
Facility Name:	New England Bioassay	Test Duration:	48	(hours)	
Test Organism:	Ceriodaphnia dubia	Beginning Date: _	11/8/17	Time:	_1308_
Sample ID:	25 °C Sodium Chloride	Dilution Water Sour	ce: <u>Moder</u>	ately Hard L	_ab Wateı
		Silution Hardness	0.4	nnm ac i	CaCO

NaCl Conc. g/L	Number of Surviving Organisms			Dissolved Oxygen (mg/L)			Temperature (°C)				рН		
Initials	КО	PD	CB	КО	PD	CB	КО	PD	CB	КО	PD	СВ	
	0	24	48	0	24	48	0	24	48	0	24	48	
1.5 g/L A	5	4	3	8.3	8.2	8.2	24.3	25.6	25.5	8.0	7.9	7.5	
В	5	4	4			8.1			25.4		M A	7.6	
С	5	4	3		1	8.1			25.3		11 1	7.6	
D	5	3	3		Jan.	8.1		1 1	25.3			7.6	
1.75 g/L A	5	4	3	8.4	8.3	8.1	24.5	25.1	25.4	8.0	7.9	7.6	
В	5	3	3			8.1			25.3			7.6	
С	5	3	3			8.1			25.3			7.6	
D	5	3	3			8.1			25.2			7.6	
2.0 g/L A	5	3	3	8.3	8.2	8.1	24.5	25.7	25.3	7.9	7.9	7.6	
В	5	2	2			8.1			25.2			7.6	
C	5	4	2		11	8.1			25.2			7.6	
D	5	2	0			8.1			25.2			7.6	
											3		

LC50	Confidence Interval	A-NOEC	Computational Method
1.92	1.67 - 3.05	1.25	Probit

Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:35 (p 1 of 3)

Test Code: 17-1703 | 08-9910-2453

							Test	Code:	17-1703 08-9910-245		
Ceriodaphnia	48-h Acute Sun	vival Test							New England Bioassay		
Analysis ID:	03-1668-1515	End	point: 4	18h Survival Ra	ate		CET	IS Version:	CETISv1.9.2		
Analyzed:	10 Nov-17 15:3	5 Ana	Iysis: L	inear Regress	ion (GLM)		Offic	Official Results: Yes			
Batch ID:	06-3617-6968	Test	Type: S	Survival (48h)			Ana	Analyst:			
Start Date:	08 Nov-17 13:08			PA/821/R-02-	012 (2002))		Diluent: Laboratory Water			
Ending Date:	10 Nov-17 13:01	Spe		Ceriodaphnia d			Brin		Applicable		
Duration:	48h	Sou	rce: I	n-House Cultu	re		Age	: <24	h		
Sample ID:	12-7305-7775	Cod	e: 4	BE151EF		A GeoEnvironmental					
Sample Date:				Sodium chlorid	е		Clie Proi				
Receipt Date:		Sou	rce: H	Huff & Huff							
Sample Age:		Stat	ion:								
Linear Regres											
Model Name	Link Fund	tion	Thresh	old Option	Thresh	Optimized	l Pooled	Het Corr	Weighted		
	robit) η=inv Φ[π]			Threshold	0.05	Yes	No	No	Yes		
Regression Su Iters LL	AlCc	BIC	24	C:	Adi Do	E Ctat	C-itical	D Value	Decision/cuE0/		
Iters LL 18 -38.92		88.59	Mu 0.2826	0.1518	Adj R2 0.8035	1.601	Critical 2.459	P-Value 0.1852	Decision(α:5%) Non-Significant Lack of Fit		
		00.09	0.2020	0.1310	0.8033	1.001	2.435	0.1032	Non-Significant Eack of Fit		
Point Estimate	es										
Level gm/L	95% LCL	95% UCL									
LC50 1.917	1.666	3.045									
Test Acceptab	ility Criteria	TAC L	imite								
Attribute	Test Stat	Lower	Upper	Overlap	Decision	1					
Control Resp	0.95	0.9	>>	Yes	Passes C	Criteria					
Regression Pa	arameters										
Parameter	Estimate	Std Error	95% LC	L 95% UCL	t Stat	P-Value	Decision	(a:5%)			
Threshold	0.1135	0.03553	0.04391	0.1832	3.196	0.0031	Significar	t Parameter			
Slope	6.587	2.644	1.406	11.77	2.492	0.0179	Significar	it Parameter			
Intercept	-1.862	0.6307	-3.098	-0.6256	-2.952	0.0058	Significar	t Parameter			
ANOVA Table											
Source	Sum Squa	res Mea	n Square	DF	F Stat	P-Value	Decision	(a:5%)			
Model	103.7	51.8	7	2	72.55	<1.0E-37	Significan	it			
Lack of Fit	6.192	1.03	2	6	1.601	0.1852	Non-Sign	ificant			
Pure Error	17.4	0.64	44	27							
Residual	23.59	0.71	49	33							
Residual Analy	ysis										
Attribute	Method			Test Stat	Critical	P-Value	Decision	(α:5%)			
Goodness-of-F	it Pearson C	hi-Sq GOF	Test	23.59	47.4	0.8863	Non-Sign	ificant Hetero	ogeneity		
	Likelihood	Ratio GOF	Test	30.57	47.4	0.5885	Non-Sign	ificant Hetero	ogeneity		
Variances	Mod Lever	ne Equality o	of Variand	ce 1.66	2.305	0.1545	Equal Va	riances			
Distribution	Shapiro-W	ilk W Norma	ality Test	0.9181	0.9398	0.0110	Non-Normal Distribution				
	Anderson-	Darling A2 N	Normality	Te 1.137	2.492	0.0057	Non-Norn	nal Distributio	nc		

Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:35 (p.2 of 3)

	alytical Rep						Test	Code:		17-1703	08-9910-245
Ceriodaphnia	48-h Acute Sı	urvival Test							N	ew Engla	and Bioassay
Analysis ID: Analyzed:	03-1668-1515 10 Nov-17 15		•	h Survival F near Regres				IS Version: cial Results:	CETISv1.9.2 Yes		
48h Survival	Rate Summary	,			Calc	ulated Varia	ate(A/B)				
Conc-gm/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
0	D	4	0.9500	0.8000	1.0000	0.0500	0,1000	10.53%	0.0%	19	20
0.25		4	0.9000	0.8000	1.0000	0.0577	0.1155	12.83%	5.26%	18	20
0.5		4	0.8000	0.8000	0.8000	0.0000	0.0000	0.00%	15.79%	16	20
0.75		4	0.9500	0.8000	1.0000	0.0500	0.1000	10.53%	0.0%	19	20
1		4	0.7500	0.6000	1.0000	0.0957	0.1915	25.53%	21.05%	15	20
1.25		4	0.8500	0.6000	1.0000	0.0957	0.1915	22.53%	10.53%	17	20
1.5		4	0.6500	0.6000	0.8000	0.0500	0.1000	15.38%	31.58%	13	20
1.75		4	0.6000	0.6000	0.6000	0.0000	0.0000	0.00%	36.84%	12	20
2		4	0.3500	0.0000	0.6000	0.1258	0.2517	71.90%	63.16%	7	20
48h Survival	Rate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4						
0	D	1.0000	0.8000	1.0000	1.0000						
0.25		1.0000	0.8000	1.0000	0.8000						
0.5		0.8000	0.8000	0.8000	0.8000						
0.75		1.0000	1.0000	0.8000	1.0000						
1		0.6000	0.8000	0.6000	1.0000						
1.25		0.6000	0.8000	1.0000	1.0000						
1.5		0.6000	0.8000	0.6000	0.6000						
1.75		0.6000	0.6000	0.6000	0.6000						
2		0.6000	0.4000	0.4000	0.0000						
48h Survival	Rate Binomials										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4						
)	D	5/5	4/5	5/5	5/5						
0.25		5/5	4/5	5/5	4/5						
0.5		4/5	4/5	4/5	4/5						
0.75		5/5	5/5	4/5	5/5						
1		3/5	4/5	3/5	5/5						
1.25		3/5	4/5	5/5	5/5						
1.5		3/5	4/5	3/5	3/5						
1.0		5/5	7/3	5/5	3/3						

1.75

2

3/5

3/5

3/5

2/5

3/5

2/5

3/5

0/5

Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:35 (p 3 of 3)

Test Code:

17-1703 | 08-9910-2453

Ceriodaphnia 48-h Acute Survival Test

03-1668-1515

10 Nov-17 15:35

Endpoint: Analysis: Linear Regression (GLM)

48h Survival Rate

CETIS Version:

New England Bioassay

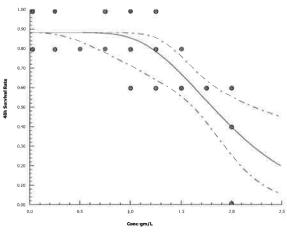
CETISv1.9.2

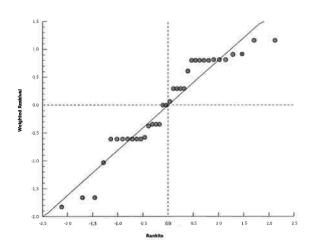
Official Results: Yes

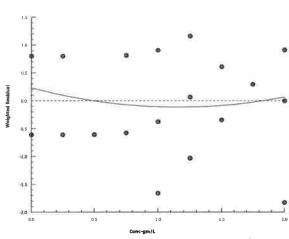
Analyzed: **Graphics**

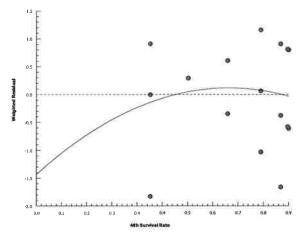
Analysis ID:

Log-Normal: inv $\Phi[\pi]=\alpha+\beta \cdot \log[x]$









CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:35 (p 1 of 3)

Test Code:

17-1703 | 08-9910-2453

Ceriodaphnia	48-h Acute	Survival I	est						N	ew Englan	d Bioass
Analysis ID;	08-6970-4	039	Endpoint:	ndpoint: 48h Survival Rate		CET	IS Version	: CETISv	1.9.2		
Analyzed:	10 Nov-17	15:35	Analysis:	Parametric-Co	ntrol vs Trea	tments	Offic	cial Result	s: Yes		
Batch ID:	06-3617-69	968	Test Type: Survival (48h)			Ana	lyst:				
Start Date:	08 Nov-17	13:08	Protocol:	EPA/821/R-02-	-012 (2002)		Diluent: Laboratory Water			ter	
Ending Date:	10 Nov-17	13:01	Species:	Ceriodaphnia d	lubia		Brin	e: No	t Applicable		
Duration:	48h		Source:	In-House Cultu	re		Age		4h		
Sample ID:	12-7305-77	775	Code:	4BE151EF			Clie	nt: GZ	A GeoEnvir	onmental	
Sample Date:	08 Nov-17		Material:	Sodium chlorid	е		Proj	ect:			
Receipt Date:	08 Nov-17		Source:	Huff & Huff							
Sample Age:	13h		Station:								
Data Transfor	m	Alt I	Чур				NOEL	LOEL	TOEL	TU	PMSD
Angular (Corre	cted)	C > 7	Г				1.25	1.5	1.369		25.55%
Dunnett Multi	ple Compa	rison Test									
Control	vs Con	c-gm/L	Test S	Stat Critical	MSD DE	P-Type	P-Value	Decision	n(a:5%)		
Dilution Water	0.25		0.521	7 2.511	0.287 6	CDF	0.7205	Non-Sign	nificant Effec	t	
	0.5		1.565	2.511	0.287 6	CDF	0.2605	Non-Sigi	nificant Effec	t	
	0.75		0	2.511	0.287 6	CDF	0.8889	Non-Sigi	nificant Effec	t	
	1		2.012	2.511	0.287 6	CDF	0.1291	Non-Sigi	nificant Effec	t	
	1.25		1.006	2.511	0.287 6	CDF	0.5014	Non-Sigi	nificant Effec	t	
	1.5*		3.018	2.511	0.287 6	CDF	0.0166	Significa	nt Effect		
	1.75	*	3.502	2.511	0.287 6	CDF	0.0052	Significa	nt Effect		
	2*		5.831	2.511	0.287 6	CDF	1.3E-05	Significa	nt Effect		
Test Acceptat	ility Criteri	а т	AC Limits								
Attribute	Test	Stat Lowe		Overlap	Decision						
Control Resp	0.95	0.9	>>	Yes	Passes C	riteria					
ANOVA Table											
Source	Sum	Squares	Mean	Square	DF	F Stat	P-Value	Decision	n(a:5%)		
	Sum 1.526		Mean 0.190		DF 8	F Stat 7.326	P-Value 3.7E-05	Decision Significa	<u> </u>		
Between		51		314					<u> </u>		
Between Error	1.526	51 273	0.190	314	8				<u> </u>		
Between Error Total	1.526 0.703 2.229	51 273	0.190	314	8 27				<u> </u>		
Between Error Total Distributional	1.526 0.703 2.229	51 273	0.190	314	8 27	7.326			nt Effect		
Between Error Total Distributional Attribute	1.526 0.703 2.229 Tests Test	51 273 78	0.190	314 0472	8 27 35	7.326	3.7E-05	Significa Decision	nt Effect		
Between Error Total Distributional Attribute Variances	1.526 0.703 2.229 Tests Test Lever	51 273 78 ne Equality	0.1906 0.0266	314 0472 est	8 27 35 Test Stat	7.326 Critical	3.7E-05	Significa Decision	nt Effect n(α:1%) Variances		
Source Between Error Total Distributional Attribute Variances Variances Distribution	1.526 0.703 2.229 Tests Test Lever Mod l	51 273 78 ne Equality Levene Equ	0.1900 0.0260 of Variance T	est nce Test	8 27 35 Test Stat 3.392	7.326 Critical 3.256	3.7E-05 P-Value 0.0080	Decision Unequal Equal Va	nt Effect n(α:1%) Variances		
Between Error Total Distributional Attribute Variances Variances Distribution	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	51 273 178 ne Equality Levene Equ	0.1900 0.0260 of Variance T ality of Varia	est nce Test	8 27 35 Test Stat 3.392 1.545	7.326 Critical 3.256 3.256	3.7E-05 P-Value 0.0080 0.1886	Decision Unequal Equal Va	nt Effect n(α:1%) Variances iriances		
Between Error Fotal Distributional Attribute Variances Variances Distribution	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	51 1273 178 ne Equality Levene Equ iro-Wilk W I	0.1906 0.0266 of Variance T ality of Varia Normality Tes	est nce Test	8 27 35 Test Stat 3.392 1.545	7.326 Critical 3.256 3.256 0.9166	3.7E-05 P-Value 0.0080 0.1886	Decision Unequal Equal Va	nt Effect n(α:1%) Variances iriances	CV%	%Effect
Between Error Fotal Distributional Attribute /ariances /ariances Distribution ISH Survival F Conc-gm/L	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	51 1273 178 ne Equality Levene Equ iro-Wilk W I	0.1906 0.0266 of Variance T ality of Varia Normality Tes	est nce Test st	8 27 35 Test Stat 3.392 1.545 0.9602	7.326 Critical 3.256 3.256 0.9166	9-Value 0.0080 0.1886 0.2185	Decision Unequal Equal Va	nt Effect n(α:1%) Variances iriances Distribution	CV% 10.53%	%Effec:
Between Error Fotal Distributional Attribute /ariances /ariances Distribution ISH Survival F Conc-gm/L 0.25	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	i51 i273 i78 ne Equality Levene Equ iro-Wilk W I	0.1900 0.0260 of Variance T ality of Varia Normality Tes	95% LCL	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL	7.326 Critical 3.256 3.256 0.9166 Median	3.7E-05 P-Value 0.0080 0.1886 0.2185	Decision Unequal Equal Va Normal I	nt Effect n(α:1%) Variances priances Distribution Std Err		
Between Error Fotal Distributional Attribute /ariances /ariances Distribution ISH Survival F Conc-gm/L 0.25	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	is 1 is 273 in e Equality of Levene Equality of Levene Equality of Levene Equality of Courts of	0.1900 0.0260 of Variance Tality of Varia Normality Tes	95% LCL 0.7909 0.7163	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL 1.0000	7.326 Critical 3.256 3.256 0.9166 Median 1.0000	9-Value 0.0080 0.1886 0.2185 Min 0.8000	Decision Unequal Equal Va Normal I	nt Effect n(α:1%) Variances priances Distribution Std Err 0.0500	10.53%	0.00% 5.26%
Between Error Fotal Distributional Attribute /ariances /ariances Distribution BBh Survival F Conc-gm/L 0.25	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	is 1 is 273 in e Equality of Levene Equality of Lev	0.1900 0.0260 of Variance T ality of Varian Normality Test Mean 0.9500 0.9000	95% LCL 0.7909 0.7163 0.7997	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL 1.0000 1.0000	7.326 Critical 3.256 3.256 0.9166 Median 1.0000 0.9000	7.7E-05 P-Value 0.0080 0.1886 0.2185 Min 0.8000 0.8000	Decision Unequal Equal Va Normal I Max 1.0000 1.0000	n(α:1%) Variances priances Distribution Std Err 0.0500 0.0577	10.53% 12.83%	0.00% 5.26%
Between Error Fotal Distributional Attribute /ariances /ariances Distribution ### Survival F Conc-gm/L) 0.25 0.55	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	is 1 is 273 in e Equality of the Equality of t	0.1900 0.0260 of Variance Tality of Varial Normality Tes Mean 0.9500 0.9000 0.8000	95% LCL 0.7909 0.7163 0.7997 0.77909	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL 1.0000 1.0000 0.8003	7.326 Critical 3.256 3.256 0.9166 Median 1.0000 0.9000 0.8000	3.7E-05 P-Value 0.0080 0.1886 0.2185 Min 0.8000 0.8000 0.8000	Decision Unequal Equal Va Normal I Max 1.0000 1.0000 0.8000	n(α:1%) Variances priances Distribution Std Err 0.0500 0.0577 0.0000	10.53% 12.83% 0.00%	0.00% 5.26% 15.79% 0.00%
Between Error Fotal Distributional Attribute Variances Distribution 48h Survival F Conc-gm/L 0 0.25 0.55	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	is 1 is 273 in e Equality of Levene Equality of Lev	0.1900 0.0260 of Variance Tality of Variant Mean 0.9500 0.9000 0.8000 0.9500	95% LCL 95% LCL 0 0.7909 0 0.7163 0 0.7997 0 0.7909 0 0.4453	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL 1.0000 1.0000 0.8003 1.0000	7.326 Critical 3.256 3.256 0.9166 Median 1.0000 0.9000 0.8000 1.0000	3.7E-05 P-Value 0.0080 0.1886 0.2185 Min 0.8000 0.8000 0.8000 0.8000	Decision Unequal Equal Va Normal I Max 1.0000 1.0000 0.8000 1.0000	n(α:1%) Variances prizances Distribution Std Err 0.0500 0.0577 0.0000 0.0500	10.53% 12.83% 0.00% 10.53%	0.00% 5.26% 15.79% 0.00% 21.05%
Between Error Total Distributional Attribute Variances Variances Distribution 48h Survival F Conc-gm/L 0 0.25 0.75 1 1.25	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	is 1 is 273 in a Equality of the Equality of t	0.1900 0.0260 of Variance T ality of Varian Normality Test of Mean 0.9500 0.9500 0.9500 0.7500	95% LCL 95% LCL 0 0.7909 0 0.7163 0 0.7997 0 0.7909 0 0.4453 0 0.5453	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL 1.0000 1.0000 0.8003 1.0000 1.0000	7.326 Critical 3.256 3.256 0.9166 Median 1.0000 0.9000 0.8000 1.0000 0.7000	3.7E-05 P-Value 0.0080 0.1886 0.2185 Min 0.8000 0.8000 0.8000 0.8000 0.6000	Decision Unequal Equal Va Normal I Max 1.0000 1.0000 1.0000 1.0000	nt Effect n(α:1%) Variances priances Distribution Std Err 0.0500 0.0577 0.0000 0.0500 0.0957	10.53% 12.83% 0.00% 10.53% 25.53%	0.00% 5.26% 15.79% 0.00% 21.05% 10.53%
Between Error Total Distributional Attribute Variances Variances	1.526 0.703 2.229 Tests Test Lever Mod I Shapi	is 1 in the second seco	0.1900 0.0260 of Variance T ality of Varian Normality Test Mean 0.9500 0.9500 0.9500 0.7500 0.8500	95% LCL 95% LCL 0.7909 0.7163 0.7997 0.7999 0.4453 0.5453 0.4909	8 27 35 Test Stat 3.392 1.545 0.9602 95% UCL 1.0000 1.0000 0.8003 1.0000 1.0000 1.0000	7.326 Critical 3.256 3.256 0.9166 Median 1.0000 0.9000 0.8000 1.0000 0.7000 0.9000	3.7E-05 P-Value 0.0080 0.1886 0.2185 Min 0.8000 0.8000 0.8000 0.8000 0.6000 0.6000	Decision Unequal Equal Va Normal I Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	nt Effect n(α:1%) Variances Distribution Std Err 0.0500 0.0577 0.0000 0.0500 0.0957 0.0957	10.53% 12.83% 0.00% 10.53% 25.53% 22.53%	0.00% 5.26% 15.79%

Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:35 (p 2 of 3)

Test Code:

17-1703 | 08-9910-2453

							Tes	t Code:		17-1703 0	8-9910-245
Ceriodaphnia	a 48-h Acute Su	rvival Te	est						N	ew Englan	d Bioassay
Analysis ID: 08-6970-4039			Endpoint: 48h Survival Rate				CETIS Version:		CETISv1.9.2		
Analyzed: 10 Nov-17 15:35			Analysis: Parametric-Control vs Treatments			Official Results:					
Angular (Cor	rected) Transfo	rmed Su	ımmarv								
Conc-gm/L	Code	Count	-	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	1.286		1.475	1,345	1.107	1.345	0.05953	9.26%	0.00%
0.25		4	1.226		1.445	1.226	1.107	1.345	0.06874	11.21%	4.63%
0.5		4	1,107		1,108	1.107	1.107	1.107	0	0.00%	13.89%
0.75		4	1.286		1.475	1.345	1.107	1.345	0.05953	9.26%	0.00%
1		4	1.056		1.405	0.9966	0.8861	1.345	0.1096	20.75%	17.86%
1.25		4	1.171		1.522	1.226	0.8861	1.345	0.1103	18.84%	8.93%
1.5		4	0.941		1.117	0.8861	0.8861	1.107	0.05527	11.74%	26.79%
1.75		4	0.886		0.8862	0.8861	0.8861	0.8861	0	0.00%	31.08%
2		4	0.620		1.065	0.6847	0.2255	0.8861	0.1399	45.10%	51.76%
48h Survival	Rate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4						
0	D	1.0000			1.0000						
0.25		1.0000	0.800	0 1.0000	0.8000						
0.5		0.8000			0.8000						
0.75		1.0000			1.0000						
1		0.6000			1.0000						
1.25		0.6000			1.0000						
1.5		0.6000			0.6000						
1.75		0.6000									
2		0.6000			0.6000 0.0000						
				0.4000	0.0000						
	rected) Transfo			Don 2	D 4						
Conc-gm/L	Code D	1.345	Rep 2 1.107		Rep 4 1.345						
-	D										
0.25		1.345	1.107		1.107						
0.5		1.107	1.107		1.107						
0.75		1.345	1.345		1.345						
1		0.8861			1.345						
1.25		0.8861			1.345						
1.5		0.8861			0.8861						
1.75		0.8861			0.8861						
2		0.8861	0.684	7 0.6847	0.2255						
48h Survival	Rate Binomials										
Conc-gm/L	Code	Rep 1			Rep 4						
0	D	5/5	4/5	5/5	5/5						
0.25		5/5	4/5	5/5	4/5						
0.5		4/5	4/5	4/5	4/5						
0.75		5/5	5/5	4/5	5/5						
1		3/5	4/5	3/5	5/5						
1.25		3/5	4/5	5/5	5/5						
1.5		3/5	4/5	3/5	3/5						
1.75		3/5	3/5	3/5	3/5						

Electronic Filing: Received, Clerk's Office 5/29/2018 10 Nov-17 15:35 (p 3 of 3)

Test Code:

17-1703 | 08-9910-2453

Ceriodaphnia 48-h Acute Survival Test

New England Bioassay

Analysis ID: Analyzed:

08-6970-4039 10 Nov-17 15:35

Endpoint:

Analysis:

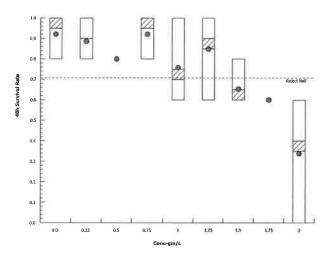
48h Survival Rate

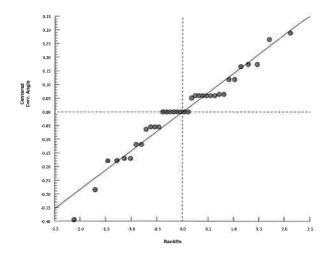
Parametric-Control vs Treatments

CETIS Version:

CETISv1.9.2 Official Results: Yes

Graphics





CHRONIC COVER SHEET

 CLIENT:
 GZA / Huff & Huff
 C.dubia
 TEST ID #
 17-1481

 ADDRESS:
 915 Harger Road Suite 330
 COC #
 N/A

 Oak Brook, IL 60523
 PROJECT #
 81.0220523.00

SAMPLE TYPE: NaCl 25°C

DILUTION WATER: Moderately Hard Synthetic

INVERTEBRATES

TEST SET UP (TECH INIT)	TBP
TEST SPECIES	Ceriodaphnia dubia
NEB LOT#	Cd17(RMH 171)
AGE	< 24 hours
TEST SOLUTION VOLUME (mls)	15
NO. ORGANISMS PER TEST CHAMBER	1
NO. ORGANISMS PER CONCENTRATION	10

Laboratory Control Water (MHRCF)

Batch Number	Hardness mg/L CaCO ₃	Alkalinity mg/L CaCO ₃
С37-МН020	84	60

	DATE	TIME
TEST START:	9/8/17	1146
TEST END:	10/13/17	1056

Comments:		
REVIEWD BY:	Jan 1/15	DATE:

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

Electronic Filing: Received, Clerk's Office 5/29/2018

SAMPLE ID:			N	aCl 25°C			
NEB PROJECT NUMBER:	81.0	0220523.00	NEB	TEST NUMBER:	17-1481	COC#	N/A
TEST ORGANISM:	Ceriodaphnia	dubia	AGE:	<24 hours		Lot #	Cd17(RMH 171)
START DATE:	9/8/17	TIME:	1146	END DATE:	10/13/17	TIME:	1056

	,		Cultur	e Lot#			Cd17(F	RMH 17	1)						
	Cup #	Al	A4	A5	A6	A7	A8 olicate	A9	A11	A12	В3	Total Live	# Live Adults	Analyst- Transfer	Analy Cour
Concentration	Day Number	A	В	С	D	E	F	G	Н	I	J	Young			
Concentration	0	✓	1	✓	1	1	1	√ √	√	1	1		10	TBP	
	1	1	1	1	1	1	1	1	1	1	1		10	TBP	
	2	1	1	1	1	1	1	1	1	1	1	0	10	TBP	
	3	4	4	6	5	3	4	5	4	4	4	43	10	КО	K
	4	5	3	1	1	1	1	9	1	7	1	24	10	СВ	CI
	5	√	1	9	6	5	5	1	5	1	5	35	10	СВ	Cl
	6	6	6	14	7	8	6	10	10	5	2/x	74	9	ко	K
	7	10	10	13	2	8	8	13	12	9	Х	85	9	CW	C
	8	✓	1	1	6	1	1	14	1	1	Х	20	9	CW	C
	9	10	7	14	8	8	8	1	7	8	Х	70	9	KO	K
	10	10	9	13	9	10	9	14	10	10	Х	94	9	СВ	C
	11	5	10	9	1/x	11	2/x	14	13	10	Х	75	7	ко	K
	12	√	/	1	Х	1	Х	12	10	8/x	Х	31	6	KO	K
	13	1	11	14	X	13	X	1	√	X	X	39	6	PD	PI
	14	√	11	16	X	15	X	2	14	X	X	58	6	PD	PI
	15	1	13	16	X	13	X	10	13	X	X	66	6	PD	Pl
	16	2	√/x	√	X	1	X	1	10	X	X	12	5	TBP	TE
NEB Lab	17	√	X	12	X	9	X	10	✓	X	X	31	5	KO	K
Synthetic	18	4	X	7/x	X	10	X	√/x	12	X	X	33	3	KO	K
Control	19	5	X	X	X	1	X	X	13	X	X	18	3	СВ	C
	20	2	X	X	X	8/x	X	X	12	X	X	22	2	PD	PI
	21	√/x	X	X	X	X	X	X	✓	X	X	0	1	KO	K
	22	X	X	X	X	X	X	X	7/x	X	X	7	0	СВ	CI
	23	X	X	X	X	X	X	X	X	X	X	0	0	СВ	Cl
	24	X	X	X	X	X	X	X	X	X	X	0	0	TBP	TE
	25	X	X	X	X	X	X	X	X	X	X	0	0		
	26	X	X	X	X	X	X	X	X	X	X	0	0		
	27	X	X	X	X	X	X	X	X	X	X	0	0		
	28	X	X	X	X	X	X	X	X	X	X	0	0		
	29	X	X	X	X	X	X	X	X	X	X	0	0		
	30	X	X	X	X	X	X	X	X	X	X	0	0		
	31	X	X	X	X	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	Х	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	X	X	0	0		
	35	X	X	X	X	X	X	X	X	X	X	0	0		
	totals	65	84	144	44	121	42	113	152	61	11	837	0		M

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

												Total			
	Day					Rer	olicate					Live Young	# Live Adults	Analyst- Transfer	Analys Count
Concentration	Day Number	A	В	С	D	Е	F	G	Н	I	J	Toung			
	0	√	1	1	1	1	1	1	1	1	1		10		
	1	√	1	1	√	1	1	1	1	1	√		10		
	2	√	1	√	1	1	√	√	√	1	1	0	10		
	3	3	5	√	√	V	3	3	3	4	4	25	10		
	4	1	4	8	5	4	√	7	4	7	1	39	10		
	5	5	✓	8	5	4	5	√	. ✓	1	5	32	10	-	
	6	8	6	13	4	8	5	9	6	7	2	68	10		
	7	√	10	√	\	√	2	12	10	10	6	50	10		
	8	10	1	14	6	9	8/x	1	√	√/x	1	47	8		
	9	7	7	14	x/5	5	X	11	7	X	8	64	7		
	10	10	11	18	X	7	X	10	11	X	2	69	7		
	11	√	9	√/x	X	√	X	10	9	X	8	36	6) <u> </u>
	12	8	√	X	X	10	X	1	9	X	1	27	6		UT _
	13	7	13	X	X	11	X	18	3	X	9/x	61	5		
	14	1	13	X	X	12	X	18	10	X	X	53	5		
	15	_ 12	✓	X	X	1	X	13	9	X	X	34	5		
	16	9/x	4	X	X	10	X	1	6	X	X	29	4		
	17	X	4	X	X	10	X	3	✓	X	X	17	4		
0.25 g/L	18	X	5	X	X	10	X	4	5	X	X	24	4		
	19	X	1	X	X	1	X	√/x	7	X	X	7	3		
	20	X	3	X	X	13	X	X	5	X	X	21	3		
	21	X	√/x	X	X	11	X	X	1	X	X	11	2		
	22	X	X	X	X	1	X	X	√/x	X	X	0	1		
	23	X	X	X	X	7	X	X	X	X	X	7	1		
	24	X	X	Х	X	√/x	X	X	X	X	X	0	0		
	25	X	X	X	X	X	X	X	X	X	X	0	0		
	26	X	X	Х	X	X	Х	X	X	X	X	0	0		
	27	X	Х	X	X	Х	X	X	X	X	X	0	0		
	28	X	X	X	X	X	X	X	X	X	X	0	0		
	29	X	Х	X	X	X	Х	X	X	X	X	0	0		
	30	X	X	X	X	Х	X	X	X	X	X	0	0		
	31	X	X	X	X	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	Х	X	X	X	Х	X	X	X	X	X	0	0		
	34	X	X	X	X	Х	X	X	X	X	X	0	0		
	35	X	Х	X	X	Х	X	X	X	X	X	0	0		
	totals	79	94	75	25	131	23	118	104	28	44	721	1		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

	THOMBE				0525.00				cerroun			OTTHE		770	
						D						Total Live	# Live Adults	Analyst- Transfer	Analys
	Day						licate					Young	riduits	riansiei	Count
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J		10		
	0	√	√	✓	√	✓	√	√	√	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√		10		
	1	✓	√	√	√	√		√	√	✓	_ ✓		10		
	2	✓	√	√	√	√	√	✓	√	√	√	0	10		
	3	3	2	4	2	✓	X	3	2	4	3	23	9		
	4	5	✓	√	√	3	X	4	✓	4	/	16	9		
	5	√	4	10	3	5	X	√	8	✓	6	36	9		-
	6	7	4	12	8	4	X	6/x	7	4	4	56	8		
	7	8	✓	10	✓	√	X	X	7	8	7	40	8		
	8	√	5	√	10	9	X	X	√	12	/	36	8		
	9	6	5	8	9	5	X	X	5	✓	6	44	8		
	10	7	5	10	10	8	X	X	5	8	10	63	8		-
	11	9	√	7	√	√/x	X	X	√/x	10/x	7	33	5		
	12	✓	7	√	10	X	X	X	X	X	√	17	5		
	13	10	7	15	12/x	X	X	X	X	X	7	51	4		
	14	10	√	11	X	X	X	X	X	X	8	29	4		
	15	10	4	13	X	X	X	X	X	X	10	37	4		-
	16	√	3/x	✓	X	X	X	X	X	X	✓	3	3		-
	17	8	X	12	X	X	X	X	X	X	11	31	3		-
0.5 g/L	18	8	X	10	X	X	X	X	X	X	10	28	3		_
	19		X	√/x	X	X	X	X	X	X	1	1	2		-
	20	12	X	X	X	X	X	X	X	X	9	21	2		_
	21	7	X	X	X	X	X	X	X	X	5	12	2		
	22	✓	X	X	X	X	X	X	X	X	8	8	2		_
	23	7	X	X	X	X	X	X	X	X	✓	7	2		
	24	3	X	X	X	X	X	X	X	X	5/x	8	1		
	25	√/x	X	X	X	X	X	X	X	X	X	0	0		
	26	X	X	X	X	X	X	X	X	X	X	0	0		
	27	X	X	X	X	X	X	X	X	X	X	0	0	v T	
	28	X	X	X	X	X	X	X	X	X	X	0	0		
	29	X	X	X	X	X	X	X	X	X	X	0	0		
	30	X	X	X	X	X	X	X	X	X	X	0	0		
	31	X	X	X	X	Х	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	Х	X	X	X	X	X	X	X	X	0	0		
	35	X	X	X	Х	X	Х	Х	X	X	X	0	0		
	totals	120	46	122	64	34	0	13	34	50	117	600	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received, Clerk's Office 5/29/2018 SAMPLE ID: 9/8/17 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: NEB PROJECT NUMBER:

	1														
												Total Live	# Live	Analyst-	Analysi
	Day					Rep	licate					Young	Adults	Transfer	Counts
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0	✓	✓	✓	✓	✓	√	✓	✓	1	✓		10		
	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		10		
	2	✓	✓	✓	√	√/X	✓	✓	✓	✓	✓	0	9		
	3	✓	3	5	4	X	2	2	3	3	3	25	9		
	4	✓	1	✓	√	X	✓	8	✓	1	5	13	9		
	5	4	5	9	4	X	6	1	6	6	✓	40	9		
	6	5	4	4	5	X	5	10	4	6	4	47	9		
	7	5	7	10	✓	X	✓	13	8	8	10	61	9		
	8	✓	/	✓	6	X	6	√	1	1	1	12	9		
	9	1/x	4	11	6	X	5	9	4	4	5	49	8		
	10	X	9	7	9	X	5	9	5	8	11	63	8		
	11	X	11	7	10	Х	✓	9	5	8	10	60	8		
	12	X	1	1	√	Х	4	✓	3	7	√/x	15	7		
	13	X	13	14	11	Х	11	9	2	1	X	60	7		
	14	X	15	10	11	X	10	6/x	10	13	X	75	6		-
	15	X	√/x	8	1	X	√	X	9	9	X	26	5		
	16	X	X	1	10	X	7	X	7/x	10	X	34	4		
	17	X	X	<i>\f</i>	7	X	7	X	X	1	X	14	4		
0.75 g/L	18	X	X	√/x	5	Х	1	X	X	11	X	16	3		
	19	Х	Х	X	1	Х	10	X	X	13	X	23	3		
	20	X	Х	X	6	Х	9	X	X	7	X	22	3	_ 4	
	21	Х	X	Х	X	Х	3	Х	X	√/x	Х	3	1		
	22	X	Х	Х	Х	Х	1	Х	Х	X	Х	0	1		
	23	X	X	Х	Х	Х	4	Х	Х	X	Х	4	1		
	24	Х	X	Х	Х	Х	4/x	X	Х	Х	X	4	0		
	25	X	Х	Х	Х	Х	Х	Х	Х	X	Х	0	0		
	26	X	X	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	27	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	0	0	1	
	28	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0	1	
	29	X	X	X	X	X	X	X	X	X	Х	0	0		
	30	X	X	X	X	Х	Х	X	Х	Х	Х	0	0		
	31	X	X	X	X	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	X	X	0	0	1	
	35	X	X	X	X	X	X	X	X	X	X	0	0		
	totals	15	71	86	94	0	98	75	66	113	48	666	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

												Total Live	# Live	Analyst-	Analys
	Day					Rep	licate					Young	Adults	Transfer	Count
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0	√	✓	√	✓	1	1	✓	√	1	✓		10		
	1	√	1	✓	√	√	1	1	1	1	1		10		
	2	√	✓	✓	1	✓	1	√	√	1	✓	0	10		
	3	2	4	5	2	3	3	4	4	3	3	33	10		1
	4	5	4	✓	✓	✓	✓	8	✓	1	3	20	10		
	5	√	1	9	5	4	4	✓	6	4	1	32	10		
	6	6	3	5	4	4	3	9	4	4	3	45	10		
	7	5	7	4	8	✓	4	5	7	6	7	53	10	1	
	8	√	✓	6	√	4	✓	1	√/x	1	3	13	9	<u> </u>	
	9	5	7	7	6	5	5	7	X	4	3/x	49	8		
	10	7	6	4	8	5	4	2	X	8	X	44	8		5
	11	11	6	9	4	3/x	5	4	X	8	X	50	7		
	12	10	2	1	1	X	4/x	1	X	4	Х	20	6		
	13	√	1	13	7	X	Х	8/x	X	1	X	29	5		
	14	13	11	11	4	Х	X	X	X	10	Х	49	5		
	15	14	11	13	3	X	Х	X	X	12	Х	53	5		
	16	7	5	1	√/x	Х	Х	X	X	5	X	17	4		
	17	√	1	8	X	Х	Х	Х	X	V	Х	8	4		
1.0 g/L	18	9	4	6	X	X	Х	Х	X	5	X	24	4		
	19	6	3	√/x	X	X	Х	X	X	1	X	9	3		
	20	10	1	Х	Х	Х	X	X	X	4	Х	14	3		
	21	√	6	Х	Х	X	Х	Х	X	4	X	10	3		
	22	√/x	7	Х	Х	X	X	X	X	√/x	X	7	1		
	23	X	V	Х	X	Х	Х	Х	Х	Х	Х	0	1		
	24	X	√/x	X	Х	Х	Х	Х	X	X	Х	0	0		
	25	X	Х	Х	Х	Х	Х	X	X	Х	Х	0	0		
	26	X	Х	Х	X	Х	Х	X	X	Х	Х	0	0		7
	27	X	Х	Х	Х	Х	Х	Х	Х	X	Х	0	0		
	28	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	0	0		
	29	X	Х	Х	X	Х	Х	Х	X	Х	Х	0	0		
	30	X	Х	X	X	Х	X	Х	X	Х	Х	0	0		
	31	X	X	X	Х	X	X	X	X	X	Х	0	0		-
	32	X	X	X	X	X	X	X	X	X	X	0	0		J
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	Х	X	0	0	-	
	35	X	X	X	X	X	X	X	X	X	X	0	0		
	totals	110	86	100	51	28	32	47	21	82	22	579	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

															1
												Total	# Live	Analyst-	Analys
	Day					Rej	licate					Live Young	Adults	Transfer	Counts
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J			1	
	0	✓	V	√	1	√	1	1	√	1	1		10		
	1	√	1	\	√	√	√	1	✓	1	√		10		
	2	1	1	\	√	1	1	1	√	1	1	0	10		
	3	3	1	1	2	3	3	2	✓	1	✓	15	10		
	4	√	5	1	1	✓	✓	6	3	4	3	21	10		
	5	4	3	6	6	5	4	1	4	1	1	32	10		
	6	3	1	4	3	5	1	4	4	1	3	28	10		
	7	6	3	8	1	6	√/x	8	2	2	5	41	9		
	8	1	5	\	3	✓	X	✓	√/x	5	✓	13	8		
	9	4	6	9	4/x	4	X	✓	X	1	3/x	30	6		
	10	7	1	5	X	7	X	3	X	2	X	25	6		
	11	3/x	6	7	X	6/x	X	4	X	2	X	28	4		
	12	X	4	√	X	X	X	4	X	2	X	10	4		
	13	X	9	8	X	X	X	1	X	1	X	17	4		
	14	X	1	6	X	X	X	7	X	8	X	21	4		
	15	X	8	9	X	X	X	6	X	7	X	30	4		
	16	X	5	>	X	X	Х	1	X	4	X	9	4		
	17	X	√/x	2	X	X	X	√/x	X	√/x	X	2	1		
1.25 g/L	18	X	X	1	X	X	X	X	X	X	X	1	1		
	19	X	X	\	X	X	X	X	X	X	X	0	1		
	20	X	X	√/x	X	X	X	X	X	X	X	0	0		
	21	X	X	X	X	X	X	X	X	X	X	0	0		
	22	X	X	X	X	Х	X	X	X	X	X	0	0		
	23	X	X	X	X	X	X	X	X	X	X	0	0		
	24	X	X	X	X	X	X	X	X	X	X	0	0		
	25	X	X	Х	X	X	Х	X	X	Х	X	0	0		
	26	X	X	X	X	Х	X	X	X	X	X	0	0		
	27	X	Х	X	X	X	Х	Х	X	X	X	0	0		
	28	X	X	X	X	Х	X	X	X	X	X	0	0		
	29	X	X	X	X	X	X	X	X	X	X	0	0	J = = , =	(n
	30	X	X	X	X	X	X	X	X	X	X	0	0		
	31	X	X	X	Х	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	Х	Х	X	X	X	0	0		
	33	X	X	X	Х	Х	Х	X	X	Х	X	0	0		
	34	X	X	X	Х	Х	Х	X	X	Х	Х	0	0		
	35	X	X	X	X	Х	Х	X	X	X	X	0	0		Vi.
	totals	30	55	66	19	36	8	44	13	38	14	323	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received, Clerk's Office 5/29/2018

SAMPLE ID: NaCl 25°C NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

												Total Live	# Live	Analyst-	Analyst-
	Day						licate					Young	Adults	Transfer	Counts
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0	√	√	√	√	√	√	/	√	√	√		10		
	1	√	√	✓	√	✓	√	√	√	√	√		10		
V 1 1 1	2	√	√	✓	√	√	√	✓	√	√	√	0	10		_
	3	√	1	2	✓	2	✓	1	√	✓	√	5	10		
	4	√	1/x	7	2	_ ✓	✓	5	2	✓	2	19	9		
	5	1_	X	✓	4	3	4	√	3	3	✓	18	9		
	6	3	X	√/x	2	5	2	1	2	4	3	22	8		
	7	4	X	X	√	6	√	5	✓	6	4	25	8		
	8	✓	X	X	√/x	√	3	5	3	√	✓	11	7		
	9	3	X	X	X	3	1	3	2	3	3/x	18	6		
	10	5	X	X	X	5	5	6	5	3	X	29	6		
	11	3	X	X	X	5	✓	6	4	4	X	22	6		
	12	√	X	X	X	√/x	√	√	√	5/x	X	5	4		-
	13	5	X	X	X	X	9	9	6	X	X	29	4		
	14	7	X	X	X	X	5	5	4	X	X	21	4		
	15	5	X	X	X	X	2/x	6	6	X	X	19	3		
	16	✓	X	X	X	X	X	√	√	X	X	0	3		
	17	4	X	X	X	X	X	5	6/x	X	X	15	2		
1.5 g/L	18	√	X	X	X	X	X	5	X	X	X	5	2		
	19		X	X	X	X	X	2	X	X	X	2	2		
	20	_ ✓	X	X	X	X	X	✓	X	X	X	0	2		
	21		X	X	X	X	X	5	X	X	X	5	2		
	22		X	X	X	X	X	3	X	X	X	3	2		
	23	√	X	X	X	X	X	✓	X	X	X	0	2		
	24	✓	X	X	X	X	X	1	X	X	X	1 .	2		
	25	√	X	X	X	X	X	3	X	X	X	3	2		
	26	√/x	X	X	X	X	X	√/x	X	X	X	0	0		
	27	X	X	X	X	X	X	X	X	X	X	0	0		
	28	X	X	X	X	X	X	X	X	X	X	0	0		
	29	X	X	X	X	X	X	X	X	X	X	0	0		
	30	X	X	X	X	X	X	X	X	X	X	0	0		
	31	X	X	X	X	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	X	X	0	0		
	35	X	X	X	X	X	X	X	X	Х	X	0	0		
	totals	40	2	9	8	29	31	75	43	28	12	277			1

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: 81.0220523.00 NEB PROJECT NUMBER: ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

												-			
												Total Live	# Live Adults	Analyst- Transfer	Analysi Counts
	Day	-				-	licate					Young	Addits	Transier	Count
Concentration	Number	A	В	C	D	E	F	G	Н	I	J		10		
	0	<u> </u>	√	\	√	√	√	√	√	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√		10		
	1		√	✓	√	√	√ //	√	√	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√	0	10		_
	2	√	✓ ✓	√	√	√	√/x	√	√	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√ √	0	9		
	3	√	√	✓ 2	✓ /	√	X	1	√	1	√ √	0	9		
	4	√	✓ ✓	2	1	1	X	√/x •	√ /		✓ ✓	2	7		
	5	√	√ /	3	1	1	X	X	√ 1	√/x		5 2	7		
	6	√	1	√	1		X	X	1	X	1	-	7		
	7	√ 1	√ 1	6	6	1	X	X	1/2	X	2	13	6		
	8	3	3	√ 1	2	3	X	X	√/x X	X	2	14	6		
	10	<i>√</i>	1	6	1	3	X	X	X	X	3	13	6		
	11	3	1	√ ✓	√	2	X	X	X	X	2	7	6		
	12	√/x	√/x	V	6	1	X	X	X	X	<i>✓</i>	6	4		
	13	X	X	√/x	4	3	X	X	X	X	6	13	3		
	14	X	X	X	√/x	8	X	X	X	X	7	15	2		
	15	X	X	X	X	5	X	X	X	X	√/x	5	1		
	16	X	X	X	X	√	X	X	X	X	X	0	1		
	17	X	X	X	X	1	X	X	X	X	X	0	1		
1.75 g/L	18	X	X	X	X	7	X	X	X	X	X	7	1		
Ü	19	X	X	X	X	1	X	X	X	X	X	0	1		
	20	X	X	X	X	4	X	X	X	X	Х	4	1		
	21	X	X	Х	Х	3	Х	Х	X	X	Х	3	1		
	22	X	X	Х	Х	1	X	Х	Х	X	Х	0	1		
	23	Х	X	X	Х	1	Х	Х	Х	Х	Х	0	1		
	24	X	Х	Х	Х	√/x	Х	Х	Х	Х	Х	0	0		
	25	X	Х	Х	х	х	Х	Х	Х	Х	Х	0	0		
	26	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	27	X	Х	Х	Х	Х	Х	X	X	X	Х	0	. 0	-	
	28	X	Х	Х	Х	Х	Х	X	Х	X	Х	0	0		
	29	X	Х	Х	Х	Х	Х	X	X	X	X	0	0		
	30	X	X	Х	X	X	X	X	X	X	X	0	0		
	31	X	X	Х	Х	Х	X	X	X	X	X	0	0		
	32	X	X	Х	Х	X	X	X	X	X	X	0	0		
	33	X	X	Х	X	X	Х	Х	X	X	X	0	0		
	34	X	X	Х	Х	Х	X	X	Х	X	X	0	0		
	35	X	X	Х	X	Х	Х	X	X	X	Х	0	0		
	totals	7	5	18	23	43	0	0	1	0	23	120	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received Clerk's Office 5/29/2018 NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia 9/8/17 START DATE:

												Total Live	# Live	Analyst-	Analysi
	Day						licate					Young	Adults	Transfer	Counts
Concentration	Number	Α	В	С	D	Е	F	G	Н	I	J		-		
	0	✓	✓	√	√	√	✓	✓	✓	✓	√		10		
	1	✓	✓	✓	✓	√	✓	√	√	√	✓		10		
	2	√	✓	✓	√/x	✓	✓	✓	✓	✓	✓	0	9		
	3	√	✓	√/x	X	✓	1	✓	√	1	✓	0	8		1
	4	✓	✓	X	X	✓	✓	√	✓	✓	✓	0	8		
	5	√	✓	X	X	✓	✓	✓	✓	✓	✓	0	8		
	6	1	1	X	X	√/x	√	✓	✓	2	✓	3	7		
	7	✓	1	X	X	X	2	✓	3	1	1	6	7		
	8	1	2	X	X	X	1	1	✓	1	1	3	7		
	9	1	√/x	X	X	X	2	1	2	1	1	6	6		
	10	√	X	X	X	X	✓	1	√	3	2	5	6		
	11	2	X	X	X	X	✓	3	3	3	1	12	6		
	12	3	X	X	X	X	3	2	2	1	✓	10	6		
	13	1	X	X	X	X	1	1	1	6	1	8	6		
	14	√	X	X	X	X	3	2	4	2	4	15	6		
	15	✓	X	X	X	X	V	√/x	1	5	2	7	5		
	16	✓	X	X	X	X	√.	X	√	1	1	0	5		
	17	√/x	X	X	X	X	✓-	X	√	4	√	4	4		
2.0 g/L	18	X	X	X	X	X	1	X	2	1	✓	2	4		
	19	X	X	X	X	X	1	X	1	3	3	7	4		
	20	X	X	X	X	X	2	Х	1	5	5	12	4		
	21	X	X	X	X	X	1	X	1	1	√	0	4		
	22	X	X	X	Х	X	1	X	1	1	1	0	4		
	23	X	Х	X	Х	X	1	Х	1	1	1	0	4		
	24	Х	Х	Х	Х	X	√	Х	1	√/x	1	0	3		
	25	Х	Х	X	Х	X	√	Х	1	Х	V	0	3		
	26	X	X	X	X	X	√/x	Х	√/x	Х	√/x	0	0		
	27	Х	Х	X	X	X	Х	Х	X	Х	X	0	0		
	28	Х	Х	X	Х	X	Х	Х	X	Х	Х	0	0		
	29	X	X	X	Х	Х	Х	Х	Х	Х	Х	0	0		
	30	X	X	X	X	X	Х	X	X	Х	X	0	0		
	31	X	Х	X	X	X	Х	Х	X	Х	Х	0	0		
	32	X	Х	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		Α
	34	X	X	X	X	X	X	X	X	X	X	0	0		
	35	X	X	X	X	X	X	X	X	X	X	0	0		
	totals	8	3	0	0	0	14	7	17	34	17	100	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received, Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia 9/8/17 START DATE:

												Total	#1:	Anglant	Amala
	Day					Rer	licate					Live Young	# Live Adults	Analyst- Transfer	Analys Count
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J	Toung			
	0	1	1	1	1	1	1	1	1	1	1		10		
	1	1	√	√	√	1	1	1	√	1	1		10		
	2	√	√/x	√	√	√/x	√/x	✓	√	√/x	√/x	0	5		
	3	√	X	√	1	X	X	1	√	X	X	0	5		
	4	√	X	√	√	X	X	1	√	X	X	0	5		-
	5	√	X	✓	✓	X	X	√/x	1	X	X	0	4		
	6	✓	X	√	2	X	X	X	1	X	X	2	4		
	7	1	X	✓	2	X	X	X	✓	X	X	3	4		
	8	✓	X	√	√	X	X	X	✓	X	X	0	4		
	9	√	X	✓	✓	X	X	X	√	X	X	0	4		
	10	✓	X	√	✓	X	X	X	✓	X	X	0	4		
	11	√/x	X	√	√/x	X	X	X	✓	X	X	0	2		
	12	X	X	√	X	X	X	X	√/x	X	X	0	1		
	13	X	X	_ <	X	X	X	X	X	X	X	0	1		
	14	X	X	√	X	X	X	X	X	X	X	0	_11		
	15	X	X	✓	X	X	X	X	X	X	X	0	1		
	16	X	X	√	X	X	X	X	X	X	X	0	1		
225 5	17	X	X	√	X	X	X	X	X	X	X	0	1		
2.25 g/L	18	X	X	√	X	X	X	X	X	X	X	0	1		
	19	X	X	√	X	X	X	X	X	X	X	0	1		
	20	X	X	√/x	X	X	X	X	X	X	X	0	0		_
	21	X	X	X	X	X	X	X	X	X	X	0	0		_
	22	X	X	X	X	X	X	X	X	X	X	0	0		
	23	X	X	X	X	X	X	X	X	X	X	0	0		
	24	X	X	X	X	X	X	X	X	X	X	0	0		
	25	X	X	X	X	X	X	X	X	X	X	0	0		
	26	X	X	X	X	X	X	X	X	X	X	0	0		
	27	X	X	X	X	X	X	X	X	X	X	0	0		
	28	X	X	X	X	X	X	X	X	X	X	0	0		
	29	X	X	X	X	X	X	X	X	X	X	0	0		
	30	X	X	X	X	X	X	X	X	X	X	0	0		-
	31	X	X	X	X	X	X	X	X	X	X	0	0		-
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	X	X	0	0		
	35 totals	X 1	X 0	X 0	X 4	0 0	0 0	X 0	X 0	0	0 0	5	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17 81.0220523.00

	I NOMBE				0323.00				Certouaj			START		7/0	
												Total	# Live	Analyst-	Analys
	Day					Rep	licate					Live Young	Adults	Transfer	Count
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0	/	1	√	1	1	1	1	√	1	1		10		
	1	1	1	√/x	√/x	√/x	√/x	√	√	1	1		6		
	2	√	1	Х	Х	Х	Х	1	1	1	1	0	6		
	3	√	1	X	X	Х	X	√/x	√/x	1	1	0	4		
	4	✓	1	X	X	X	X	X	X	1	√/x	0	3		
	5	√	1	Х	Х	Х	Х	Х	X	1	Х	0	3		
	6	√	1	X	X	Х	Х	Х	X	/	Х	0	3		
	7	1	1	Х	Х	Х	Х	Х	X	1	X	0	3		
	8	√	1	X	X	Х	X	Х	X	1	X	0	3		
	9	√	1	Х	X	Х	Х	X	X	1	Х	0	3		
	10	1	1	X	X	Х	Х	Х	X	1	Х	0	3		
	11	√	1	Х	Х	Х	Х	Х	X	1	Х	0	3		
	12	√	1	Х	Х	Х	Х	Х	X	√/x	Х	0	2		
	13	1	1	Х	Х	Х	X	Х	X	Х	Х	0	2		
	14	√/x	√/x	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	15	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	16	Х	Х	Х	Х	Х	Х	Х	X	X	Х	0	0		
	17	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
2.5 g/L	18	X	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	19	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	20	X	Х	X	х	X	Х	Х	X	Х	Х	0	0		
	21	X	Х	X	Х	Х	Х	Х	X	Х	X	0	0		
	22	Х	Х	X	Х	Х	Х	Х	X	X	Х	0	0		
	23	X	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	24	X	Х	X	Х	Х	Х	Х	Х	Х	Х	0	0		
	25	X	Х	X	Х	Х	Х	Х	X	Х	Х	0	0		
	26	X	Х	X	Х	Х	Х	х	X	Х	X	0	0		
	27	X	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	28	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	29	X	Х	Х	Х	Х	Х	Х	X	Х	Х	0	0		
	30	X	Х	X	Х	Х	Х	Х	X	Х	Х	0	0		
	31	X	Х	X	Х	Х	Х	Х	X	Х	Х	0	0		
	32	X	Х	Х	Х	Х	Х	Х	X	X	Х	0	0		
	33	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	0	0		J
	34	X	Х	X	Х	Х	Х	Х	X	Х	Х	0	0	-	
	35	X	Х	X	Х	Х	Х	Х	X	Х	Х	0	0		
	totals	0	0	0	0	0	0	0	0	0	0	0	0		

NEW ENGLAND BIOASSA FJERTKONIE FÜLING: REGEIVER OF LEIK'S OFFICE 5/29/2018

SAMPLE ID: NaCl 25°C

NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

NEB PROJEC	1 NOMBI	ZIV.		61.022	0323.00		OKGA	INISIVI.	Cerioaaj	onnia ai	ivia	START	DATE:	9/8/	17
												Total	# Live	Analyst-	Analy
	Dov	Day Replicate							Live Young	Adults	Transfer	Counts			
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J	Toung			
	0	1	1	1	1	1	1	1	1	1	1		10		
	1	√/x	√/x	√/x	√/x	√/x	√/x	√/x	√/x	√/x	√/x		0		
	2	X	Х	X	X	X	X	X	X	X	X	0	0		
	3	Х	Х	X	Х	Х	Х	Х	X	X	X	0	0		
	4	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	0	0		
	5	X	Х	Х	Х	Х	Х	Х	X	Х	X	0	0		
	6	Х	Х	Х	Х	Х	х	Х	X	X	X	0	0		
	7	Х	Х	Х	Х	Х	Х	Х	X	X	Х	0	0		
	8	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	9	Х	Х	Х	Х	Х	Х	Х	Х	X	X	0	0		
	10	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	0	0		
	11	Х	Х	Х	Х	Х	Х	Х	Х	X	X	0	0		
	12	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0	- 1	
	13	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	14	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	15	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
	16	Х	х	X	Х	Х	Х	Х	X	х	Х	0	0		
	17	X	х	Х	Х	Х	Х	Х	Х	Х	Х	0	0		
2.75 g/L	18	X	Х	Х	Х	Х	X	Х	X	Х	Х	0	0		
	19	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	0	0	2	
	20	X	Х	Х	X	X	Х	Х	X	х	Х	0	0	1	
	21	X	Х	Х	X	X	Х	Х	X	Х	Х	0	0		
	22	X	Х	Х	X	X	X	Х	Х	Х	Х	0	0		
	23	Х	Х	X	X	X	X	X	X	Х	X	0	0		
	24	Х	Х	X	Х	Х	Х	Х	X	Х	Х	0	0		
	25	X	X	X	X	X	X	Х	X	Х	Х	0	0		
	26	X	Х	X	X	X	X	X	X	Х	X	0	0		
	27	X	Х	Х	X	X	Х	Х	X	Х	Х	0	0		
	28	X	X	X	X	X	Х	X	X	Х	X	0	0		
	29	X	Х	X	X	X	X	X	X	Х	X	0	0		
	30	X	X	X	X	X	X	X	Х	Х	Х	0	0		
	31	X	Х	Х	X	Х	X	Х	X	Х	X	0	0		
	32	X	X	X	X	Х	Х	X	X	Х	X	0	0		
	33	X	Х	X	X	X	X	X	X	Х	X	0	0		
	34	X	Х	X	X	X	X	X	X	X	Х	0	0		
	35	X	X	Х	X	Х	Х	Х	X	Х	X	0	0		
	totals	0	0	0	0	0	0	0	0	0	0	0	0		

NEW ENGLAND BIOASSAY - CERIODAPHNIA CHRONIC. TEST OBSERVATION SHEET Electronic Filing: Received, Clerk's Office 5/29/2018

SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are
		judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: CONTROL

DAY	OBSERVATION	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

HEW ENGLA	Flectronic F	Filing: Received Clerk's Office 5/29/2018
SAMPLE ID:	NaCl 25°C	lling: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are
		57

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 0.25 g/L

DAY	OBSERVATION
1	
2	
3	Rep F organism marked as dead on day 1 however organism was in cup with neonates.
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

NEW ENGLAND BIOASSAY - CERIODAPHNIA CHRONIC TEST OBSERVATION SHEET Electronic Filing: Received, Clerk's Office 5/29/2018 SAMPLE ID: NaCl 25°C Organisms are considered to be healthy and swimming normally unless otherwise				
SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise		
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are		

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 0.5 g/L

DAY	OBSERVATION
1	
2	
3	Rep F organism/cup missing.
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

NEW ENGLAND BIOASSAY CERIODAPHNIA CHRONIC TEST OBSERVATION SHEET 9/2018. Electronic Filing: Received, Clerk's Office 5/29/2018.

SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 0.75 g/L

DAY	OBSERVATION
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	Organism missing from rep D, no cup.
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

NEW ENGLAND BIOASSAY - CERIODAPHNIA CHRONIC TEST ORSERVATION SHEET.
Flectronic Filing: Received. Clerk's Office 5/29/2018

SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 1.0 g/L

DAY	OBSERVATION	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

NEW ENGLAND BIOASSAY CERIODAPHNIA CHRONIC TEST OBSERVATION SHEET 9/29/2018

SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 1.25 g/L

DAY	OBSERVATION	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		

NEW ENGLAN	ND BIOASSAY - CERIODAPHI Flectronic F	NIA CHRONIC TEST OBSERVATION SHEET. Illing: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 1.5 g/L

DAY	OBSERVATION
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	n e
30	
31	
32	
33	
34	
35	

NEW ENGLAND BIOASSAY CERIODAPHNIA CHRONIC TEST OBSERVATION SHEET Electronic Filing: Received, Clerk's Office 5/29/2018

SAMPLE ID: NaCl 25°C Organisms are considered to be healthy and swimming normally unless otherwise noted in the observations below. If they are listed as "small", then the adults are TEST DATE: 41524

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 1.75 g/L

DAY	OBSERVATION	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
-11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		

NEW ENGLAN	ID BIOASSAY CERIODAPH	NIA CHRONIC TEST OBSERVATION SHEETIling: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 2.0 g/L

DAY	OBSERVATION	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

NEW ENGLAN	D BIOASSAY CERIODAPH Electronic i	NIA CHRONIC TEST ORSERVATION SHEET Filing: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 2.25 g/L

1 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 11 11 12 12 13 14 14 15 16 16 17 18 8 19 9 20 21 19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 33 34 34 4 25 5	DAY	OBSERVATION	
3 4 5 5 6 7 7 8 8 9 9 10 11 11 12 13 14 15 16 16 17 18 18 19 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 34			
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	2		
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	3		
6	4		
7 8 9 10 11 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 33 34	5		
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	6		
9 10 11 12 13 14 15 16 17 18 18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 33 34 34	7		
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	8		
11	9		
11	10		
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	16		
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34			
21 22 23 24 25 26 27 28 29 30 31 32 33 34			
22 23 24 25 26 27 28 29 30 31 32 33 34			
23 24 25 26 27 28 29 30 31 32 33 34	21		
24 25 26 27 28 29 30 31 32 33 34	22		
25 26 27 28 29 30 31 32 33 34	23		
26 27 28 29 30 31 32 33 34	24		
27 28 29 30 31 32 33 34	25		
27 28 29 30 31 32 33 34			
28 29 30 31 32 33 34			
29 30 31 32 33 34			
30 31 32 33 34			
31 32 33 34			
32 33 34			
33 34			
34			
	35		

NEW ENGLAND BIOASSAY CERIODAPHNIA CHRONIC TEST OBSERVATION SHEET 9/29/2018

SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 2.5 g/L

DAY	OBSERVATION	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		

NEW ENGLAN	ND BIOASSAY - CERIODAPH Electronic F	NIA CHRONIC TEST OBSERVATION SHEET - Illing: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaCl 25°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

judged to be smaller in size than adults of the same age oberved in standard testing.

CONCENTRATION: 2.75 g/L

DAY	OBSERVATION
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

Electronic Filing: Received, Clerk's Office 5/29/2018

NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

SAMPLE ID:		NaCl 25°C							
NEB PROJECT NUMBE			1.0220523.0		TEST ORG		Ceriodaphnia dubia		
DILUTION WATER SO			tely Hard S		START DA		9/8/17	TIME: 1146	
ANALYST	TBP	TBP	TBP	СВ	KO	ZM	КО		
NEB Lab Synthetic Control	1	2	3	4	5	6	7	Remarks	
Temp °C Initial	24.6	24.2	24.1	24.9	25.1	25.4	24.5		
D.O. mg/L Initial	8.3	8.5	8.4	8.3	8.3	8.3	8.3		
H s.u. Initial	7.9	7.9	8.0	7.7	7.7	7.9	7.4		
Conductivity µS Initial	337	324	324	321	330	342	328		
Cemp °C Final	24.0	24.0	24.2	25.7	24.9	25.0	25.1		
D.O. mg/L Final	7.6	9.0	8.9	8.6	8.2	8.2	8.4		
H s.u. Final	8.3	8.4	7.9	8.3	8.0	8.2	8.2		
Conductivity µS Final	376	391	371	373	387	372	360		
0.25 g/L	1	2	3	4	5	6	7	Remarks	
emp °C Initial	25.0	24.2	24.1	25.1	25.2	25.1	24.6		
O.O. mg/L Initial	8.3	8.4	8.4	8.3	8.3	8.3	8.2		
H s.u. Initial	7.8	7.9	8.0	7.8	7.8	7.9	7.5		
Conductivity µS Initial	761	797	793	898	849	815	839		
emp °C Final	24.0	24.0	24.3	25.8	24.8	24.9	25.2		
D.O. mg/L Final	8.3	9.0	8.9	8.7	8.3	8.2	8.7		
H s.u. Final	8.4	8.5	8.1	8.3	8.1	8.2	8.2		
Conductivity µS Final	793	830	827	964	897	858	877		
0.5 g/L	1	2	3	4	5	6	7	Remarks	
Temp °C Initial	25.0	24.2	24.2	25.2	25.2	25.4	24.6		
D.O. mg/L Initial	8.3	8.4	8.4	8.3	8.3	8.2	8.2		
H s.u. Initial	7.8	8.0	8.0	7.9	7.8	8.0	7.5		
Conductivity µS Initial	1,301	1,291	1,305	1,366	1,391	1,333	1,249		
emp °C Final	24.6	24.0	24.4	25.8	24.7	24.8	25.3		
O.O. mg/L Final	8.3	9.1	9.0	8.7	8.5	8.2	8.8		
H s.u. Final	8.5	8.5	8.2	8.3	8.2	8.2	8.3		
Conductivity µS Final	1,332	1,306	1,331	1,428	1,428	1,373	1,284		
0.75 g/L	1	2	3	4	5	6	7	Remarks	
emp °C Initial	25.0	24.1	24.1	25.2	25.2	25.5	24.6		
O.O. mg/L Initial	8.3	8.4	8.4	8.3	8.3	8.2	8.2		
H s.u. Initial	7.8	8.0	8.0	7.9	7.9	8.0	7.6		
Conductivity µS Initial	1,748	1,773	1,800	1,817	1,841	1,881	1,857	t-Access	
Cemp °C Final	24.7	24.0	24.3	25.9	24.6	24.8	25.2	4	
D.O. mg/L Final	8.2	9.1	9.0	8.8	8.6	8.3	8.9		
H s.u. Final	8.5	8.6	8.3	8.3	8.2	8.2	8.3		
Conductivity µS Final	1,771	1,800	1,830	1,898	1,907	1,920	1,944		

Electronic Filing: Received, Clerk's Office 5/29/2018 NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

Access	PLE ID:	Na	Cl 25°C							
NEB PROJECT NUMBER: DILUTION WATER SOURCE:		_		.0220523.0		TEST ORG	54	Ceriodaphnia dubia		
	TER SOURC		Moderately Hard Synthetic			START DA		9/8/17 TIME: 1146		
1.0 g/L		1	2	3	4	5	6	7	Remarks	
Temp °C Ini	itial 2	5.0	24.1	24.2	25.1	25.2	25.5	24.7		
O O mg/L In	itial {	3.3	8.4	8.4	8.3	8.2	8.2	8.2		
oH s.u. Ini	tial	7.9	8.0	8.0	7.9	7.9	8.0	7.7		
Conductivity µS	Initial 2,	260	2,211	2,253	2,252	2,262	2,272	2,278		
Temp °C Fin	al 2	4.7	24.1	24.3	25.4	24.7	24.7	25.2		
O.O. mg/L Fit	nal 8	3.2	9.1	9.1	8.7	8.6	8.3	8.9		
oH s.u. Fii	nal 8	3.5	8.5	8.3	8.3	8.2	8.2	8.2		
Conductivity µS	Final 2,	287	2,232	2,272	2,279	2,278	2,303	2,472		
1.25 g/L		1	2	3	4	5	6	7	Remarks	
Temp °C Ini	tial 2	5.0	24.2	24.2	25.1	25.2	25.5	24.7		
D.O. mg/L In	itial 8	3.3	8.4	8.4	8.3	8.3	8.2	8.2		
oH s.u. Ini	tial 7	1.9	8.0	8.1	7.9	7.9	8.0	7.7		
Conductivity µS	Initial 2,	766	2,761	2,270	2,828	2,737	2,790	2,815		
Γemp °C Fin	al 2	4.7	24.2	24.3	25.5	24.6	24.7	25.2		
D.O. mg/L Fir.	nal 8	3.1	8.9	8.9	8.9	8.5	8.3	8.8		
H s.u. Fir	nal 8	3.4	8.5	8.2	8.3	8.2	8.2	8.2		
Conductivity µS	Final 2,	902	2,783	2,848	2,861	2,791	2,814	3,129		
1.5 g/L		1	2	3	4	5	6	7	Remarks	
Temp °C Ini	tial 2:	5.0	24.2	24.0	25.0	25.0	25.0	24.7		
D.O. mg/L Ini	itial 8	3.3	8.5	8.2	8.3	8.4	8.3	8.3		
H s.u. Ini	tial 7	.9	8.0	8.1	7.9	7.8	8.0	7.7		
Conductivity µS	Initial 3,2	205	3,240	3,227	3,274	3,179	3,136	3,261		
emp °C Fin	al 24	4.0	24.8	24.3	25.6	24.6	25.0	25.3		
D.O. mg/L Fin	al 8	.1	8.7	8.9	8.9	8.4	8.4	8.7		
H s.u. Fin	al 8	.4	3.4	8.2	8.4	8.2	8.1	8.2		
Conductivity µS	Final 3,4	180	3,224	3,258	3,310	3,220	3,219	3,492		
1.75 g/L		1	2	3	4	5	6	7	Remarks	
°C Init	tial 2:	5.0	24.4	24.5	24.9	25.0	25.5	25.4		
O.O. mg/L Ini	tial 8	.3	8.4	8.4	8.4	8.3	8.2	8.2		
H s.u. Init	tial 7	.9	7.9	8.1	7.7	7.8	7.9	7.7		
Conductivity µS]		527	3,520	3,634	3,608	3,742	3,702	3,711		
emp °C Fina	al 24	1.0	24.7	24.6	26.0	25.3	25.2	25.6		
O.O. mg/L Fin		.1	8.7	9.0	8.8	8.5	8.4	8.6		
H s.u. Fin	al 8	.4	8.3	8.3	8.3	8.2	8.2	8.2		
Conductivity µS	Final 3,6	570	3,587	3,754	3,730	3,790	3,699	3,713		

NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

NEB PROJECT NUMBER:		R:		1.0220523.0		TEST ORG	ANISM	Ceriodaphnia dubia		
DILUTION WATER SOURCE:		URCE:	Modera	tely Hard S	ynthetic	START DA	TE:	9/8/17	TIME: 1146	
2.0 g	/L	1	2	3	4	5	6	7	Remarks	
Temp °C	Initial	25.0	24.5	24.5	25.1	25.1	25.5	25.3		
D.O. mg/L	Initial	8.3	8.3	8.4	8.3	8.3	8.2	8.1		
pH s.u.	Initial	7.8	8.0	8.0	7.9	7.9	7.9	7.7		
Conductivity µS	S Initial	4,121	4,140	4,078	4,128	4,179	4,045	4,186		
Temp °C	Final	24.0	24.5	24.5	25.4	25.4	25.3	25.6		
D.O. mg/L	Final	8.1	8.8	9.0	8.8	8.6	8.4	8.9		
pH s.u.	Final	8.4	8.3	8.3	8.3	8.2	8.2	8.2		
Conductivity µ	S Final	4,260	4,142	4,133	4,200	4,160	4,052	4,424		
2.25	g/L	1	2	3	4	5	6	7	Remarks	
Гетр °С	Initial	25.0	24.5	24.5	25.1	25.0	25.6	25.4		
D.O. mg/L	Initial	8.3	8.4	8.6	8.3	8.3	8.2	8.1	V.	
oH s.u.	Initial	7.8	8.0	8.0	7.9	7.8	7.9	7.8		
Conductivity µ	S Initial	4,641	4,480	4,595	4,577	4,572	4,531	4,603		
Temp °C	Final	24.0	24.9	24.4	26.0	25.2	25.3	25.6		
D.O. mg/L	Final	8.1	9.2	8.9	8.9	8.4	8.3	8.6		
pH s.u.	Final	8.4	8.6	8.3	8.3	8.2	8.2	8.3		
Conductivity µ	S Final	4,600	4,556	4,650	4,710	4,590	4,656	4,606		
2.5 g	g/L	1	2	3	4	5	6	7	Remarks	
Гетр °С	Initial	25.1	24.6	24.5	25.1	25.0	25.5	25.3		
D.O. mg/L	Initial	8.3	8.3	8.5	8.3	8.3	8.2	8.2		
oH s.u.	Initial	7.9	8.0	8.0	7.9	7.8	7.9	7.8		
Conductivity µS	S Initial	5,085	5,060	4,969	5,071	5,044	5,061	5,167		
Гетр °С	Final	24.0	24.8	24.5	25.5	25.3	25.3	25.6		
D.O. mg/L	Final	8.0	8.9	8.9	8.8	8.6	8.3	8.9		
oH s.u.	Final	8.4	8.4	8.3	8.3	8.3	8.2	8.3		
Conductivity µ	S Final	5,096	4,958	5,073	5,030	5,050	5,042	5,766		
2.75 į	g/L	1	2	3	4	5	6	7	Remarks	
Гетр °C	Initial	25.1	24.5							
D.O. mg/L	Initial	8.3	8.4							
oH s.u.	Initial	7.9	8.0							
Conductivity µ	S Initial	5,565	5,540							
Гетр °С	Final	24.0		11						
D.O. mg/L	Final	8.0								
oH s.u.	Final	8.3								
Conductivity µS	S Final	5,610								

NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

SAMPLE ID:	SAMPLE ID:								
NEB PROJECT NUMBE	R:	NaCl 25°C 8	1.0220523.0	00	TEST ORG	ANISM	Ceriodaphnia dubia		
DILUTION WATER SOU	JRCE:	Moderately Hard Synthetic			START DA	TE:	9/8/17 TIME: 1146		
ANALYST	CW	CW	KO	PD	KW	TBP	CW		
NEB Lab Synthetic Control	8	9	10	11	12	13	14	Remarks	
emp °C Initial	24.9	25.4	24.9	24.5	25.4	24.5	24.9		
O.O. mg/L Initial	8.2	8.2	8.4	8.4	8.3	8.3	8.3		
H s_u. Initial	7.6	7.6	8.0	7.7	7.7	8.2	7.6		
Conductivity µS Initial	326	328	318	331	320	335	322		
emp °C Final	24.9	25.7	24.8	25.4	24.6	24.8	24.7		
O.O. mg/L Final	8.5	8.3	8.5	8.1	8.3	8.4	8.4		
H s.u. Final	8.3	8.3	8.3	7.5	8.4	8.2	7.9		
onductivity µS Final	367	366	347	346	361	354	372		
0.25 g/L	8	9	10	11	12	13	14	Remarks	
emp °C Initial	24.9	25.4	24.9	24.8	25.5	24.7	25.0		
O. mg/L Initial	8.2	8.2	8.3	8.3	8.3	8.2	8.2		
H s.u. Initial	7.7	7.6	8.0	7.9	7.7	8.1	7.5		
onductivity µS Initial	841	858	825	917	819	917	849		
emp °C Final	24.9	25.7	24.8	25.3	25.0	24.8	24.7		
O.O. mg/L Final	8.5	8.4	8.5	8.2	8.4	8.4	8.4		
H s.u. Final	8.3	8.3	8.3	7.6	8.4	8.2	7.9		
Conductivity µS Final	903	934	861	931	833	945	877		
0.5 g/L	8	9	10	11	12	13	14	Remarks	
emp °C Initial	24.9	25.5	24.9	24.8	25.4	24.8	25.0		
O.O. mg/L Initial	8.2	8.2	8.3	8.3	8.3	8.2	8.2		
H s.u. Initial	7.7	7.6	8.0	7.9	7.8	8.1	7.6		
Conductivity µS Initial	1,350	1,309	1,313	1,353	1,297	1,319	1,262		
emp °C Final	24.9	25.7	24.8	25.4	25.5	25.0	24.7		
O.O. mg/L Final	8.7	8.4	8.5	8.3	8.3	8.4	8.4		
H s.u. Final	8.3	8.3	8.3	7.8	8.3	8.2	8.0		
Conductivity µS Final	1,421	1,328	1,337	1,344	1,302	1,387	1,346		
0.75 g/L	8	9	10	11	12	13	14	Remarks	
emp °C Initial	24.8	25.5	24.9	24.8	25.4	24.9	25.1		
O.O. mg/L Initial	8.2	8.2	8.3	8.3	8.2	8.2	8.2		
H s.u. Initial	7.8	7.6	8.0	8.0	7.8	8.1	7.7		
Conductivity µS Initial	1,802	1,818	1,811	1,875	1,776	1,819	1,788		
emp °C Final	24.8	25.6	24.8	25.3	25.5	25.0	24.8		
O_mg/L Final	8.6	8.6	8.5	8.4	8.2	8.4	8.5		
H s.u. Final	8.3	8.3	8.3	7.9	8.3	8.2	8.1		
Conductivity µS Final	1,983	1,954	1,914	1,843	1,774	1,840	1,833		

Electronic Filing: Received Clerk's Office 5/29/2018 NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

SAMPLE ID:		NaCl 25°C							
NEB PROJECT NUMBE	R:		1.0220523.0	00	TEST ORC	ANISM	Ceriodaphnia dubia		
DILUTION WATER SO	URCE:	Moderately Hard Synthetic			START DA	TE:	9/8/17 TIME: 1146		
1.0 g/L	8	9	10	11	12	13	14	Remarks	
Cemp °C Initial	24.8	2t.6	24.9	24.7	25.4	24.9	25.1		
O.O. mg/L Initial	8.2	8.1	8.3	8.3	8.3	8.2	8.2		
oH s.u. Initial	7.8	7.7	8.0	8.0	7.8	8.1	7.7		
Conductivity µS Initial	2,281	2,286	2,284	2,315	2,237	2,260	2,265		
Temp °C Final	24.7	25.7	25.0	25.4	25.6	25.1	24.8		
D.O. mg/L Final	8.6	8.6	8.6	8.6	8.2	8.4	8.4		
oH s.u. Final	8.3	8.3	8.3	7.9	8.3	8.2	8.1		
Conductivity µS Final	2,275	2,259	2,261	2,320	2,233	2,269	2,285		
1.25 g/L	8	9	10	11	12	13	14	Remarks	
Temp °C Initial	24.9	25.5	24.9	24.8	25.5	24.9	25.2		
D.O. mg/L Initial	8.2	8.2	8.3	8.3	8.2	8.2	8.2		
oH s.u. Initial	7.8	7.7	8.0	8.0	7.8	8.1	7.8		
Conductivity µS Initial	2,764	2,764	2,774	2,781	2,713	2,670	2,683		
Γemp °C Final	24.9	25.7	25.0	25.6	25.6	25.1	24.9		
D.O. mg/L Final	8.7	8.6	8.7	8.3	8.4	8.5	8.5		
oH s.u. Final	8.4	8.4	8.3	7.9	8.3	8.2	8.2		
Conductivity µS Final	2,752	2,749	2,775	2,701	2,671	2,702	2,721		
1.5 g/L	8	9	10	11	12	13	14	Remarks	
Temp °C Initial	25.5	25.4	25.1	24.8	25.5	25.1	25.0		
D.O. mg/L Initial	8.2	8.2	8.2	8.3	8.1	8.3	8.3		
oH s u. Initial	7.7	7.7	7.9	7.9	7.9	8.1	7.8		
Conductivity µS Initial	3,230	3,253	3,175	3,277	3,158	3,254	3,170		
Temp °C Final	24.8	25.8	25.1	25.5	25.2	25.1	24.7		
D.O. mg/L Final	8.7	8.6	8.7	8.4	8.4	8.5	8.5		
oH s.u. Final	8.4	8.4	8.3	8.0	8.4	8.2	8.2		
Conductivity µS Final	3,250	3,176	3,200	3,240	3,107	3,237	3,160		
1.75 g/L	8	9	10	11	12	13	14	Remarks	
Temp °C Initial	25.5	25.2	25.2	25.0	25.0	25.3	25.4		
D.O. mg/L Initial	8.2	8.2	8.3	8.3	8.2	8.2	8.2		
oH s.u. Initial	7.8	7.8	7.9	7.9	7.9	8.1	7.8		
Conductivity µS Initial	3,667	3,623	3,555	3,672	3,744	3,700	3,622		
Temp °C Final	25.0	25.3	25.2	25.6	25.1	25.3	24.9		
D.O. mg/L Final	8.6	8.7	8.7	8.5	8.4	8.6	8.6		
O.O. mg/L Final OH s.u. Final	8.4	8.3	8.3	8.0	8.3	8.2	8.2		
Conductivity µS Final	3.797	3,740	3,750	3,653	3,758	3,780	3,770		

NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

SAMPLE ID		NaCl 25°C							
NEB PROJECT NUME			1.0220523.0		TEST ORC		Ceriodaphnia dubia		
DILUTION WATER SO	OURCE:	Moderately Hard Synthetic			START DA	ATE:	9/8/17 TIME: 1146		
2.0 g/L	8	9	10	11	12	13	14	Remarks	
emp °C Initial	25.5	25.1	25.2	25.0	24.6	25.3	25.5		
D.O. mg/L Initial	8.2	8.2	8.2	8.3	8.4	8.1	8.2		
H s.u. Initial	7.8	7.8	7.9	7.9	7.8	8.1	7.8		
Conductivity µS Initia	4,100	4,114	4,087	4,115	4,177	4,150	4,037		
emp °C Final	24.9	25.1	25.5	25.2	25.0	25.3	24.7		
O.O. mg/L Final	8.7	8.7	8.7	8.6	8.4	8.6	8.4		
oH s.u. Final	8.4	8.4	8.3	7.9	8.3	8.2	8.2		
Conductivity µS Final	4,132	3,996	4,120	4,024	4,066	3,929	4,060		
2.25 g/L	8	9	10	11	12	13	14	Remarks	
emp °C Initial	25.5	25.1	25.2	24.9	24.9	25.3	25.5		
O mg/L Initial	8.1	8.2	8.3	8.3	8.2	8.1	8.2		
oH s.u. Initial	7.8	7.8	7.9	7.8	7.8	8.1	7.8		
Conductivity µS Initia	4,560	4,581	4,518	4,634	4,598	4,553	4,461		
Cemp °C Final	24.8	25.2	25.3	25.4	25.0	25.4	24.8		
O,O, mg/L Final	8.7	8.7	8.5	8.5	8.4	8.4	8.4		
H s.u. Final	8.3	8.3	8.3	7.9	8.3	8.2	8.2		
Conductivity µS Final	4,895	4,997	4,930	4,603	4,518	4,737	4,870		
2.5 g/L	8	9	10	11	12	13	14	Remarks	
Temp °C Initial	25.5	25.0	25.3	24.9	24.9	25.3	25.4		
O.O. mg/L Initial	8.1	8.2	8.2	8.3	8.2	8.2	8.2		
H s.u. Initial	7.8	7.9	7.9	7.9	7.8	8.0	7.9		
Conductivity µS Initia	4,999	5,173	5,057	5,077	5,183	4,977	4,917		
emp °C Final	24.8	25.2	25.6	25.4	24.8	25.4	24.6		
O.O. mg/L Final	8.7	8.7	8.7	8.5	8.3	8.6	8.7		
H s.u. Final	8.4	8.3	8.3	7.9	8.3	8.3	8.2		
Conductivity µS Final	4,929	5,051	5,060	4,886	5,033	5,009	4,820		
2.75 g/L	8	9	10	11	12	13	14	Remarks	
Cemp °C Initial									
O.O. mg/L Initial							1		
H s.u. Initial									
Conductivity µS Initia									
emp °C Final									
O.O. mg/L Final						3	! == I		
H s.u. Final		1				. 1			
Conductivity µS Final							(

NEB'S DATA SHEEF POKONIC FINE CHERREIXE AND PRK'S PATIGRE 5/29/2018 IONS

SAMPLE ID: NEB PROJECT NUMBE	R·	NaCl 25°C	1.0220523.0	00	TEST ORC	ANISM	Ceriodaphnia dubia		
DILUTION WATER SOL		Moderately Hard Synthetic			START DA		9/8/17	TIME: 1146	
ANALYST	PD	PD	TBP	СВ	ТВР	PD	PD		
NEB Lab Synthetic Control	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.6	24.7	26.0	25.4	25.7	24.8	25.4		
D.O. mg/L Initial	8.2	8.2	8.1	8.2	8.1	8.1	8.1		
pH s.u. Initial	7.9	8.0	8.2	7.8	7.4	8.1	7.9		
Conductivity µS Initial	340	337	396	324	324	325	318		
Temp °C Final	24.0	25.5	26.0	25.9	25.1	25.3	24.9	1	
D.O. mg/L Final	8.6	8.5	8.2	8.2	8.2	8.4	8.8		
pH s.u. Final	8.2	8.2	7.6	7.9	8.2	8.5	8.3	V	
Conductivity µS Final	345	343	351	343	336	337	338		
0.25 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.6	24.7	25.8	25.5	25.7	24.8	25.4		
D.O. mg/L Initial	8.2	8.2	8.1	8.2	8.1	8.1	8.1		
pH s.u. Initial	7.9	8.0	8.1	7.8	7.6	8.0	7.9		
Conductivity µS Initial	861	815	849	852	830	851	811		
Temp °C Final	24.1	25.5	26.0	25.9	25.1	25.2	25.0		
D.O. mg/L Final	8.5	8.5	8.2	8.3	8.3	8.4	8.8		
pH s.u. Final	8.2	8.2	7.7	8.0	8.2	8.5	8.3		
Conductivity µS Final	876	831	885	854	837	851	828		
0.5 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.6	24.6	25.7	25.4	25.7	24.8	25.4		
D.O. mg/L Initial	8.2	8.3	8.1	8.2	8.1	8.1	8.1		
pH s.u. Initial	8.0	8.0	8.1	7.8	7.6	8.0	7.9		
Conductivity µS Initial	1,310	1,294	1,258	1,402	1,334	1,312	1,290		
Temp °C Final	24.1	25.5	26.0	26.0	25.1	25.2	25.3		
D.O. mg/L Final	8.5	8.6	8.3	8.4	8.3	8.4	8.8		
pH s.u. Final	8.3	8.3	7.8	8.1	8.1	8.4	8.4		
Conductivity µS Final	1,388	1,309	1,305	1,394	1,342	1,287	1,294		
0.75 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.6	24.6	25.7	25.5	25.7	24.9	25.4		
D.O. mg/L Initial	8.2	8.3	8.1	8.2	8.1	8.1	8.1		
pH s.u. Initial	8.0	8.0	8.0	7.9	7.7	8.0	7.9		
Conductivity µS Initial	1,764	1,782	1,795	1,822	1,794	1,806	1,757		
Temp °C Final	24.2	25.6	26.0	25.8	25.2	25.2	25.1	4	
D.O. mg/L Final	8.5	8.5	8.4	8.5	8.3	8.4	8.9		
pH s.u. Final	8.3	8.3	7.9	8.1	8.1	8.4	8.4		
Conductivity µS Final	1,781	1,769	1,879	1,860	1,801	1,799	1,776		

NEB'S DATA SHEIF-FOKORIO FINDC: REQUIRE CANGLERY'S 10 HI OSE 5/22 20 20 10 NS

SAMPLE ID: NEB PROJECT NUMBE	D.	NaCl 25°C	1.0220523.0	20	TEST ORC	ANICM	Ceriodaphnia dubia		
DILUTION WATER SOURCE:			tely Hard S		START DA		9/8/17 TIME; 1146		
1.0 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.6	24.7	25.6	25.4	25.7	24.9	25.4		
D.O. mg/L Initial	8.2	8.2	8.1	8.2	8.1	8.1	8.1		
pH s.u. Initial	8.0	8.0	8.0	7.9	7.7	8.0	8.0		
Conductivity µS Initial	2,305	2,254	2,274	2,301	2,281	2,285	2,199		
Femp °C Final	24.4	25.5	26.0	25.9	25.3	25.4	25.1		
D.O. mg/L Final	8.5	8.4	8.4	8.4	8.3	8.4	8.9		
pH s.u. Final	8.3	8.2	8.0	8.2	8.1	8.4	8.4		
Conductivity µS Final	2,247	2,208	2,311	2,253	2,258	2,257	2,185		
1.25 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.6	24.7	25.6	25.5	25.7	25.0			
D.O. mg/L Initial	8.2	8.3	8.1	8.2	8.1	8.1			
pH s.u. Initial	8.0	8.0	8.0	7.9	7.8	8.0			
Conductivity µS Initial	2,789	2,737	2,710	2,738	2,758	2,759			
Femp °C Final	24.4	25.4	25.9	25.3	25.3	24.8			
D.O. mg/L Final	8.5	8.4	8.4	8.6	8.3	8.4			
oH s.u. Final	8.3	8.2	8.0	8.3	8.1	8.4			
Conductivity µS Final	2,735	2,671	2,746	2,654	2,737	2,695			
1.5 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.9	24.7	25.2	25.4	25.4	24.9	25.2		
D.O. mg/L Initial	8.2	8.3	8.2	8.2	8.2	8.1	8.2		
oH s.u. Initial	8.0	8.0	8.0	7.9	7.8	7.9	7.8		
Conductivity µS Initial	3,120	3,176	3,217	3,214	3,200	3,225	3,135		
Temp °C Final	24.6	25.6	25.8	25.3	25.4	24.9	25.1		
D O. mg/L Final	8.5	8.4	8.5	8.7	8.3	8.4	8.8		
oH s.u. Final	8.3	8.2	8.1	8.3	8.1	8.3	8.3		
Conductivity µS Final	3,100	3,128	3,217	3,152	3,149	3,151	3,112		
1.75 g/L	15	16	17	18	19	20	21	Remarks	
Temp °C Initial	24.9	24.7	25.1	25.5	25.4	24.9	25.2		
D.O. mg/L Initial	8.1	8.3	8.2	8.2	8.1	8.1	8.1		
oH s.u. Initial	8.0	8.0	8.0	7.9	7.8	7.9	7.9		
Conductivity µS Initial	3,720	3,690	3,723	3,667	3,740	3,612	3,560		
Γemp °C Final	24.8	25.6	26.0	25.6	25.3	25.1	25.1		
D.O. mg/L Final	8.5	8.5	8.5	8.7	8.3	8.4	8.7		
oH s.u. Final	8.3	8.3	8.1	8.3	8.1	8.3	8.4		
Conductivity µS Final	3,740	3,575	3,738	3,660	3,681	3,577	3,558		

NEB'S DATA SHEFFI CORORIGE FINING: HE COCK DE CONSTRUCTION DE

SAMPLE ID:	NaCl 25°C									
NEB PROJECT NUMBE		81.0220523.00			TEST ORC		Ceriodaphnia dubia			
DILUTION WATER SO	URCE:	Moderately Hard Synthetic			START DATE:		9/8/17 TIME: 1146			
2.0 g/L	15	16	17	18	19	20	21	Remarks		
Temp °C Initial	24.9	24.7	25.2	25.4	25.4	24.9	25.1			
D.O. mg/L Initial	8.1	8.3	8.2	8.2	8.1	8.1	8.1			
oH s.u. Initial	8.0	8.0	8.0	7.9	7.8	7.9	7.9			
Conductivity µS Initial	4,220	4,091	4,156	4,175	4,130	4,129	4,012			
Temp °C Final	24.8	25.6	26.0	25.8	25.7	25.1	25.1			
D.O. mg/L Final	8.5	8.5	8.4	8.6	8.3	8.4	8.8			
pH s.u. Final	8.3	8.2	8.0	8.3	8.1	8.3	8.3			
Conductivity µS Final	4,170	4,040	4,143	4,142	4,112	4,054	4,039			
2.25 g/L	15	16	17	18	19	20	21	Remarks		
Temp °C Initial	24.9	24.8	25.1	25.4	25.4	24.9				
DO mg/L Initial	8.1	8.3	8.2	8.2	8.1	8.1				
pH s.u. Initial	8.0	8.0	8.0	7.9	7.7	7.9				
Conductivity µS Initial	4,630	4,507	4,550	4,603	4,440	4,592				
Temp °C Final	24.7	25.6	26.0	25.6	25.5	25.1				
D.O. mg/L Final	8.5	8.6	8.4	8.7	8.3	8.3				
pH s.u. Final	8.3	8.3	8.0	8.3	8.1	8.2				
Conductivity µS Final	4,780	4,521	4,788	4,605	4,514	4,615				
2.5 g/L	15	16	17	18	19	20	21	Remarks		
Temp °C Initial										
D.O. mg/L Initial					1					
pH s.u. Initial										
Conductivity µS Initial										
Temp °C Final										
D.O. mg/L Final	-									
pH s.u. Final					7 11					
Conductivity µS Final										
2.75 g/L	15	16	17	18	19	20	21	Remarks		
Temp °C Initial	-									
O.O. mg/L Initial										
pH s.u. Initial										
Conductivity µS Initial										
Temp °C Final										
D.O. mg/L Final										
oH s.u. Final		ζ ===								
Conductivity µS Final		1								

NEB'S DATA SHEEF POR ORIC TIND GHROGE IVE ON CHERK'S OF GOE 5/28/2018 ONS

SAMPLE ID:		NaCl 25°C					Cautadanhuta dubia		
NEB PROJECT NUMBE		81.0220523.00 Moderately Hard Synthetic			_TEST ORGANISM START DATE:		<i>Ceriodaphnia dubia</i> 9/8/17 TIME: 1146		
DILUTION WATER SOU	CB	KO	KO	TBP	T	NIE:	9/6/17	IIVIE: 1140	
ANALYST NEB Lab Synthetic	СВ	NO NO	KO	IDF			-		
Control	22	23	24	25	26	27	28	Remarks	
Гетр °С Initial	24.7	24.3							
O.O. mg/L Initial	8.2	8.3			1				
H s.u. Initial	7.6	7.9							
Conductivity µS Initial	319	339	1				J		
Γemp °C Final	24.2	* - 1				(
D.O. mg/L Final	8.5								
pH s.u. Final	8.0								
Conductivity µS Final	344								
0.25 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.2	24.0	24.0					
D.O. mg/L Initial	8.2	8.4	8.7	8.5					
pH s.u. Initial	7.6	7.9	8.2	8.0					
Conductivity µS Initial	816	852	886	842					
Temp °C Final	24.1	24.4	24.5						
D.O. mg/L Final	8.6	8.5	8.7						
pH s.u. Final	8.1	8.4	8.2				\		
Conductivity µS Final	833	866	895						
0.5 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.0	24.0	24.0					
D.O. mg/L Initial	8.2	8.4	8.5	8.5					
pH s.u. Initial	7.7	8.0	8.2	8.0					
Conductivity µS Initial	1,306	1,324	1,356	1,296					
Temp °C Final	24.0	24.2	24.5	24.0					
D.O. mg/L Final	8.6	8.6	8.7	8.8					
pH s.u. Final	8.2	8.4	8.2	7.5					
Conductivity µS Final	1,309	1,331	1,370	1,290					
0.75 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.0	24.0	24.0					
D.O. mg/L Initial	8.2	8.4	8.5	8.4					
pH s.u. Initial	7.7	8.0	8.2	8.0					
Conductivity µS Initial	1,784	1,881	1,834	1,757					
Temp °C Final	24.0	24.1	24.6				755		
D.O. mg/L Final	8.6	8.6	8.7						
oH s.u. Final	8.2	8.3	8.2						
Conductivity µS Final	1,796	1,866	1,823						

NEB'S DATA SHEEFI CORONIC FIND CHROCEWOUND CHK'S OATIOG 5/29/2018 IONS

SAMPLE II		NaCl 25°C							
NEB PROJECT NUMI	BER:	8	1.0220523.	00	TEST ORC	GANISM	Ceriodaphnia dubia		
DILUTION WATER S	OURCE:	Moderately Hard Synthetic			START DATE:		9/8/17 TIME: 1146		
1.0 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.8.4	24.1	24.0					
D.O. mg/L Initial	8.2	8.4	8.5	8.5					
pH s.u. Initial	7.8	8.0	8.2	8.0					
Conductivity µS Initia	2,331	2,358	2,267	2,274					
Temp °C Final	24.0	24.3	24.8						
D.O. mg/L Final	8.7	8.6	8.7						
pH s.u. Final	8.3	8.3	8.2						
Conductivity µS Final	2,329	2,332	2,318						
1.25 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial									
D.O. mg/L Initial							7		
pH s.u. Initial							0 1		
Conductivity µS Initia									
Temp °C Final									
D.O. mg/L Final									
pH s.u Final									
Conductivity µS Final									
1.5 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.0	24.1	24.1					
D.O. mg/L Initial	8.2	8.4	8.5	8.4					
pH s.u. Initial	7.8	8.0	8.2	8.0					
Conductivity µS Initia	3,196	3,233	3,182	3,170		1			
Temp °C Final	24.0	24.3	24.7	24.0					
D.O. mg/L Final	8.7	8.7	8.7	8.8					
pH s.u. Final	8.3	8.3	8.2	7.5					
Conductivity µS Final	3,196	3,200	3,183	3,190	V = = (
1.75 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.0	24.1	24.0	7		-		
D.O. mg/L Initial	8.2	8.4	8.5	8.5					
pH s.u. Initial	7.8	8.0	8.1	7.9		/			
Conductivity µS Initia	1 3,676	3,813	3,655	3,736					
Temp °C Final	24.0	24.3	24.7						
D.O. mg/L Final	8.8	8.6	8.6	4					
pH s.u. Final	8.3	8.3	8.0						
Conductivity µS Final	3,692	3,743	3,701						

NEB'S DATA SHEEFI POTRONIC FINING HRONG INCLUDE THE STATE OF THE STATE

SAMPLE ID:		NaCl 25°C							
NEB PROJECT NUMBER:			1.0220523.0		TEST ORG		Ceriodaphnia dubia		
DILUTION WATER SO	URCE:	Moderately Hard Synthetic			START DATE:		9/8/17	ΓΙΜΕ: 1146	
2.0 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial	24.8	24.0	24.2	24.0					
D.O. mg/L Initial	8.2	8.4	8.5	8.5					
pH s.u. Initial	7.8	8.0	8.1	7.9					
Conductivity µS Initial	4,031	4,225	4,140	4,061					
Temp °C Final	24.0	24.4	24.7	24.0			(i		
D.O mg/L Final	8.7	8.6	8.6	8.8					
pH s.u. Final	8.3	8.3	8.1	7.7			W		
Conductivity µS Final	4,005	4,151	4,121	3,966					
2.25 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial									
D.O. mg/L Initial									
pH s.u. Initial									
Conductivity µS Initial									
Temp °C Final									
D.O. mg/L Final									
pH s.u. Final		(1 = = i					===		
Conductivity µS Final									
2.5 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial							1		
D.O. mg/L Initial					1				
pH s.u. Initial									
Conductivity µS Initial									
Temp °C Final									
D.O. mg/L Final									
pH s.u. Final		-							
Conductivity µS Final									
2.75 g/L	22	23	24	25	26	27	28	Remarks	
Temp °C Initial									
D.O mg/L Initial						1			
pH s.u. Initial						-	3		
Conductivity µS Initial									
Гетр °С Final									
D.O. mg/L Final									
pH s.u. Final									
Conductivity µS Final									

NEB'S DATA SHEEFI POR ORIO TIND CHROCEIVE AND LOTH SI OFFI COE 5/28/2018 IONS

SAMPLE ID:		NaCl 25°C						
NEB PROJECT NUMBER			1.0220523.0		TEST ORC			daphnia dubia
DILUTION WATER SOU	RCE:	Modera	tely Hard S	ynthetic	START DA	ATE:	9/8/17	TIME: 1146
ANALYST								
NEB Lab Synthetic Control	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D.O. mg/L Initial								
pH s.u. Initial		- = 1		/			1	
Conductivity µS Initial			-					
Temp °C Final							1	
D.O. mg/L Final								
pH s.u. Final						1		
Conductivity µS Final								
0.25 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D.O. mg/L Initial								
pH s.u. Initial								
Conductivity µS Initial								
Temp °C Final								
D.O. mg/L Final							. = 1	
pH s.u. Final								
Conductivity µS Final							C	
0.5 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D.O. mg/L Initial					1			
pH s.u. Initial								
Conductivity µS Initial								
Temp °C Final								
D.O. mg/L Final								
pH s.u. Final								
Conductivity µS Final								
0.75 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D.O. mg/L Initial								
pH s.u. Initial								
Conductivity µS Initial								
Temp °C Final					1			
D.O. mg/L Final								
pH s.u. Final								
Conductivity µS Final								

NEB'S DATA SHEEFI PORQUIC FINING: HERREIZE AND PRK'S I OFFICE THE PROPERTY OF THE PROPERTY OF

NEB PROJECT NUMBEI	R:	NaCl 25°C	1.0220523.	00	TEST ORC	GANISM	Cerio	daphnia dubia
DILUTION WATER SOL	JRCE:	Modera	itely Hard S	Synthetic	START DA	ATE:		ΓΙΜΕ: 1146
1.0 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D O mg/L Initial								
pH s.u. Initial								
Conductivity µS Initial		1						
Temp °C Final								
D_O_mg/L Final								
pH s.u. Final								
Conductivity µS Final								
1.25 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial		= = 4						
D.O. mg/L Initial					7 (
pH s.u. Initial								
Conductivity µS Initial								
Temp °C Final		1						
D.O. mg/L Final								
pH s.u. Final		7						
Conductivity µS Final								
1.5 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D O. mg/L Initial								
pH s.u. Initial								
Conductivity µS Initial								
Temp °C Final								
D.O. mg/L Final		1					- 1	
pH s.u. Final								
Conductivity µS Final		1						
1.75 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial					7		-	
D.O. mg/L Initial								
oH s.u. Initial								
Conductivity µS Initial								
Cemp °C Final					J = 1			
D.O. mg/L Final								
H s.u. Final								
Conductivity µS Final								

NEB'S DATA SHEEFIRCT ONIC THIND CHROCE IMPANO LOUK'S OF STORE 5/28/2048 ONS

SAMPLE ID:		NaCl 25°C						
NEB PROJECT NUMBER	:		1.0220523.0	00	TEST ORC	GANISM	Cerio	daphnia dubia
DILUTION WATER SOU	RCE:	Modera	tely Hard S	ynthetic	START DA	ATE:	9/8/17 7	TIME: 1146
2.0 g/L	29	30	31	32	33	34	35	Remarks
l'emp °C Initial								
D.O. mg/L Initial				(Y		1		
pH s.u. Initial								
Conductivity µS Initial						41.		
Temp °C Final						VIII S		
D.O. mg/L Final								
pH s.u. Final								
Conductivity µS Final								
2.25 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial								
D.O. mg/L Initial								
pH s.u. Initial								
Conductivity µS Initial								
Temp °C Final								
D.O. mg/L Final								
pH s.u. Final								
Conductivity µS Final								
2.5 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial		1 2 2 2						
D,O. mg/L Initial								
pH s.u. Initial						1 - 1 -		
Conductivity µS Initial								
Temp °C Final								
D.O. mg/L Final								
pH s.u. Final		d []						
Conductivity µS Final								
2.75 g/L	29	30	31	32	33	34	35	Remarks
Temp °C Initial		4						
D.O. mg/L Initial								
pH s.u. Initial								
Conductivity µS Initial								
Гетр °C Final				i i				
D.O. mg/L Final								
pH s.u. Final								
Conductivity µS Final								

Table	of	Rar	ndo	m Perr											t ID#		17-1			
		15	15	1	2 E	ΞĮφ	cŧfc	ffic	; Ŧi	ling ^{1,4} F	₹Ęc	œiv	/ <mark>e</mark> d	,1C	lerk ^t /s	಄f	fice	2 ⁸ 5/	/2 9	/2018
	3 1	8 4	16 5	7 14	10 13	11 3	10 14	13 9	5 13	13	2	13 9	16 15	6	2	5 8	13 4	5	14 8	
		16	14	15	6	2	6	2	16	8	5	12	3	9	13	4	3	10	4	
14 9	9	1	6	3	9	14	13	8	6	5	8	14	7	3	15	13	11	4	7	
2 1	.6	10	13	5	5	13	2	11	7	3	12	5	14	12	16	2	2	9	15	
		13	7	2	15	1	9	1	4	7	10	6	9	11	9	7	6	16 6	11	
	.4 .5	6 2	10 1	4 13	14 12	4 16	15 3	3 4	3 8	4 10	16 1	2 15	6 5	5 14	1 12	12 14	10 12	3	9 2	
	.0	7	12	9	11	9	8	12	14	15	4	11	8	16	8	9	14	14	1	
15	7	5	2	10	7	8	12	6	15	6	13	16	12	15	4	11	8	12	6	
		11	8	8	8	15	5	16	1	1	9	8	1	8	14	16	5	13	5	
		14	3 4	6 11	4 3	10 12	11 7	5 7	12 10	9 12	3 14	10 3	4 10	4 1	3 6	10 15	9 16	1 15	3 12	
		9 12	11	16	16	5	4	14	9	16	11	1	2	10	5	1	15	7	13	
	4	3	9	12	1	6	1	15	11	2	6	4	11	2	11	3	7	11	16	
															CON	2				
		16	5	5	13	1	13	2	16	14	12	9	8	7	5	13	3	13	3	
	2	8	8 13	14 6	16 5	4 9	3 15	8 11	11 10	10 12	14 6	15 16	1 15	2 16	11 9	4 10	5 12	15 16	9 15	
	.3 .2	2 4	16	16	11	3 14	10	5	12	3	3	12	14	15	13	6	4	1	16	
		3	9	4	10	6	4	16	2	2	9	8	16	4	6	5	15	7	8	
9 1	.5	12	10	3	2	12	6	1	15	4	13	7	7	9	12	14	8	8	11	
		11	12	13	12	5	11	7	8	9	5	14	11	10	1	3	13	3	5	
		13	14 2	8 9	14 15	15 16	5 14	3 6	7 14	11 7	15 8	6 3	12 13	5 11	7 8	11 7	1 7	14 12	4 7	
	.4 4	14 6	4	12	3	11	8	15	9	8	1	13	6	3	3	15	9	9	12	
	5	1	11	10	6	3	7	10	5	5	11	10	10	12	15	16	14	5	2	
5 3	3	5	6	7	7	13	2	14	3	16	4	5	5	13	4	9	16	2	6	
		15	15	15	9	8	12	12	13	15	10	1	4	6	16	2	6	11	1	
	.1 9	10 7	3 7	2 11	4 1	2 7	1 16	4 13	6 1	6 13	7 2	11 4	9 2	14 1	10 2	8 12	11 2	4 10	13 14	
	.6	9	1	1	8	10	9	9	4	13	16	2	3	8	14	1	10	6	10	
	6	7	4	8	6	5	2	8	15	4	6	6	1	4	5	7	13	2	10	
		11	3	11	15	9	10	1	3	8	2	15	7	9	8	16	1	14	3	
10 1	.6	4	5	12	9	16	11	7	1	7	16	11	8	3	3	12	2	3	4	
	.4	1	9	5	5	4	13	6	8	15	5	12	5	7	16	5	11	8	1	
	3 .1	13 2	14 1	15 14	2 16	1 6	14 9	16 3	5 4	14 16	9 14	2 3	16 15	1 11	12 11	6 3	14 9	4 12	13 5	
		2 16		13	7	13	1	11	14	9	10	16		10	2	10	7	10	16	
		9	13	4	13	8	3	5	13	10	12	5	12	5	14	13	16	5	6	
		3	12	9	12	2	4	13	10	3	13	14	4	2	1	14	8	6	12	
		14	6	10	1	3	12	4	2	2	4	13	3	16	9	9	3	7	14	
		5 10	11 7	3 2	11 14	15 7	8 15	2 14	7 16	11 13	7 1	8 9	14 10	6 12	4 10	4 11	4 10	15 9	11 8	
		8	10	6	4	11	7	10	11	6	8	4	9	8	15	8	6	11	9	
2		6	2	1	8	10	6	15	12	1	11	7	11	13	6	1	15	13	15	
		15	8	16	10	14	16	9	6	12	3	10	6	14	7	2	12	16	7	
5 8	8	12	15	7 REP	3	12	5	12	9	5	15	1	13	15	13	15	5	1	2	
13 4	4	10	4	16	13	16	13	5	3	6	14	1	16	8	7	2	3	3	12	
5 1	.4	4	6	8	2	15	1	13	14	16	4	15	4	3	12	12	1	4	7	
		2	15	14	16	9	12	16	6	10	15	14	9	10	1	14	8	8	16	
		15 7	8	12 9	3 14	5	14 11	7 15	12 11	5 12	13 1	16 12	1 12	7 14	5 16	11 3	2 11	9 11	3 8	
		, 16	14 7	9 10	8	10 11	8	15 14	13	7	11	6	3	14 11	4	4	6	6	9	
		8	9	7	12	8	7	1	15	9	3	3	7	13	11	10	4	5	1	
11 6	6	6	1	4	1	3	16	12	5	4	9	13	13	6	8	15	9	1	14	
		3	16	2	11	7	9	6	9	1	8	4	11	5	2	16	10	12	4	
		1 14	13 2	1 6	15 4	4 14	4 10	11 9	4 8	2 15	16 10	5 7	8 10	1 9	9 10	5 6	12 14	16 10	6 11	
		9	10	15	5	2	15	10	2	14	2	8	2	4	13	8	5	15	5	
			11	5	9	6	6	3	10	13	12	9	6	2	15	7	15	7	13	
		11	5	13	7	12	5	2	7	11	5	10	15	12	3	1	13	13	10	
		13 5	3 12	3 11	10 6	13 1	2	4 8	1 16	8 3	6 7	11 2	14 5	15 16	6 14	9 13	16 7	2 14	2 15	
10 I		,	14		U	1	5	3	-0	_	,	~	,	10	Τ-4	10	,	_ -T		

Ceri	odap	hnia	dubia	Elect	ronic	Cultu	ire Ch	nart eived	Cle	rk's C	Lot# ffice 5	1291	2018	H IT	0	_ <u>A</u>
		source:			A- 1			od size:		(Qty.)	11100 0	,, 20, 1	HUFF	and thi	ff 25	5° 9-8.
Tech	AH	Art	AT		SUP	CP	Aut	AT		AT	A41			4		
Date		831	9-1		9-3	9-4	9.5	4.6		9.7	9.8			10	4.0	
Day acc.	0	1	2	3	4	5	6	7		8	9	10	11	12	13	14
Cup #	N	N	2		5	0	4	4	1	M	1 1 717					
2	N	N	4		6	9	4	N	2	ij	х —					
3	N	N	4		9	10	Y	4	3	Ŋ	Y					
4	N	N	h		5	þ	7	4	4	N	T2 114					
5	N	N	7		5	lo	У	N	5	1	T3 Y 17					
6	N	N	4		5	9	Y	N	6	Y	716					
7	N	N	7		4	ſo	Y	N	7	1	75 117					
8	N	N	7		6	10	У	N	8	N	7 15					
9	N	N	7		5	So	У	4	9	N	Y 14					
10	N	N	7		4	9	У	P	10	Y	Y					
11	N	N	7		4	8	Y	N	11		78 7 19					
12	N	N	4		5	10	У	4	12	N	y 12					
13	N	N	2		5	lo	y	N	13	7	У					
Y = n					been met.					y 3rd broo		od moth	er dead		neonates orted egg	s
✓ or	P = neo	nates pre	sent afte	er renewa	al on previ	ous day	(see time	in log)			A→ acclimated		ptable for			
_	7.1	n collec				ray diagra										
Proj	ect#			Symbols	s (✓ / P)	used? (Y/N)		Time	period	, neonate	es release	ed		Collec	tion date	e / time
				Т		7	9-7-1-	1/1715	~	9-8-1	1/0530)		9.8.	17/100	Go
				Т		1.		l .			1					
				Т												
				Т												
				T						_						

Cer	iodap	hnia	dubia	g Elect	ronic	Cultu	ire Cl	nart eived	Cle	rk's O	Lot # ffice 5	15915	7618	MH I	71)	В
		source:						od size:		(Qty.)		14	ef our	d Hof	+ 25	9.8
Tech	AH	AH	74		376	578	ALL	A		A.	AH					
Date	8.30	8-31	9-1		9-3	9-4	9.5	9.6		4.7	9.8	1-40				
Day acc.	0	1	2	3	4	5	6	7		8	9	10	11	12	13	14
Cup #	3 14 6	e iliy						V			dir.	E-14.E		5.80		
1	N	N	N		9	10	Y	1	1	N	7					
2	N	N	N		5	9	Y	4	2	N	7					
3	N	N	N		5	c_{\parallel}	Y	9	3	N	716					
4	N	N	4		5	9	Y	4	4	N	1					
5	N	N	7		4	10	Y	4	5	N	Y					
6	N	N	2		4	10	7	N	6	7	7					
7	N	N	h		5	9	У	4	7	N	Y					
8	N	N	2		6	8	7	N	8	Y	4					
9	N	N	4		4	lo	Y	N	9	N	7					
10	N	N	4		5	9	Ч	N	10	4	Y					
11	N	N	7		5	10	Y	N	11	7	Y					
12	N	N	4		5	11	4	4	12	N	Y					
13	N	N	7		4	10	λ	1	13	Y	y					
								roduced in				111	21.4	N = no r		Mil.
					ods and c			neos. by 3	rd broo	od.	X = broo		er dead table for	ae = abo	100	
								d counted)).	acc. = if a	cclimated ,			- 1 DVIII -		-1
Test o	rganisı	n collec	ction:		Т	ray diagra	am	1 1 1		B. W.			7			: F" R
Proje	ect#	11-11	Tri- Mi	Symbols	(< / P)	used? (Y/N)	Vi-A	Time p	period	, neonate	s release	d		Collec	tion date	/ time
				Т		У	9.7.	צורו / רו			17/0530			9.8.	17/100	30
			7 12	т	2013		~					A.my				
				Т												
li yi		BIRT.	NA JUN	τ					أنيا						Ent	
				Т	1111111											17 13

Electronic Filing: Received, Clerk's Office 5/29/2018 Electronic Filing: Received, Clerk's Office 5/29/2018 13 Nov-17 08:42 (p 1 of 2)

Test Code:

17-1481 | 18-5007-5889

Cariadaabaia											
Ceriodapiinia	a 7-d Survival a	nd Reprod	uction Te	st					N	ew England	Bioass
Analysis ID:	20-1896-4172	En	dpoint:	Reproduction			CET	IS Version	n: CETISv	1.9.2	
Analyzed:	13 Nov-17 8:4		•	Nonparametric	-Control vs	Treatments		ial Resul			
Batch ID:	15-6387-4143			Reproduction-S	Sunvival (7d)		Anal	vet:			
Start Date:	08 Sep-17 11:4			EPA/821/R-02-	` '		Anal Dilu	=	aborotos, Wo	tor	
	: 13 Oct-17 10:5				` '				aboratory Wa	lei	
-		•		Ceriodaphnia d			Brin		ot Applicable		
Duration:	34d 23h	S0	urce:	In-House Cultu	ire		Age:	<,	24h 		
Sample ID:	15-3062-4589	Co	de:	5B3B7A4D			Clier	nt: G	ZA GeoEnvir	onmental	
Sample Date:	: 08 Sep-17	Ma	aterial:	Sodium chlorid	е		Proje	ect:			
Receipt Date:	: 08 Sep-17	So	urce:	GZA GeoEnvir	onmental			c0 -	10	ic	
Sample Age:	12h	Sta	ation:				()b	aa	()	
Data Transfo	rm	Alt Hyp					NOEL	LOEL	TOEL	TU	PMSD
Untransforme		C > T					1	1.25	1.118	10	25.59%
Steel Many-C	ne Rank Sum T	est									
	vs Conc-gr		Test S	tat Critical	Ties Di	P-Type	P-Value	Decisio	n(α:5%)		
Dilution Water		L	90.5	73		Asymp	0.4742		nificant Effec	+	
Diducti vvalet	0.25		90.5 76.5	73 73			0.4742	•	*		
	0.5 0.75		81	73 73		Asymp Asymp	0.0909 0.1761	-	inificant Effec inificant Effec		
	1		73.5	73 73				_			
	-					Asymp	0.0545	_	inificant Effec	T.	
	1.25*		62.5	73		Asymp	0.0051	_	ant Effect		
	1.5*		57.5	73		Asymp	0.0014	-	ant Effect		
	1.75* 2*		55.5	73		Asymp	7.7E-04	-	ant Effect		
	_		55	73	0 18		6.6E-04	-	ant Effect		
	2.25*		55	73	0 18	Asymp	6,6E-04	Significa	ant Effect		
Test Acceptal	bility Criteria	TAC	Limits								
Attribute	Test Stat		Upper	Overlap	Decision						
Control Resp	26.1	15	>>	Yes	Passes C						
PMSD	0.2559	0.13	0.47	Yes	Passes C	riteria					
ANOVA Table	9										
	Sum Squ	ares	Mean S	Square	DF	F Stat	P-Value	Decisio	n(α:5%)		
Source		ares	Mean \$		DF 9	F Stat 22.67	P-Value <1.0E-37		n(α:5%) ant Effect		
Source Between	Sum Squ	ares		4							
Source Between Error	Sum Squ 7545.01	ares	838.33	4	9						
Source Between Error Total	Sum Squ 7545.01 3328.7 10873.7	ares	838.33	4	9 90						
Source Between Error Total Distributional	Sum Squ 7545.01 3328.7 10873.7	ares	838.33	4	9 90 99	22.67	<1.0E-37	Significa			
Source Between Error Total Distributional Attribute	Sum Squ 7545.01 3328.7 10873.7 I Tests		838.33 36.985	4 6	9 90 99 Test Stat	22.67 Critical	<1.0E-37	Significa Decisio	ant Effect n(α:1%)		
Source Between Error Total Distributional Attribute Variances	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Ed	quality of V	838.33 36.985 ariance Te	4 6	9 90 99	22.67	<1.0E-37	Significa Decisio Unequal	ant Effect	ion	
Source Between Error Total Distributional Attribute Variances Distribution	Sum Squ 7545.01 3328.7 10873.7 Tests Test Bartlett Ed Shapiro-V	quality of V	838.33 36.985 ariance Te	4 6	9 90 99 Test Stat 61.1	22.67 Critical 21.67	<1.0E-37 P-Value <1.0E-37	Significa Decisio Unequal	nn(α:1%) I Variances	ion	
ANOVA Table Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L	Sum Squ	quality of V	838.33 36.985 ariance Te mality Test	4 6	9 90 99 Test Stat 61.1 0.9454	22.67 Critical 21.67 0.9654	<1.0E-37 P-Value <1.0E-37 4.2E-04	Decisio Unequal Non-Non	n(α:1%) I Variances rmal Distribut		%Effect
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count	838.33 36.985 ariance Te mality Tesi	95% LCL	9 90 99 Test Stat 61.1 0.9454	22.67 Critical 21.67 0.9654 Median	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min	Decisio Unequal Non-Non	nn(α:1%) I Variances rmal Distribut Std Err	CV%	%Effec
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L	Sum Squ	quality of V Vilk W Norr Count 10	838.33 36.985 ariance Te mality Test Mean 26.1	95% LCL	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35	22.67 Critical 21.67 0.9654 Median 24.5	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11	Decisio Unequal Non-Non Max 42	n(α:1%) I Variances rmal Distribut Std Err 2.763	CV% 33.47%	0.00%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count 10 10	838.33 36.985 ariance Te mality Test Mean 26.1 21.4	95% LCL 19.85 16.74	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06	22.67 Critical 21.67 0.9654 Median 24.5 20	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11 14	Decisio Unequal Non-Non Max 42 31	n(α:1%) I Variances rmal Distribut Std Err 2.763 2.061	CV% 33.47% 30.46%	0.00% 18.01%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count 10 10	838.33 36.985 ariance Te mality Test Mean 26.1 21.4 17.1	95% LCL 19.85 16.74 10.11	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5	P-Value <1.0E-37 4.2E-04 Min 11 14 0	Decisio Unequal Non-Non Max 42 31 36	n(α:1%) I Variances rmal Distribut Std Err 2.763 2.061 3.089	CV% 33.47% 30.46% 57.13%	0.00% 18.01% 34.48%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25 0.75	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count 10 10 10	838.33 36.985 ariance Te mality Test Mean 26.1 21.4 17.1 18.6	95% LCL 19.85 16.74 10.11 12.02	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20	P-Value <1.0E-37 4.2E-04 Min 11 14 0 0	Decisio Unequal Non-Non Max 42 31 36 33	n(α:1%) I Variances rmal Distribut Std Err 2.763 2.061 3.089 2.911	CV% 33.47% 30.46% 57.13% 49.48%	0.00% 18.01% 34.48% 28.74%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25 0.75	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count 10 10 10	838.33 36.985 ariance Te mality Test Mean 26.1 21.4 17.1 18.6 18.3	95% LCL 19.85 16.74 10.11 12.02 15.21	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18 21.39	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20 18	P-Value <1.0E-37 4.2E-04 Min 11 14 0 0 11	Decisio Unequal Non-Non Max 42 31 36 33 26	n(α:1%) I Variances rmal Distribut Std Err 2.763 2.061 3.089 2.911 1.367	CV% 33.47% 30.46% 57.13% 49.48% 23.62%	0.00% 18.01% 34.48% 28.74% 29.89%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25 0.75 1 1.25	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count 10 10 10 10	838.33 36.985 ariance Tenality Test Mean 26.1 21.4 17.1 18.6 18.3 13.7	95% LCL 19.85 16.74 10.11 12.02 15.21 10.46	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18 21.39 16.94	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20 18 12.5	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11 14 0 0 11 8	Decisio Unequal Non-Non Max 42 31 36 33 26 20	n(α:1%) I Variances rmal Distribut Std Err 2.763 2.061 3.089 2.911 1.367 1.43	CV% 33.47% 30.46% 57.13% 49.48% 23.62% 33.01%	0.00% 18.01% 34.48% 28.74% 29.89% 47.51%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25 0.75 1 1.25 1.5	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	quality of V Vilk W Norr Count 10 10 10 10 10	838.33 36.985 ariance Temality Test Mean 26.1 21.4 17.1 18.6 18.3 13.7 8.9	95% LCL 19.85 16.74 10.11 12.02 15.21 10.46 6.151	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18 21.39 16.94 11.65	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20 18 12.5 8.5	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11 14 0 0 11 8 2	Decisio Unequal Non-Non Max 42 31 36 33 26 20 16	n(a:1%) I Variances rmal Distribut Std Err 2.763 2.061 3.089 2.911 1.367 1.43 1.215	CV% 33.47% 30.46% 57.13% 49.48% 23.62% 33.01% 43.18%	0.00% 18.01% 34.48% 28.74% 29.89% 47.51% 65.90%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25 0.75 1 1.25 1.55 1.75	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	Quality of V Vilk W Norr Count 10 10 10 10 10 10	838.33 36.985 ariance Temality Test Mean 26.1 21.4 17.1 18.6 18.3 13.7 8.9 2.2	95% LCL 19.85 16.74 10.11 12.02 15.21 10.46 6.151 -0.4936	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18 21.39 16.94 11.65 4.894	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20 18 12.5 8.5 0.5	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11 14 0 0 11 8 2 0	Decisio Unequa Non-Noi Max 42 31 36 33 26 20 16 11	Std Err 2.763 2.061 3.089 2.911 1.367 1.43 1.215 1.191	CV% 33.47% 30.46% 57.13% 49.48% 23.62% 33.01% 43.18% 171.15%	0.00% 18.01% 34.48% 28.74% 29.89% 47.51% 65.90% 91.57%
Source Between Error Total Distributional Attribute Variances Distribution Reproduction Conc-gm/L 0 0.25 0.75 1 1.25 1.75 1.75	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	Quality of V Vilk W Norr Count 10 10 10 10 10 10 10	838.33 36.985 ariance Temality Test Mean 26.1 21.4 17.1 18.6 18.3 13.7 8.9 2.2 0.9	95% LCL 19.85 16.74 10.11 12.02 15.21 10.46 6.151 -0.4936 0.1127	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18 21.39 16.94 11.65 4.894 1.687	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20 18 12.5 8.5 0.5 0.5	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11 14 0 0 11 8 2 0 0	Decisio Unequal Non-Not Max 42 31 36 33 26 20 16 11 3	Std Err 2.763 2.061 3.089 2.911 1.367 1.43 1.215 1.191 0.348	CV% 33.47% 30.46% 57.13% 49.48% 23.62% 33.01% 43.18% 171.15% 122.28%	0.00% 18.01% 34.48% 28.74% 29.89% 47.51% 65.90% 91.57% 96.55%
Source Between Error Total Distributional Attribute Variances Distribution	Sum Squ 7545.01 3328.7 10873.7 I Tests Test Bartlett Edit Shapiro-V Summary Code	Quality of V Vilk W Norr Count 10 10 10 10 10 10	838.33 36.985 ariance Temality Test Mean 26.1 21.4 17.1 18.6 18.3 13.7 8.9 2.2	95% LCL 19.85 16.74 10.11 12.02 15.21 10.46 6.151 -0.4936	9 90 99 Test Stat 61.1 0.9454 95% UCL 32.35 26.06 24.09 25.18 21.39 16.94 11.65 4.894	22.67 Critical 21.67 0.9654 Median 24.5 20 16.5 20 18 12.5 8.5 0.5	<1.0E-37 P-Value <1.0E-37 4.2E-04 Min 11 14 0 0 11 8 2 0	Decisio Unequa Non-Noi Max 42 31 36 33 26 20 16 11	Std Err 2.763 2.061 3.089 2.911 1.367 1.43 1.215 1.191	CV% 33.47% 30.46% 57.13% 49.48% 23.62% 33.01% 43.18% 171.15%	0.00% 18.01% 34.48% 28.74% 29.89% 47.51% 65.90% 91.57%

Electronic Filing: Received, Clerk's Office 5/29/2018

Test Code:

13 Nov-17 08:42 (p 2 of 2)

17-1481 | 18-5007-5889

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

Analysis ID: Analyzed: 20-1896-4172 13 Nov-17 8:40 Endpoint: Reproduction

Analysis:

Nonparametric-Control vs Treatments

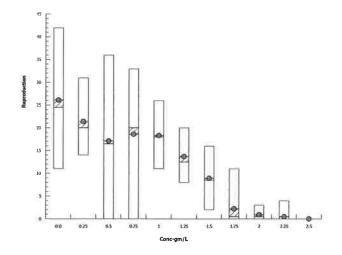
CETIS Version: CETISv1.9.2

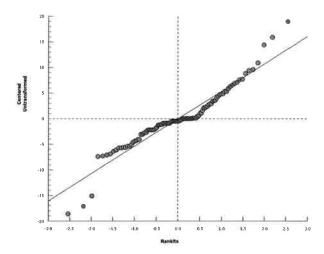
Official Results: Yes

Reproduction [Detail
----------------	--------

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	25	23	42	20	24	23	37	31	25	11
0.25		16	25	29	14	16	15	31	23	28	17
0.5		23	10	36	13	12	0	13	24	20	20
0.75		14	19	28	13	0	13	33	21	23	22
1		18	18	23	19	11	14	26	21	17	16
1.25		16	11	19	12	19	8	20	13	8	11
1.5		8	2	9	8	16	6	11	7	13	9
1.75		0	0	11	7	2	0	0	1	0	1
2		1	1	0	0	0	2	0	3	2	0
2.25		1	0	0	4	0	0	0	0	0	0
2.5		0	0	0	0	0	0	0	0	0	0

Graphics





CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:56 (p 1 of 3)

Test Code:

17-1481 | 18-5007-5889

								1620	Code.	17-1461 10-3007-366
Ceriodaphnia	a 7-d Sur	vival and	d Reproduc	tion Test						New England Bioassay
Analysis ID:	00-440	7-4718	End	ooint: 70	d Survival Rat	е		CET	IS Version:	CETISv1.9.2
Analyzed:	03 Nov	-17 14:5	5 Anal	ysis: Li	near Regress	ion (GLM)		Offic	ial Results	: Yes
Batch ID:	15-6387	'-4143	Test	Type: R	eproduction-S	urvival (7d)		Ana	yst:	
Start Date:	08 Sep-	17 11:46			PA/821/R-02-			Dilu	ent: Lab	oratory Water
Ending Date:	13 Oct-	17 10:56	Spec	cies: C	eriodaphnia d	ubia		Brin	e: Not	Applicable
Duration:	34d 23	h	Soul	rce: In	-House Cultur	re		Age	<24	h
Sample ID:	15-3062	2-4589	Code	e: 5l	33B7A4D			Clie	nt: GZA	A GeoEnvironmental
Sample Date:			Mate		odium chloride			Proj	ect:	
Receipt Date	•	17	Soul	rce: G	ZA GeoEnviro	nmental			- 0	216
Sample Age:	12h		Stati	on:					25	day
Linear Regre	ssion Op	otions								0
Model Name	Li	nk Func	tion	Thresho	ld Option	Thresh	Optimized	Pooled	Het Corr	Weighted
Log-Normal (F	Probit) η=	=inv Φ[π]		Control 7	Threshold	0.1	Yes	Yes	No	Yes
Regression S	Summary									
Iters LL	Al	Cc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(a:5%)
18 -15,0	03 39	9.06	37.51	0.3344	0.08713	0.9497				Lack of Fit Not Tested
Point Estima	tes									
Level gm/l	L 95	5% LCL	95% UCL							
LC50 2.16	1,	874	2.374							
Test Accepta	bility Cri	teria	TAC Li	mits						
Attribute	Te	est Stat		Upper	Overlap	Decision				
Control Resp	0.	9	0.8	>>	Yes	Passes C	riteria			
Regression F	Paramete	rs								
Parameter		stimate	Std Error	95% LCI	L 95% UCL	t Stat	P-Value	Decision	(α:5%)	
Threshold	0.	09267	0.03698	0.02019	0.1652	2.506	0.0335	Significan	t Parameter	
Slope	11	1.48	3.461	4.693	18.26	3.316	0.0090	Significan	t Parameter	
Intercept	-3	.837	1.225	-6.239	-1.436	-3.132	0.0121	Significan	t Parameter	
ANOVA Table	9									
Source	S	um Squa	ares Mea	n Square	DF	F Stat	P-Value	Decision	(α:5%)	
Model		19.6	74.8		2	104.8	5.8E-07	Significan	t	
Residual	6.	424	0.71	38	9					
Residual Ana	alysis									
Attribute	М	ethod			Test Stat	Critical	P-Value	Decision		
Goodness-of-			hi-Sq GOF		6.424	16.92	0.6969	_	ificant Heter	· ·
			Ratio GOF		8.883	16.92	0.4481	•	ficant Heter	ogeneity
Distribution			ilk W Norma	•	0.9303	0.8608	0.3836	Normal D		
	Aı	nderson-	Darling A2 N	lormality	Te 0.3613	2.492	0.4497	Normal D	istribution	

Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:56 (p 2 of 3)

Test Code:

17-1481 | 18-5007-5889

Analysis ID: Analyzed:	00-4407-4718 03 Nov-17 14:		Endpoint: Analysis:	7d Survival Ra Linear Regres				S Version: ial Results:	CETISv1 Yes	.9.2	
7d Survival R	ate Summary				Calcı	ulated Varia	ate(A/B)				
Conc-gm/L	Code	Count	t Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
0	D	10	0.900	0.0000	1.0000	0.1000	0.3162	35.14%	0.0%	9	10
0.25		10	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	-11.11%	10	10
0.5		10	0.800	0.0000	1,0000	0.1333	0.4216	52.70%	11.11%	8	10
0.75		10	0.900	0.0000	1.0000	0,1000	0.3162	35.14%	0.0%	9	10
1		10	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	-11.11%	10	10
1.25		10	0.900	0.0000	1.0000	0.1000	0.3162	35.14%	0.0%	9	10
1.5		10	0.800	0.0000	1.0000	0.1333	0.4216	52.70%	11.11%	8	10
1.75		10	0.700	0.0000	1.0000	0.1528	0.4830	69.01%	22.22%	7	10
2		10	0.700	0.0000	1.0000	0.1528	0.4830	69.01%	22.22%	7	10
2.25		10	0.400	0.0000	1.0000	0.1633	0,5164	129.10%	55.56%	4	10
2.5		10	0.300	0.0000	1.0000	0.1528	0.4830	161.00%	66.67%	3	10
2.75		10	0.000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
7d Survival R	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 1
0	D	1.0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.000
0.25		1.0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
0.5		1,0000	1.000	0 1.0000	1.0000	1.0000	0.0000	0.0000	1.0000	1.0000	1.000
0.75		1.0000	1.000	0 1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.000
1		1.0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
1.25		1.0000	1.000	0 1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.000
1.5		1.0000			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
1.75		1.0000			1.0000	1.0000	0.0000	0.0000	1.0000	0.0000	1.000
2		1.0000			0.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.000
2.25		1,0000			1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.000
											0.000
2.5		1.0000			0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	
2.75		0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0,000
	ate Binomials										
Conc-gm/L	Code	Rep 1			1/1	1/1	Rep 6	Rep 7	1/1	Rep 9	Rep 1 0/1
	D	1/1	1/1	1/1			1/1	1/1			
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	1/1	1/1
0.75		1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1
1.5		1/1	0/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	0/1	1/1
2		1/1	1/1	0/1	0/1	0/1	1/1	1/1	1/1	1/1	1/1
2.25		1/1	0/1	1/1	1/1	0/1	0/1	0/1	1/1	0/1	0/1
2.5		1/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1
			17.1		· .	٠	·	-	J		0/1

002-570-915-7

CETIS™ v1.9.2.4

Analyst: Page 82 of 159

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:56 (p 3 of 3)

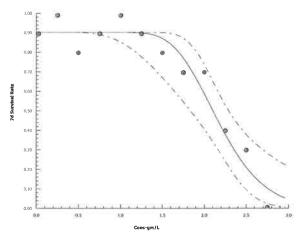
Test Code:

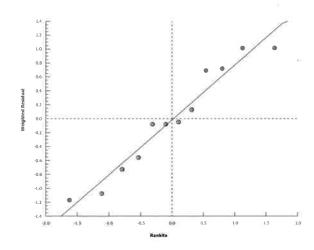
17-1481 | 18-5007-5889

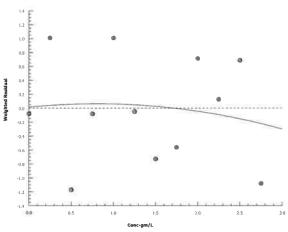
Ceriodaphnia 7-d Survival and Reproduction TestNew England BioassayAnalysis ID:00-4407-4718Endpoint:7d Survival RateCETIS Version:CETISv1.9.2Analyzed:03 Nov-17 14:55Analysis:Linear Regression (GLM)Official Results:Yes

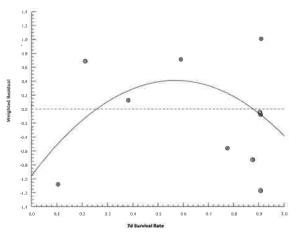


Log-Normal: inv $\Phi[\pi]=\alpha+\beta \cdot \log[x]$









CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:56 (p 1 of 2)

Test Code:

-11.11%

11-11%

22.22%

22.22%

55.56%

66.67%

0.0%

17-1481 | 18-5007-5889

							Test Code	e:	17-148	31 18-5007-5889
Ceriodaphnia	7-d Survival an	d Reproduction	Test						New En	gland Bioassay
Analysis ID:	11-7441-9793	Endpoint	: 7d \$	Survival Rat	e		CETIS Ve	rsion:	CETISv1.9.2	
Analyzed:	03 Nov-17 14:5	66 Analysis:	STE	2xK Conti	ngency Tabl	es	Official R	esults:	Yes	
Batch ID:	15-6387-4143	Test Type	e: Rep	roduction-S	Survival (7d)		Analyst:			
Start Date:	08 Sep-17 11:46	Protocol	: EP/	N821/R-02-	013 (2002)		Diluent:	Labora	itory Water	
Ending Date:	13 Oct-17 10:56	Species:	Cer	iodaphnia d	ubia		Brine:	Not Ap	plicable	
Duration:	34d 23h	Source:	In-H	louse Cultu	re		Age:	<24h		
Sample ID:	15-3062-4589	Code:	5B3	B7A4D			Client:	GZA G	eoEnvironmen	tal
Sample Date:	08 Sep-17	Material:	Soc	lium chloride	е		Project:			
Receipt Date:		Source:	GZ	A GeoEnviro	onmental			0	100	
Sample Age:	12h	Station:						25		Cuil
Data Transfor	rm	Alt Hyp					NOEL LO	EL 1	OEL TU	Λ
Untransformed		C > T					2.5 > 2.5	r	n/a	0
Fisher Exact/	Bonferroni-Holn	n Test								
Control	vs Group	Tes	t Stat	P-Type	P-Value	Decision(α:5%)			
Dilution Water		1_00		Exact	1.0000	Non-Signi	ficant Effect			
	0.5	0.50	000	Exact	1.0000	Non-Signi	ficant Effect			
	0.75	0.76	332	Exact	1.0000	Non-Signi	ficant Effect			
	1	1.00	000	Exact	1.0000	Non-Signi	ficant Effect			
	1,25	0.76	332	Exact	1_0000	Non-Signi	ficant Effect			
	1.5	0.50	000	Exact	1.0000	Non-Signi	ficant Effect			
	1,75	0.29	910	Exact	1.0000	Non-Signi	ficant Effect			
	2	0.29	910	Exact	1.0000	Non-Signi	ficant Effect			
	2.25	0.02	286	Exact	0.2577	Non-Signi	ficant Effect			
	2,5	0.00	099	Exact	0.0988	Non-Signi	ficant Effect			
Test Acceptal	bility Criteria	TAC Limits								
Attribute	Test Stat	Lower Upp	рег	Overlap	Decision					
Control Resp	0.9	0.8 >>		Yes	Passes C	riteria				
Data Summar	'n									
Conc-gm/L	Code	NR R		NR + R	Prop NR	Prop R	%Effect			
0	D	9 1		10	0.9	0.1	0.0%			
0.25		10 0		10	1	0	-11.11%			
0.5		8 2		10	0.8	0.2	11.11%			
0.75		9 1		10	0.9	0.1	0.0%			
						_	44 4404			

1

1.25

1.5

2

1.75

2.25

2.5

10

9

8

7

7

4

0

1

2

3

3

6

10

10

10

10

10

10

10

1

0.9

0.8

0.7

0.7

0.4

0.3

0

0,1

0.2

0.3

0.3

0.6

0.7

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:56 (p 2 of 2)

Test Code:

17-1481 | 18-5007-5889

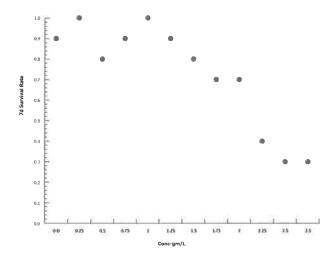
Ceriodaphnia	7-d Survival a	ind Reprod	uction Test						1	lew Englan	d Bioassay
Analysis ID: Analyzed:	11-7441-9793 03 Nov-17 14			I Survival Ra		oles		IS Version: cial Results		1.9.2	
7d Survival R	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	0.0000
		4.0000	4 0000	4 0000	4 0000	4 0000	4 0000	4 0000	4 0000	4 0000	4 0000

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1.0000	1.0000	1,0000	1,0000	1.0000	1.0000	1.0000	1.0000	1,0000	0.0000
0.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5		1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	1.0000	1.0000	1.0000
0.75		1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1,0000	1.0000
1		1.0000	1,0000	1,0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.25		1.0000	1.0000	1,0000	1,0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000
1.5		1:0000	0.0000	0.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000
1.75		1.0000	1.0000	1.0000	1:0000	1.0000	0.0000	0.0000	1.0000	0.0000	1.0000
2		1.0000	1.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2.25		1,0000	0.0000	1.0000	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000
2.5		1.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000

7d Survival Rate Binomials

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0,5		1/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	1/1	1/1
0.75		1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1
1.5		1/1	0/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	0/1	1/1
2		1/1	1/1	0/1	0/1	0/1	1/1	1/1	1/1	1/1	1/1
2.25		1/1	0/1	1/1	1/1	0/1	0/1	0/1	1/1	0/1	0/1
2.5		1/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1

Graphics



Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 13:53 (p 1 of 2)

Test Code:

17-1481 | 18-5007-5889

Ceriodaphnia	7-d Survival an	d Repro	duction Tes	t					Ne	ew England	Bioassa
Analysis ID:	12-6364-8523			Reproduction	011	Ttt-		S Version:		.9.2	
Analyzed:	03 Nov-17 13:5		_	lonparametric-				ial Results	s: Yes		
Batch ID:	15-6387-4143			Reproduction-S	•	•	Anal				
Start Date:	08 Sep-17 11:46			PA/821/R-02-	` ')	Dilue		oratory Wat	er	
=	13 Oct-17 10:56		•	Ceriodaphnia d			Brine		Applicable		
Duration:	34d 23h	S	iource: I	n-House Cultu	re		Age:	<24	\$h		
Sample ID:	15-3062-4589	С	ode: 5	B3B7A4D			Clier	nt: GZ	A GeoEnviro	nmental	
Sample Date:	08 Sep-17	IV	laterial: S	Sodium chlorid	е		Proje	ect:			
Receipt Date:	08 Sep-17	S	ource: C	SZA GeoEnviro	onmental			28	0 11	In A	16
Sample Age:	12h	S	station:					1/2) /,	1 cm	1
Data Transfor	m	Alt Hy	р				NOEL	LOEL	TOEL	TU	PMSD
Untransformed	d	C > T					1	1.25	1_118		37.37%
Steel Many-O	ne Rank Sum Te	est									
Control	vs Conc-gm	ı/L	Test St	at Critical	Ties D	F P-Type	P-Value	Decision	ι(α:5%)		
Dilution Water			96 5	73	1 1	8 Asymp	0.6676	Non-Sign	ificant Effec	t	
	0.5		84	73	0 1	8 Asymp	0.2398	Non-Sign	ificant Effect	t	
	0.75		93 5	73	1 1	8 Asymp	0.5626	Non-Sign	ificant Effect	t	
	1		97.5	73	1 1	8 Asymp	0.7004	Non-Sign	ificant Effect	t	
	1.25*		67.5	73	1 1	8 Asymp	0.0150	Significar	nt Effect		
	1.5*		64	73	0 1	8 Asymp	0.0067	Significar	nt Effect		
	1.75*		59	73	0 1	8 Asymp	0.0018	Significar	nt Effect		
	2*		57.5	73	1 1	8 Asymp	0.0012	Significar	nt Effect		
Test Acceptal	bility Criteria	TAC	C Limits								
Attribute	Test Stat		Upper	Overlap	Decisio	1					
Control Resp	64.8	15	>>	Yes	Passes	Criteria					
PMSD	0,3737	0.13	0.47	Yes	Passes (Criteria					
ANOVA Table											
Source	Sum Squa	ares	Mean S	quare	DF	F Stat	P-Value	Decision	ι(α:5%)		
Between	37817.8		4727.23	3	8	9.468	<1_0E-37	Significar	nt Effect		
Error	40440.3		499.263	3	81						
Total	78258.1				89						
Distributional	Tests										
Attribute	Test				Test Sta	t Critical	P-Value	Decision	ι(α:1%)		
Variances	Bartlett Ed	uality of	Variance Te	st	31.98	20.09	9.4E-05		Variances		
	Shaniro-W	/ilk W No	rmality Test		0.9886	0.962	0.6268	Normal D	Distribution		
Distribution	onapho m										_
Reproduction		Count	Mean	95% LCL	95% UC	_ Median	Min	Max	Std Err	CV%	%Effect
Reproduction Conc-gm/L	Summary	Count 10	Mean 64.8	95% LCL 44.14	95% UC 85.46	_ Median	Min 11	Max 109	Std Err 9.135	CV% 44.58%	%Effect
Reproduction Conc-gm/L	Summary Code										
Reproduction Conc-gm/L 0 0.25	Summary Code	10	64.8	44.14	85.46	66	11	109	9.135	44.58%	0.00% 11.88%
Reproduction Conc-gm/L 0 0.25 0.5	Summary Code	10 10	64.8 57.1	44.14 38.58	85.46 75.62	66 64	11 23	109 98	9.135 8.186	44.58% 45.34%	0.00% 11.88% 31.48%
Reproduction Conc-gm/L D D.25 D.5 D.75	Summary Code	10 10 10	64.8 57.1 44.4	44.14 38.58 25.86	85.46 75.62 62.94	66 64 44.5	11 23 0	109 98 87	9.135 8.186 8.194	44.58% 45.34% 58.36%	0.00% 11.88% 31.48% 19.75%
Reproduction Conc-gm/L 0 0.25 0.5 0.75	Summary Code	10 10 10 10	64.8 57.1 44.4 52	44.14 38.58 25.86 33.56	85.46 75.62 62.94 70.44	66 64 44.5 58.5	11 23 0 0	109 98 87 78	9.135 8.186 8.194 8.151	44.58% 45.34% 58.36% 49.57%	0.00% 11.88% 31.48% 19.75% 11.73%
Reproduction Conc-gm/L 0 0.25 0.5 0.75 1	Summary Code	10 10 10 10 10	64.8 57.1 44.4 52 57.2	44.14 38.58 25.86 33.56 33.49	85.46 75.62 62.94 70.44 80.91	66 64 44.5 58.5 49	11 23 0 0 21	109 98 87 78 110	9.135 8.186 8.194 8.151 10,48	44.58% 45.34% 58.36% 49.57% 57.95%	0.00% 11.88% 31.48% 19.75% 11.73% 56.64%
Reproduction Conc-gm/L 0 0.25 0.5 0.75 1 1.25	Summary Code	10 10 10 10 10 10	64.8 57.1 44.4 52 57.2 28.1	44.14 38.58 25.86 33.56 33.49 17.59	85.46 75.62 62.94 70.44 80.91 38.61	66 64 44.5 58.5 49 28.5	11 23 0 0 21 8	109 98 87 78 110	9.135 8.186 8.194 8.151 10.48 4.646	44.58% 45.34% 58.36% 49.57% 57.95% 52.29%	0.00% 11.88% 31.48% 19.75% 11.73% 56.64% 65.43%
Distribution Reproduction Conc-gm/L 0 0.25 0.5 0.75 1 1.25 1.75 2	Summary Code	10 10 10 10 10 10	64.8 57.1 44.4 52 57.2 28.1 22.4	44.14 38.58 25.86 33.56 33.49 17.59 12.6	85.46 75.62 62.94 70.44 80.91 38.61 32.2	66 64 44.5 58.5 49 28.5 28.5	11 23 0 0 21 8 2	109 98 87 78 110 54	9.135 8.186 8.194 8.151 10.48 4.646 4.331	44.58% 45.34% 58.36% 49.57% 57.95% 52.29% 61.15%	0.00%

Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 13:53 (p 2 of 2)

Test Code:

17-1481 | 18-5007-5889

Ceriodaphnia	7-d Survival a	and Repr	oduction Te	est					ı	lew Englan	d Bioassay
Analysis ID: Analyzed:	12-6364-8523 03 Nov-17 13		Endpoint: Analysis:	Reproduction Nonparametr		s Treatments		TIS Version: icial Results:	CETISv Yes	1.9.2	
Reproduction	Detail										
Conc-gm/L	Code	Rep 1	1 Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	51	71	109	44	81	42	93	85	61	11
0.25		58	78	75	25	70	23	98	72	28	44
0.5		65	39	87	64	34	0	13	34	50	58
0.75		15	71	78	66	0	54	75	50	63	48

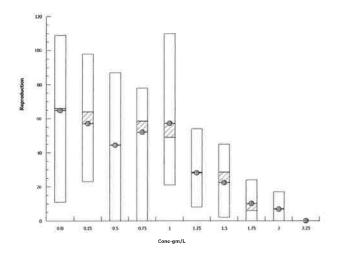
Graphics

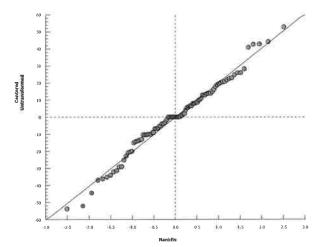
1.25

1.5

1,75

2.25





Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 13:53 (p 1 of 2)

oe no And	nytical repe	,,,					Test	Code:		17-1481 18	8-5007-588
Ceriodaphnia	7-d Survival an	d Reprodu	ction T	est					N	ew England	d Bioassay
Analysis ID:	07-3887-8713		dpoint:	7d Survival Ra		_		S Version:	CETISv1	9.2	
Analyzed:	03 Nov-17 13:5		alysis:	Trimmed Spea	arman-Karbe	∍ r	Οπιο	ial Results	Yes		
Batch ID:	15-6387-4143	Tes	t Type:	Reproduction-	Survival (7d)	Anal	yst:			
Start Date:	08 Sep-17 11:46		tocol:	EPA/821/R-02	-013 (2002)		Dilue	ent: Lab	oratory Wat	er	
Ending Date:	13 Oct-17 10:56	Spe	ecies:	Ceriodaphnia	dubia		Brin	e: Not	Applicable		
Duration:	34d 23h	So	ırce:	In-House Culti	ure		Age:	<24	h	_	
Sample ID:	15-3062-4589	Co	de:	5B3B7A4D			Clier	-	A GeoEnviro	onmental	
Sample Date:	08 Sep-17	Ma	terial:	Sodium chloric	de		Proje	ect:			
Receipt Date:	: 08 Sep-17	So	ırce:	GZA GeoEnvi	ronmental		,	0 1	111		
Sample Age:	12h	Sta	tion:				ò	5	14 9	Jul >	
Trimmed Spe	arman-Kärber E	stimates									
Threshold Op		hreshold	Trim	Mu	Sigma		LC50	95% LCL			
Control Thresh	nold 0.	4	16.67	% 0.2571	0.03305		1.807	1.552	2.105		
Test Acceptal	bility Criteria	TAC	imits								
Attribute	Test Stat	Lower	Uppe	r Overlap	Decision	1					
Control Resp	0.6	0.8	>>	Yes	Below Cr	iteria					
7d Survival R	ate Summary				Calc	ulated Vari	ate(A/B)				
Conc-gm/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
0	D	10	0.600	0.0000	1.0000	0.1633	0.5164	86.07%	0.0%	6	10
0.25		10	0.500	0.0000	1.0000	0.1667	0.5270	105.40%	16.67%	5	10
0.5		10	0.400	0.0000	1.0000	0.1633	0.5164	129,10%	33,33%	4	10
0.75		10	0.600	0.0000	1.0000	0.1633	0.5164	86.07%	0.0%	6	10
1		10	0.500	0.0000	1.0000	0.1667	0.5270	105.40%	16.67%	5	10
1,25		10	0.400	0.0000	1,0000	0.1633	0.5164	129.10%	33.33%	4	10
1.5		10	0,400	0.0000	1.0000	0,1633	0.5164	129.10%	33.33%	4	10
1.75		10	0,200		1.0000	0.1333	0.4216	210.80%	66.67%	2	10
2		10	0.600	0.0000	1,0000	0.1633	0.5164	86.07%	0.0%	6	10
2.25		10	0.100		1.0000	0.1000	0.3162	316.20%	83.33%	1	10
2.5		10	0.000		0.0000	0.0000	0.0000		100.0%	0	10
2.75		10	0,000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
7d Survival R	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2		Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1,0000	1.000		0.0000	1.0000	0.0000	1.0000	1.0000	0.0000	0.0000
0.25		1.0000	1.000		0.0000	1.0000	0.0000	1.0000	1.0000	0.0000	0.0000
0.5		1.0000	1.000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
0.75		0.0000	1.000		1.0000	0.0000	1,0000	0.0000	1.0000	1.0000	0.0000
1		1,0000	1.000	0 1,0000	1.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000
1.25		0.0000	1,000	0 1,0000	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000	0.0000
1.5		1,0000	0.000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	0.0000	0.0000
1.75		0.0000	0.000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	1.0000
2		1.0000	0.000		0.0000	0.0000	1.0000	1.0000	1.0000	1,0000	1.0000
- 2.25		0.0000	0,000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
						->					

2.5

2.75

0,0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000 0.0000

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 13:53 (p 2 of 2)

17-1481 | 18-5007-5889

							165	t Code:		17-1401 1	0-0007-0009
Ceriodaphnia	7-d Survival a	nd Repre	oduction Tes	t					N	lew Englan	d Bioassay
Analysis ID: Analyzed:	07-3887-8713 03 Nov-17 13		•	d Survival Ra Frimmed Spe		er		TIS Version icial Result		1.9.2	
7d Survival R	ate Binomials										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	0/1	1/1	0/1	1/1	1/1	0/1	0/1
0.25		1/1	1/1	0/1	0/1	1/1	0/1	1/1	1/1	0/1	0/1
0.5		1/1	1/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1
0.75		0/1	1/1	1/1	1/1	0/1	1/1	0/1	1/1	1/1	0/1
1		1/1	1/1	1/1	1/1	0/1	0/1	0/1	0/1	1/1	0/1
1.25		0/1	1/1	1/1	0/1	0/1	0/1	1/1	0/1	1/1	0/1
1.5		1/1	0/1	0/1	0/1	0/1	1/1	1/1	1/1	0/1	0/1
1.75		0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1	0/1	1/1
2		1/1	0/1	0/1	0/1	0/1	1/1	1/1	1/1	1/1	1/1
2.25		0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
2.5		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

0/1

0/1

0/1

0/1

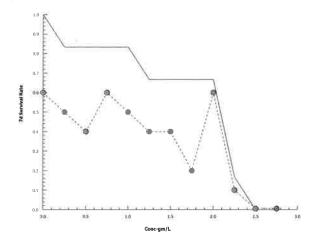
0/1

0/1

0/1

Graphics

2.75



0/1

0/1

0/1

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 13:53 (p 1 of 2)

Test Code:

17-1481 | 18-5007-5889

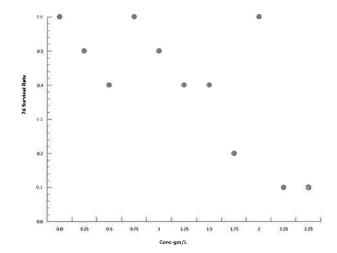
Ceriodaphnia	7-d Survival an	d Reprod	duction Test						N	ew Englan	d Bioassa
Analysis ID: Analyzed:	07-8726-5740 03 Nov-17 13:5			d Survival Ra TP 2xK Conti		les		'IS Version cial Result		1.9.2	
Batch ID:	15-6387-4143	To	est Type: R	eproduction-	Survival (7d)		Ana	lyst:			
Start Date:	08 Sep-17 11:46	6 P	rotocol: E	PA/821/R-02	-013 (2002)		Dilu	ent: Lal	boratory Wa	ter	
Ending Date:	13 Oct-17 10:56	s	pecies: C	eriodaphnia d	dubia		Brir	ie: No	t Applicable		
Duration:	34d 23h	S	ource: In	-House Cultu	ıre		Age	_			
Sample ID:	15-3062-4589	С	ode: 5l	B3B7A4D			Clie	nt: GZ	A GeoEnviro	onmental	
Sample Date:	08 Sep-17	М	laterial: S	odium chlorid	le		Pro	ect:			
Receipt Date:		S	ource: G	ZA GeoEnvir	onmental			-0		1	
Sample Age:		S	tation:					75	M	da	イン
Data Transfor	m	Alt Hyp	5				NOEL	LOEL	TOEL	TU	0
Untransformed		C > T					2.25	> 2.25	n/a		
Fisher Exact/l	Bonferroni-Holn	n Test									
Control	vs Group		Test Sta	t P-Type	P-Value	Decision	ι(α:5%)				
Dilution Water	0,25		0.5000	Exact	1.0000	Non-Sign	ificant Effec	t			
	0.5		0.3281	Exact	1.0000	-	ificant Effec				
	0.75		0.6750	Exact	1.0000	Non-Sign	ificant Effec	t			
	1		0.5000	Exact	1.0000	Non-Sign	ificant Effec	t			
	1.25		0.3281	Exact	1,0000	Non-Sign	ificant Effec	t			
	1.5		0.3281	Exact	1,0000	Non-Sign	ificant Effec	t			
	1.75		0.0849	Exact	0.6792	Non-Sign	ificant Effec	t			
	2		0.6750	Exact	1.0000	Non-Sign	ificant Effec	t			
	2.25		0.0286	Exact	0.2577	_	ificant Effec				
Test Acceptab	oility Criteria	TAC	Limits								
Attribute	Test Stat		Upper	Overlap	Decision						
Control Resp	0.6	0.8	>>	Yes	Below Crit	teria					
Data Summar	у										
Conc-gm/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	D	6	4	10	0.6	0.4	0.0%				
0.25		5	5	10	0.5	0.5	16.67%				
0.5		4	6	10	0.4	0.6	33.33%				
0.75		6	4	10	0.6	0.4	0.0%				
1		5	5	10	0.5	0.5	16.67%				
1.25		4	6	10	0.4	0.6	33.33%				
1.5		4	6	10	0.4	0.6	33.33%				
1.75		2	8	10	0.2	8.0	66.67%				
2		6	4	10	0.6	0.4	0.0%				
2.25		1	9	10	0.1	0.9	83.33%				
7d Survival Ra	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
)	D	1.0000	1.0000	1.0000	0.0000	1.0000	0.0000	1.0000	1.0000	0.0000	0.0000
25		1.0000	1.0000	0.0000	0.0000	1.0000	0.0000	1.0000	1.0000	0.0000	0.0000
0.5		1.0000	1.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
0.75		0.0000	1,0000	1,0000	1.0000	0.0000	1,0000	0.0000	1.0000	1_0000	0.0000
1		1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.0000	0.0000	1-0000	0.0000
1.25		0.0000	1,0000	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000	0.0000
1,5		1.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000	0.0000	0_0000
1.75		0.0000	0.0000	0.0000	0.0000	1.0000	0,0000	0.0000	0.0000	0.0000	1.0000
2		1.0000	0,0000	0.0000	0.0000	0.0000	1,0000	1.0000	1.0000	1.0000	1.0000
2.25		0.0000	0.0000			0.0000	0.0000	0.0000			
1,20		0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0 0000	0.0000	0.0000	0.0000

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 13:53 (p 2 of 2)

17-1481 | 18-5007-5889

							les	t Code:		17-1401 1	8-5007-5889
Ceriodaphnia	a 7-d Survival a	and Repro	duction Test						P	lew Englan	d Bioassay
Analysis ID: Analyzed:	07-8726-5740 03 Nov-17 13			d Survival Ra TP 2xK Con		bles		TIS Version		1.9.2	
7d Survival R	Rate Binomials										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	0/1	1/1	0/1	1/1	1/1	0/1	0/1
0.25		1/1	1/1	0/1	0/1	1/1	0/1	1/1	1/1	0/1	0/1
0.5		1/1	1/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1
0.75		0/1	1/1	1/1	1/1	0/1	1/1	0/1	1/1	1/1	0/1
1		1/1	1/1	1/1	1/1	0/1	0/1	0/1	0/1	1/1	0/1
1.25		0/1	1/1	1/1	0/1	0/1	0/1	1/1	0/1	1/1	0/1
1.5		1/1	0/1	0/1	0/1	0/1	1/1	1/1	1/1	0/1	0/1
1.75		0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1	0/1	1/1
2		1/1	0/1	0/1	0/1	0/1	1/1	1/1	1/1	1/1	1/1
2.25		0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

Graphics



CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:06 (p 1 of 2)

17-1481 | 18-5007-5889

				rest code.	17-1401 10-3007-3009
Ceriodaphnia	7-d Survival and Re	production Te	est		New England Bioassay
Analysis ID: Analyzed:	03-2881-5575 03 Nov-17 14:05	Endpoint: Analysis:	7d Survival Rate Untrimmed Spearman-Kärber	CETIS Version: Official Results:	CETISv1.9.2 Yes
Analyzeu.	03 1404-17 14.03	Arialysis.	Onlined Speaman-Karber	Official Results.	165
Batch ID:	15-6387-4143	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	08 Sep-17 11:46	Protocol:	EPA/821/R-02-013 (2002)	Diluent: Labo	ratory Water
Ending Date:	13 Oct-17 10:56	Species:	Ceriodaphnia dubia	Brine: Not A	Applicable
Duration:	34d 23h	Source:	In-House Culture	Age: <24h	
Sample ID:	15-3062-4589	Code:	5B3B7A4D	Client: GZA	GeoEnvironmental
Sample Date:	08 Sep-17	Material:	Sodium chloride	Project:	
Receipt Date:	08 Sep-17	Source:	GZA GeoEnvironmental	0,	0: 1. 6
Sample Age:	12h	Station:		25	21 Days

Spearman-Kärber Estimates

Threshold Option	Threshold	Trim	Mu	Sigma	LC50	95% LCL	95% UCL
Control Threshold	0.9	0.00%	0.3189	0.007344	2.084	2.015	2.156

· · · · · · · · · · · · · · · · · · ·	Test Acceptabilit	y Criteria	TAC	Limits		
Control Resp 0.1 0.8 >> Yes Below Criteria	Attribute	Test Stat	Lower	Upper	Overlap	Decision
	Control Resp	0.1	0.8	>>	Yes	Below Criteria

7d Survival Rat	e Summary		Calculated Variate(A/B)								
Conc-gm/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
0	D	10	0.1000	0.0000	1.0000	0.1000	0.3162	316.20%	0.0%	1	10
0.25		10	0.2000	0.0000	1.0000	0.1333	0.4216	210.80%	-100.0%	2	10
0.5		10	0.2000	0.0000	1.0000	0.1333	0.4216	210.80%	-100.0%	2	10
0.75		10	0.1000	0.0000	1.0000	0.1000	0.3162	316,20%	0.0%	1	10
1		10	0,3000	0.0000	1,0000	0.1528	0.4830	161.00%	-200,0%	3	10
1.25		10	0.0000	0.0000	0.0000	0,0000	0.0000		100.0%	0	10
1.5		10	0.2000	0,0000	1,0000	0.1333	0.4216	210.80%	-100.0%	2	10
1.75		10	0.1000	0,0000	1,0000	0,1000	0.3162	316.20%	0.0%	1	10
2		10	0.4000	0.0000	1.0000	0.1633	0.5164	129.10%	-300.0%	4	10
2,25		10	0.0000	0.0000	0.0000	0,0000	0.0000		100.0%	0	10
2.5		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
2.75		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10

7d Survival Rate Detail

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000
0.25		0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	1.0000	0.0000	0.0000
0.5		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
0.75		0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000
1		1.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000
1.25		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1.5		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000
1.75		0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2		0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000	1.0000	1.0000
2,25		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2.5		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2.75		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

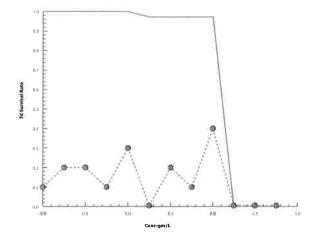
CETIS Analytical Reporteronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:06 (p 2 of 2)

Test Code:

17-1481 | 18-5007-5889

Ceriodaphnia	7-d Survival a	ınd Repr	roduction T			ı	New Englan	d Bioassay			
Analysis ID: Analyzed:	03-2881-5575 03 Nov-17 14		Endpoint: Analysis:	7d Survival Rate Untrimmed Spearman-Kärber			CETIS Version: Official Results:		CETISv1.9.2 Yes		
7d Survival R	ate Binomials										
Conc-gm/L	Code	Rep '	1 Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	0/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1
0.25		0/1	0/1	0/1	0/1	1/1	0/1	0/1	1/1	0/1	0/1
0.5		1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1
0.75		0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1	0/1
1		1/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1
1,25		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
1.5		1/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1
1.75		0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1
2		0/1	0/1	0/1	0/1	0/1	1/1	0/1	1/1	1/1	1/1
2.25		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
2.5		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
2.75		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

Graphics



Analyst: Page 93 of 159

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:06 (p 1 of 2)

Test Code:

17-1481 | 18-5007-5889

Ceriodaphnia	7-d Survival an	d Repro	duction Te	est							N	ew Englan	d Bioassa
Analysis ID:	20-2658-3643		ndpoint:		urvival Rat				ETIS Ve		CETISv1	.9.2	
Analyzed:	03 Nov-17 14:0)5 A	nalysis:	STP	2xK Conti	ngency Tabl	es		Official R	esults:	Yes		
Batch ID:	15-6387-4143	Т	est Type:	Repr	roduction-S	Survival (7d)			Analyst:				
Start Date:	08 Sep-17 11:46	6 P	rotocol:	ĘΡΑ	/821/R-02-	013 (2002)			Diluent:	Labo	ratory Wat	er :	
Ending Date:	13 Oct-17 10:56	s	pecies:	Cerio	odaphnia d	ubia		E	Brine:	Not A	Applicable		
Duration:	34d 23h	S	ource:	In-H	ouse Cultu	re			\ge:	<24h	1		
Sample ID:	15-3062-4589	С	ode:	5B3E	B7A4D			(Client:	GZA	GeoEnviro	nmental	
Sample Date:	•	ľ	laterial:	Sodi	um chlorid	е		F	Project:	_			
Receipt Date:	•		ource:	GZA	GeoEnviro	onmental			\circ	$\leq_{\mathcal{O}}$	11	Lru	
Sample Age:	12h	S	tation:						Ö	. J		000	X /
Data Transfor		Alt Hy	р					NOEL		EL	TOEL	TU	U
Untransformed		C > T						2	> 2		n/a		
Fisher Exact/E	Bonferroni-Holm	1 Test											
	vs Group		Test S	Stat	P-Type	P-Value	Decision	(α:5%)					
Dilution Water			0.894	7	Exact	1,0000	Non-Sign						
	0.5		0.894		Exact	1.0000	Non-Sign						
	0.75		0.763		Exact	1.0000	Non-Sign						
	1		0.956		Exact	1.0000	Non-Sign						
	1.25		0.500		Exact	1.0000	Non-Sign						
	1.5		0.894		Exact	1.0000	Non-Sign						
	1.75		0.763		Exact	1.0000	Non-Sign						
	2		0.983	<i>'</i>	Exact	0.9837	Non-Sign	mcant E	пест				
Test Acceptab	-		Limits			5							
Attribute Control Resp	7est Stat	0.8	Uppe:		Overlap Yes	Decision Below Crit	oria						
		0.0			162	Delow Citi	.ena				-		
Data Summar			_			_							
Conc-gm/L	Code	NR	R		NR + R	Prop NR	Prop R	%Effe	ct				
0	D	1	9		10	0.1	0.9	0.0%	NO.				
0.25		2	8		10	0.2	8.0	-100.0					
0.5		2	8		10	0.2	0.8	-100.0	1%				
0.75 1		1	9 7		10	0.1	0.9	0.0%	10/				
ı 1.25		3 0	, 10		10 10	0.3 0	0.7 1	-200.0 100.0					
1.5		2	8		10	0.2	0.8	-100.0					
1.75		1	9		10	0.2	0.9	0.0%	70				
2		4	6		10	0.4	0.6	-300.0)%				
7d Survival Ra	ate Detail												
Conc-gm/L	Code	Rep 1	Rep 2		Rep 3	Rep 4	Rep 5	Rep 6	Re	р 7	Rep 8	Rep 9	Rep 10
)	D	0.0000	0.000		0.0000	0.0000	0.0000	0.000		000	1.0000	0.0000	0.0000
0.25		0.0000	0.000		0.0000	0.0000	1.0000	0.000		000	1.0000	0.0000	0.0000
0.5		1.0000	0.000		0.0000	0.0000	0.0000	0.000		000	0.0000	0.0000	1.0000
).75		0.0000	0.000		0.0000	0.0000	0.0000	1.000		000	0.0000	0.0000	0.0000
		1.0000	1.0000		0.0000	0.0000	0.0000	0.000		000	0.0000	1.0000	0.0000
.25		0.0000	0.0000		0.0000	0.0000	0.0000	0.000		000	0.0000	0.0000	0.0000
1.5		1.0000	0.0000		0.0000	0.0000	0.0000	0.000		000	0.0000	0.0000	0.0000
1.75		$\alpha \alpha \alpha \alpha \alpha \alpha$	$\alpha \alpha $	1	CL CROWN					1 1/ 1/ 1	$\alpha \alpha \alpha \alpha \alpha \alpha$		0.0000
2		0.0000	0.0000		0.0000	0.0000 0.0000	1.0000 0.0000	1.000		000	0.0000 1.0000	0,0000 1,0000	0.0000 1.0000

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:06 (p 2 of 2)

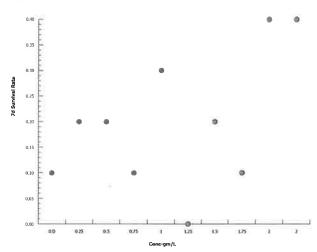
Test Code:

17-1481 | 18-5007-5889

Ceriodaphnia 7-d Survival and Reproduction Test										New England Bioassay		
								ΓIS Version: icial Results		1.9.2		
7d Survival R	ate Binomials											
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10	
0	D	0/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1	

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	0/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1
0.25		0/1	0/1	0/1	0/1	1/1	0/1	0/1	1/1	0/1	0/1
0.5		1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1
0.75		0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1	0/1
1		1/1	1/1	0/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1
1.25		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
1.5		1/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1
1.75		0/1	0/1	0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1
2		0/1	0/1	0/1	0/1	0/1	1/1	0/1	1/1	1/1	1/1

Graphics



CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:06 (p 1 of 2)

Test Code:

17-1481 | 18-5007-5889

Ceriodaphnia	r-a Survival a	and Reprod	uction rest						N	ew England	DIVESS
Analysis ID: Analyzed:	13-5260-8410 03 Nov-17 14		•	Reproduction Nonparametric-Control vs Treatments			IS Version		.9.2		
Batch ID:	15-6387-4143	Te	est Type: R	eproduction-S	Survival (7	1)	Anal	yst:			
Start Date:	08 Sep-17 11:	:46 P ı	rotocol: El	EPA/821/R-02-013 (2002)			Dilu	ent: La	boratory Wat	er	
nding Date:	13 Oct-17 10:	56 S _I	pecies: C	Ceriodaphnia dubia			Brin	e: No	t Applicable		
Ouration:	34d 23h	So	ource: In	-House Cultu	re		Age	<2	4h		
Sample ID:	15-3062-4589	C	ode: 5E	33B7A4D			Clie	nt: GZ	A GeoEnviro	nmental	
Sample Date:	08 Sep-17	M	aterial: So	odium chloride	Э		Proj	ect:			C
Receipt Date:	08 Sep-17	S	ource: G	ZA GeoEnviro	onmental			250	1	Law	1
Sample Age:	12h	St	tation:					17)	21	Our	
ata Transfor	m	Alt Hyp)				NOEL	LOEL	TOEL	TU	PMSD
Intransformed		C > T					1	1.25	1.118		40.95%
teel Many-O	ne Rank Sum	Test									
Control	vs Conc-g	gm/L	Test Sta	t Critical		OF P-Type	P-Value	Decisio	n(a:5%)		
Dilution Water	0,25		97.5	73	1 1	8 Asymp	0.7004	_	nificant Effec		
	0.5		88	73	0 1	8 Asymp	0.3652	_	nificant Effec		
	0.75		98.5	73		8 Asymp	0.7316	_	nificant Effec		
	1		87	73		8 Asymp	0.3316	_	nificant Effec	t	
	1.25*		71.5	73		8 Asymp	0.0343	_	nt Effect		
	1.5*		67	73		8 Asymp	0.0134	_	nt Effect		
	1.75*		60	73		8 Asymp	0.0024	Significa			
	2*		59	73	0 1	8 Asymp	0.0018	Significa	nt Effect		
Test Acceptab	ility Criteria		Limits								
Attribute	Test Sta		Upper	Overlap	Decisio						
Control Resp	83	15	>>	Yes	Passes						
PMSD	0.4095	0.13	0_47	Yes	Passes	Criteria					
ANOVA Table											
Source	Sum So	uares	Mean So	quare	DF	F Stat	P-Value	Decisio	n(α:5%)		
Between	56685.8		7085.73		8	7 205	3.6E-07	Significa	nt Effect		
Error	79655,8		983.405		81						
Fotal	136342				89						
Distributional	Tests										
Attribute	Test				Test Sta	t Critical	P-Value	Decisio	<u> </u>		
/ariances			/ariance Tes	t	29.48	20.09	2.6E-04	•	Variances		
Distribution	Shapiro	-Wilk W Nor	mality Test		0.9884	0.962	0.6117	Normal [Distribution		
Reproduction	Summary										
Conc-gm/L	Code	Count	Mean	95% LCL	95% UC		Min	Max	Std Err	CV%	%Effec
	D	10	83	50.04	116	74.5	11	145	14.57	55.51%	0.00%
.25		10	71.4	43.48	99.32	77	23	124	12.34	54.67%	13.98%
.5		10	57.7	27.82	87.58	48	0	122	13.21	72.39%	30.48%
.75		10	65.8	40.39	91.21	73	0	113	11.23	53.98%	20.72%
		10	57.2	33.49	80.91	49	21	110	10.48	57.95%	31.08%
.25		10	32.3	18.57	46.03	33	8	66	6.068	59.41%	61.08%
.5		10	27	12.57	41.43	28.5	2	68	6.379	74.71%	67.47%
.75		10	12	1.7	22.3	6	0	43	4.553	119.99%	85.54%
2		10	10	2.266	17.73	7.5	0	34	3.419	108.12%	87.95%

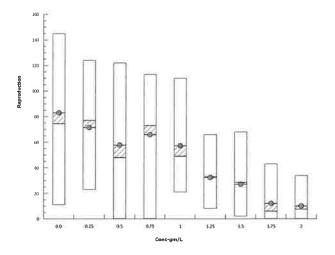
CETIS Analytical Report ectronic Filing: Received, Clerk's Office 5/29/2018 03 Nov-17 14:06 (p 2 of 2) Test Code: 17-1481 | 18-5007-5889

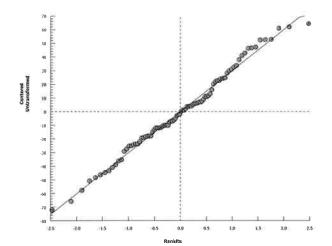
Ceriodaphnia	7-d Survival and Re	eproduction T		New England Bioassay	
Analysis ID:	13-5260-8416	Endpoint:	Reproduction	CETIS Version:	CETISv1,9.2
Analyzed:	03 Nov-17 14:05	Analysis:	Nonparametric-Control vs Treatments	Official Results:	Yes
Danna diretta	Detail				

Reprod	luction	Detail
--------	---------	--------

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	65	84	144	44	121	42	113	145	61	11
0.25		79	94	75	25	124	23	118	104	28	44
0.5		110	46	122	64	34	0	13	34	50	104
0.75		15	71	86	94	0	90	75	66	113	48
1		110	79	100	51	28	32	47	21	82	22
1,25		30	55	66	19	36	8	44	13	38	14
1.5		40	2	9	8	29	31	68	43	28	12
1.75		7	5	18	23	43	0	0	1	0	23
2		8	3	0	0	0	14	7	17	34	17

Graphics





Electronic Filing: Received, Clerk's Office 5/29/2018

CHRONIC COVER SHEET

CLIENT:	GZA / Huff & Huff	C.dubia TEST ID#	17-1480
ADDRESS:	915 Harger Road Suite 330	COC#	N/A
	Oak Brook, IL 60523	PROJECT #	81.0220523.00
SAMPLE TYPE:	NaCl 10°C		
DILUTION WATER:	Moderately Hard Synthetic		

INVERTEBRATES

TEST SET UP (TECH INIT)	TBP
TEST SPECIES	Ceriodaphnia dubia
NEB LOT#	Cd17(RMH 170)
AGE	< 24 hours
TEST SOLUTION VOLUME (mls)	15
NO. ORGANISMS PER TEST CHAMBER	1
NO. ORGANISMS PER CONCENTRATION	10

Laboratory Control Water (MHRCF)

Batch Number	Hardness mg/L CaCO ₃	Alkalinity mg/L CaCO ₃
С37-МН020	84	60

9	DATE	TIME
TEST START:	9/8/17	1245
TEST END:	10/13/17	1120

Comments:	
REVIEWD BY:	 DATE: [[13]]
	Page 98 of 159

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received, Clerk's Office 5/29/2018

	LICCLIC		. 1 (000	vou, Cicino	SINCO O/ LO		
SAMPLE ID:			N	aCl 10°C			
NEB PROJECT NUMBER:	81.	0220523.00	NEB '	TEST NUMBER:	17-1480	COC#	N/A
TEST ORGANISM:	Ceriodaphnia	dubia	AGE:	<24 hours		Lot #	Cd17(RMH 170)
START DATE:	9/8/17	TIME:	1245	END DATE:	10/13/17	TIME:	1120

START DATE			9/8/17		HME:	12	45	END L	AIL.		10/13/1		TIME:	11.	20
			Culture	e Lot#			Cd17(F	MH 17	(0)						
	Cup#	B2	В3	B4	В5	В6	В7	B10	B11	B12	B13	Total Live	# Live	Analyst-	Analyst
	Day						licate					Young	Adults	Transfer	Counts
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0	√	√	✓	√		10	TBP							
	1	✓	✓	✓	✓	√	√	✓	√	✓	√		10	TBP	
	2	✓	√	✓	√	✓	✓	√	✓	✓	√	0	10	TBP	
	3	√	√	✓	√	√	√	✓	√	✓	√	0	10	KO	KO
	4	√	✓	✓	✓	√	√	✓	√	✓	✓	0	10	KO	КО
	5	√	✓	✓	√	✓	✓	√	√	√	✓	0	10	PD	PD
	6	√	√	✓	√	√	✓	✓	√	✓	✓	0	10	KO	KO
	7	√	✓	✓	✓	✓	√	✓	✓	✓	/	0	10	KO	KO
	8	√	√	√	✓	√	√	✓	√	✓	✓	0	10	CW	CW
	9	√	√	✓	√	✓	√	√	✓	✓	✓	0	10	KO	KO
	10	√	✓	√	√	√	✓	√	√	✓	✓	0	10	СВ	CB
	11	√	✓	√	✓	√	✓	√	√	✓	✓	0	10	PD	PD
	12	✓	✓	✓	√	✓	√	✓	√	✓	✓	0	10	KO	KO
	13	√	✓	✓	√	✓	√	√	√	✓	✓	0	10	CW	CW
	14	√	✓	√	✓	✓	✓	✓	√	√	✓	0	10	CW	CW
	15	2	1	2	3	3	✓	√	√	✓	✓	11	10	PD	PD
	16	✓	✓	✓	√	√	✓	✓	√	✓	✓	0	10	PD	PD
NEB Lab	17	√	√	✓	√	✓	√	✓	√	✓	✓	0	10	TBP	TBP
Synthetic Control	18	√	✓	✓	√	✓	✓	✓	√	✓	√	0	10	CB	СВ
Control	19	√	√	√	√	√	✓	√	√	√	✓	0	10	CB	CB
	20	√	4	✓	✓	√	√	3	√	✓	✓	7	10	CB	CB
	21	✓	√	✓	√	√	✓	√	✓	5	✓	5	10	KO	KO
	22	√	✓	✓	3	4	✓	✓	√	1	✓	7	10	KO	KO
	23	√	✓	3	✓	✓	√	✓	√	✓	1	4	10	KO	KO
	24	✓	✓	✓	✓	✓	✓	✓	√	✓	✓	0	10	PD	PD
	25	√	✓	✓	√	✓	✓	√		✓	✓	0	10	CB	СВ
	26	✓	✓	✓	√	√	✓	✓	√	✓	✓	0	10	CB	CB
	27	√	✓	✓	✓	✓	√	5	√	✓	✓	5	10	CW	CW
	28	✓	√	✓	√	✓	2	√	√	✓	√	2	10	TBP	TBP
	29	2	√	✓	√	✓	√	√	✓	6	√	8	10	CW	CW
	30	✓	√	6	7	✓	√	√	√	✓	4	17	10	CW	CW
	31	✓	√	✓	✓	✓	√	1	3	✓	✓	3	10	KO	KO
	32	✓	√	✓	√	✓	✓	1	✓	✓	AE/x	0	9	KO	KO
	33	✓	✓	✓	√	✓	✓	√	√	✓	X	0	9	СВ	CB
	34	✓	√	✓	√	√	✓	√	√	1	X	0	9	ŘΟ	KO
	35	✓	√	√	√	✓	1	✓	√	1	X	0	9	PD	PD
	totals	4	5	11	13	7	2	8	3	11	5	69	9	=	MG

		TY TEST BROOD DATA SHEET	- / /	
SAMPLE ID:	electronic Filing:	Received, Clerk's Office	5/29/2018	
NEB PROJECT NUMBER:	81.0220523.00	ORGANISM: Ceriodaphnia dubia	START DATE:	9/8/17

	1														
												Total Live	# Live	Analyst- Transfer	Analyst Counts
	Day						licate					Young	Addits	Transier	Counts
Concentration	Number	_ A	В	С	D	Е	F	G	Н	I	J				
	0	_ ✓	✓	✓	√	✓	√	√	✓	✓	1		10		
	1	√	✓	✓	√	√	√	√	√	✓	√		10		
	2		✓	✓	√	✓	√	√	✓	✓	√	0	10		
	3	_ ✓	✓	√	√	✓	√	✓	✓	✓	√	0	10		
	4		✓	√	✓	✓	✓	√	√	✓	✓	0	10		-
	5	√	✓	√	√	√	✓	✓	✓	✓	✓	0	10		
	6	_ ✓	1	√	✓	✓	✓	✓	✓	✓	✓	0	10		
	7	√	✓	✓	✓	√	✓	√	√	✓	√	0	10		
	8	✓	✓	✓	✓	✓	✓	✓	✓	1	1	0	10		
	9	<u> </u>	✓	✓	✓	✓	1	✓	_ \	/	1	0	10		
	10	_ ✓	✓	1	✓	✓	✓	1	✓	✓	1	0	10		
	- 11	✓	√	1	✓	1	✓	✓	✓	1	1	0	10		
	12	✓	1	✓	✓	1	1	✓	✓	1	✓	0	10		
	13	√	✓	✓	✓	1	1	✓	✓	1	✓	0	10	11-	
	14	√	1	1	1	1	✓	√	1	1	✓	0	10		
	15	√	1	4	✓	1	1	1	✓	1	3	7	10		
	16	✓	1	1	1	V	✓	✓	1	1	1	0	10	(
	17	√	1	1	1	1	√	✓	1	1	1	0	10		
0.25 g/L	18	√	1	✓	√	1	√	✓	1	1	1	0	10		
	19	√	1	1	1	V	3	√	1	1	1	3	10		
	20	1	4	1	1	1	7	√	✓	1	1	11	10		
	21	√	1	1	4	6	1	1	1	6	1	16	10		
	22	√	1	5	1	1	1	1	√	1	5	10	10		
	23	√	1	1	1	1	1	√	1	1	1	0	10		
	24	/	1	1	√	1	1	√	1	1	1	0	10		
	25	√	1	1	1	1	1	√	1	1	V	0	10		
	26	√	1	1	V	1	1	√	1	1	1	0	10) e = -	
	27	/	3	1	1	1	10	√	√	1	1	13	10		
	28	1	1	1	1	1	1	1	V	4	1	4	10	1 1	
	29	1	1	8	5	1	1	1	1	1	5	18	10		
	30	1	1	1	1	1	1	1	1	1	1	0	10		
	31	1	1	1	1	1	1	1	1	1	1	0	10		
	32	√	1	1	1	1	1	1	1	1	1	0	10		
	33	1	1	1	1	1	1	1	√	1	1	0	10	- 1	
	34	√	2	1	1	1	1	1	1	1	1	3	10		
	35	\	1	1	1	2	1	1	√	1	1	2	10		
	totals	0	9	17	9	8	21	0	0	10	13	87	10		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID:	Electronic Filing.	Received, Clerk's Office s	0/29/2018	
NEB PROJECT NUMBER:	81.0220523.00	ORGANISM: Ceriodaphnia dubia	START DATE:	9/8/17

												Total	шт:	Amelint	A m = 1 - 1
	Day				-	Rer	licate		7			Live Young	# Live Adults	Analyst- Transfer	Analys Counts
Concentration	Number	Α	В	С	D	Е	F	G	Н	I	J				
	0	√	1	√	✓	1	1	1	✓	1	1		10		
	1	√	✓	√	√	1	✓	√	✓	√	1		10		
	2	√	1	✓	✓	√	✓	√	√	1	√/x	0	9		
	3	√	1	✓	1	✓	1	√	√	√	X	0	9		
	4	√	1	1	✓	√	✓	1	✓	√	X	0	9		
	5	✓	1	✓	1	1	✓	✓	✓	1	X	0	9	4 1	
	6	1	1	√	✓	1	1	✓	✓	✓	X	0	9		
	7	1	1	✓	✓	1	✓	1	√	1	X	0	9		
	8	✓	1	✓	√	1	√	✓	✓	1	X	0	9		
	9	√	1	1	√	√	1	1	1	1	X	0	9		
	10	√	1	✓	1	√	1	√	1	1	X	0	9		
	11	√	1	√	1	√	1	1	1	1	X	0	9		
	12	√	1	1	1	1	1	1	1	1	X	0	9		
	13	√	1	√	1	1	✓	√	1	/	X	0	9		
	14	√	1	1	1	1	1	√	1	1	X	0	9		
	15	2	2	1	√	√	1	1	1	1	X	6	9		
	16	√	V	√	1	1	1	1	1	1	X	0	9		
	17	√	√	1	1	1	1	1	1	1	Х	0	9		
0.5 g/L	18	√	1	√	1	1	1	1	1	7	X	7	9		
	19	1	1	√	✓	1	1	1	√	1	X	0	9		
	20	√	1	1	6	2	√	1	3	1	X	11	9		
	21	√	1	1	1	1	1	√	√	1	X	0	9		
	22	1	1	4	1	√	√	1	✓	/	X	6	9		
	23	√	1	√	1	1	1	1	1	1	X	0	9		
	24	√	1	√	1	1	1	1	√	1	X	0	9		
	25	√	1	1	√/x	√	1	√	1	√	Х	0	8		
	26	_	1	1	Х	√	1	√	1	1	X	0	8		
	27	√	√	1	X	2	1	1	1	√	X	2	8		
	28	√	/	1	X	2	5	1	√	V	X	7	8		
	29	2	√	6	X	√	1	√	1	1	X	8	8		
	30	√	1	√	Х	√	√	√	1	/	X	0	8		
	31	√	√	1	X	√	1	1	1	√	X	0	8		
	32	/	√	1	X	1	1	√	1	1	X	0	8		
	33	√	1	√	Х	1	1	1	1	1	X	0	8		
	34	√	1	√	х	√	1	1	1	1	X	0	8		
	35	\	√	1	Х	2	2	1	√	1	X	4	8		
	totals	5	2	11	6	8	7	2	3	7	0	51	8		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: 81.0220523.00 START DATE: NEB PROJECT NUMBER: ORGANISM: Ceriodaphnia dubia 9/8/17

	I NOMBE				323.00		ORGA						DATE.	7/0	r -
												Total Live	# Live	Analyst-	Analyst
	Day					Rep	licate					Young	Adults	Transfer	Counts
Concentration	Number	Α	В	С	D	Ē	F	G	Н	I	J				
	0	√	✓	✓	√	✓	1	✓	✓	1	1		10		
	1	✓	1	✓	✓	1	1	√	√	✓	✓		10	. ==	
	2	1	✓	✓	✓	1	✓	✓	✓	√	✓	0	10		
	3	1	✓	✓	✓	1	1	1	√	1	1	0	10		1
	4	√	✓	√	1	1	1	1	√	1	1	0	10		
	5	\	✓	1	✓	1	√	1	√	1	1	0	10		+
	6	\	√	√	√	1	1	1	>	1	1	0	10		
	7	\	√	√	√	1	1	√	\	1	1	0	10		
	8	\	✓	√	√	1	1	1	\	1	1	0	10		
	9	1	1	√	1	1	1	√	√	1	1	0	10		
	10	1	1	1	1	1	1	1	√	1	1	0	10		
	11	√	V	√	1	1	1	1	√	1	√	0	10		
	12	V	V	√	1	1	1	1	1	1	1	0	10		
	13	√	1	1	1	1	1	1	√	1	1	0	10		
	14	1	1	1	1	1	1	1	√	1	1	0	10		0
	15	1	1	3	2	1	1	1	√	1	1	7	10		
	16	1	1	√	4	1	1	1	√	1	1	4	10		1
	17	√	√/x	1	1	1	1	1	√	1	1	0	9		
0.75 g/L	18	1	Х	1	√	1	1	1	√	1	1	0	9		
	19	1	Х	1	1	1	1	1	√	1	1	0	9		
	20	\	Х	1	√	1	1	1	1	1	1	1	9		
	21	1	Х	1	√	1	1	1	1	1	1	0	9		7
	22	1	Х	1	1	4	1	1	√	1	1	5	9		
	23	1	Х	1	2	1	1	√/x	1	1	1	2	8		
	24	1	Х	1	1	1	1	Х	1	1	1	0	8		
	25	1	Х	√	√	1	1	х	1	1	1	0	8		
	26	√/x	х	1	1	1	1	Х	√	1	1	0	7		
	27	X	Х	1	5	1	1	Х	1	1	1	5	7		
	28	X	Х	1	1	1	1	Х	√	1	1	0	7	1	
	29	X	X	1	1	1	3	X	1	2	1	6	7		11
	30	X	X	1	1	1	1	X	1	1	1	0	7		
	31	X	X	4	1	4	1	X	1	1	4	12	7		
	32	X	X	<u>√</u>	1	1	1	X	1	1	1	0	7	-	
	33	X	X	√	√	1	1	X	√	1	1	0	7		
	34	X	X	1	1	1	1	X	1	1	1	0	7		
	35	X	X	√	√	√	1	X	√	1	1	0	7		
	totals	1	0	7	13	10	3	0	1	3	4	42	7		1

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received, Clerk's Office 5/29/2018

SAMPLE ID:

NaCI 10¹⁰C START DATE: 81.0220523.00 ORGANISM: Ceriodaphnia dubia 9/8/17 NEB PROJECT NUMBER:

	T				3323.00				Cerioaaj			START		<i>3</i> 10	
												Total Live	# Live	Analyst-	Analys
	Day					Rep	licate					Young	Adults	Transfer	Count
Concentration	Number	Α	В	С	D	Е	F	G	Н	I	J				
	0	√	✓	✓	✓	√	✓	✓	✓	1	✓		10		
	1	√	✓	√	1	√	✓	✓	✓	1	✓	1	10		
	2	√	✓	1	√	1	✓	1	✓	1	✓	0	10		i.
	3	√	✓	√	1	1	√	1	✓	1	✓	0	10		
	4	✓	✓	✓	1	✓	✓	√	✓	✓	✓	0	10		0
	5	✓	√	✓	✓	1	1	✓	✓	✓	1	0	10		
	6	1	1	✓	✓	1	✓	✓	✓	✓	1	0	10		
	7	√	✓	√	✓	✓	1	✓	✓	√	1	0	10		
	8	1	✓	✓	✓	✓	1	✓	✓	√	✓	0	10		
	9	1	1	√	✓	✓	✓	✓	1	✓	1	0	10		-
	10	√	✓	1	√	1	1	1	1	√	1	0	10		
	11	√	✓	✓	✓	1	1	✓	✓	1	1	0	10		
	12	√	✓	\	✓	1	✓	✓	✓	1	1	0	10		
	13	√	✓	\	√	√	1	✓	√	1	1	0	10		
	14	√	1	√	V	1	1	√	1	1	1	0	10		
	15	2	√	1	√	√	1	√	1	1	5	7	10		
	16	√	1	√	1	✓	✓	1	1	1	1	0	10		
	17	√	1	1	1	1	✓	1	1	V	1	0	10		
1.0 g/L	18	√	1	1	1	1	√	✓	1	1	1	0	10	4	+ -
	19	√	1	1	1	1	1	1	1	1	1	0	10		
	20	√	1	1	1	1	V	1	1	1	1	0	10		
	21	√	1	4	5	1	1	1	√	5	1	14	10		
	22	√	1	√	1	1	1	√	√	1	3	3	10		
	23	√	V	√	V	√	1	√	√	1	1	0	10		
	24	√	V	1	√	1	1	1	1	1	1	0	10		
	25	√	1	1	1	√	1	1	√	1	1	0	10		
	26	1	√	1	1	1	1	1	1	1	1	0	10	1	
	27	√	2	1	1	1	1	1	✓	1	1	2	10		
	28	√	1	√	V	V	V	1	1	1	1	0	10		
	29	√	1	5	4	1	1	1	√	3	2	14	10		
	30	/	√	√	√	√	1	1	2	1	1	2	10		
	31	V	√	√	1	1	1	1	1	1	1	0	10		
	32	1	1	1	1	1	1	1	1	1	1	0	10		
	33	1	1	1	1	1	1	1	1	1	1	0	10		
	34	1	1	1	1	1	1	1	1	1	1	0	10		
	35	1	1	1	1	1	1	1	1	1	1	0	10		
	totals	2	2	9	9	0	0	0	2	8	10	42	10		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received Clerk's Office 5/29/2018 START DATE: 81.0220523.00 NEB PROJECT NUMBER: ORGANISM: Ceriodaphnia dubia 9/8/17

	INCIVIBLE				0525.00				Certodaj			START	,	7/0	7
												Total Live	# Live	Analyst-	Analys
	Day					Rej	olicate			_		Young	Adults	Transfer	Coun
Concentration	Number	Α	В	С	D	Е	F	G	Н	I	J				
	0	√	✓	√	√	✓	✓	√	√	✓	✓		10	-	
	1	✓	✓	✓	✓	✓	✓	√	✓	✓	1		10		
	2	√	✓	✓	✓	✓	/	√	✓	√	✓	0	10		1
	3	√	✓	✓	✓	✓	✓	✓	✓	√	✓	0	10		1
	4	√	✓	✓	✓	✓	✓	✓	✓	√	1	0	10		
	5	√	✓	√	✓	✓	✓	√	✓	1	✓	0	10		
	6	√	✓	1	✓	✓	✓	✓	✓	1	1	0	10		
	7	✓	✓	✓	✓	✓	1	✓	1	✓	1	0	10		
	8	√	✓	✓	✓	✓	1	✓	✓	1	1	0	10	-	1
	9	√	✓	√	√	1	✓	✓	1	1	1	0	10		1
	10	√	✓	1	1	✓	✓	√	✓	1	1	0	10		
	11	✓	1	1	1	1	/	1	✓	1	1	0	10		
	12	√	✓	✓	✓	1	1	✓	✓	1	1	0	10		
	13	1	✓	√	✓	1	1	>	√	1	1	0	10		
	14	√	1	√	√	1	1	>	1	1	1	0	10		
	15	. ✓	1	1	2	2	✓	✓	√	1	2	7	10		
	16	✓	√	\	√	√	1	\	√	1	1	0	10		
	17	✓	1	\	√	√	V	>	√	1	1	0	10		
1.25 g/L	18	√	✓	✓	√	√	/	>	√	1	1	0	10	1	1
	19	✓	1	1	1	√	✓	√	1	1	1	0	10		
	20	√	✓	✓	√	✓	5	\	√	1	1	5	10		
	21	√	1	1	√	1	✓	\	2	1	1	2	10		
	22	√	1	1	1	√	✓	1	1	2	1	3	10		
	23	√	1	\	1	√	1	\	√	1	1	0	10		
	24	√	1	V	1	√	√/X	√	√	1	1	0	9		71_
	25	√/x	1	√	1	1	X	1	√	1	1	0	8		
	26	X	√	√	1	√	X	√	√	1	1	0	8		
	27	Х	1	1	1	√	X	√	√	1	1	0	8		
	28	X	√	√	√	1	Х	1	1	1	1	0	8	Ties Si	
	29	X	1	√	1	√	Х	✓	√	5	1	5	8		
	30	X	√	2	2	√	X	>	√	/	3	7	8		
	31	Х	√	√	√	√	Х	✓	√	1	√	0	8		
	32	X	√	1	V	1	Х	√	1	1	1	0	8		
	33	Х	√	√	√	1	х	1	1	1	1	0	8		
	34	X	1	1	1	1	Х	1	1	1	1	0	8		
	35	X	1	✓	/	1	X	1	1	1	1	0	8		
	totals	0	0	3	5	2	5	0	2	7	5	29	8		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received, Clerk's Office 5/29/2018 9/8/17 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: NEB PROJECT NUMBER:

	1 INCIVIDE:				0323.00				Certoda			Struct	,	710	
												Total Live	# Live Adults	Analyst- Transfer	Analyst Counts
	Day	-					licate					Young	Addits	Transici	Count
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0		✓	/	√	✓	_ ✓	✓	√	√	√ .		10		
	1	✓	/	V	✓	√	√	✓	✓	✓	√		10		
	2	√	✓	√	√	√	✓	√	√	√	✓	0	10		
	3	√	√	V	√	✓	√	√	√	✓	√	0	10		
	4	√	/	√	√	√	√	√	√	1	√	0	10		-
	5	√	0	10											
	6	√	V	/	√	√	√	√	√	/	√	0	10		
	7	√	/	√	0	10									
	8	✓	√	V	√	√	√	√	√	✓	✓	0	10		-
	9	✓	1	√	√	√	✓	√	√	✓	✓	0	10		
	10	√	√	√	✓	✓	√	✓	√	1	✓	0	10		
	11	√	√	✓	✓	✓	✓	✓	√	✓	✓	0	10		
	12	✓	✓	√	✓	✓	✓	✓	✓	✓	√	0	10		
	13	√	✓	✓	✓	✓	✓	✓	√	✓	√	0	10		
	14	√	√	✓	✓	1	✓	✓	✓	✓	√	0	10		
	15	√	✓	✓	✓	1	✓	✓	✓	✓	✓	1	10		
	16	√	1	✓	√	✓	✓	✓	✓	✓	✓	0	10		
	17	✓	√	✓	✓	1	✓	✓	✓	1	✓	0	10		
1.5 g/L	18	√	✓	✓	✓	✓	✓	✓	✓	1	✓	0	10		
	19	√	✓	✓	1	√	✓	✓	√	1	✓	0	10		
	20	✓	✓	√	1	✓	✓	✓	✓	1	✓	0	10		
	21	√	1	1	1	1	1	✓	1	1	✓	0	10		
	22	√	1	1	1	1	✓	✓	✓	3	1	3	10		
	23	√	√	✓	✓	1	1	√	✓	1	1	0	10		
	24	1	1	1	✓	✓	✓	✓	√	1	1	0	10		1
	25	√	1	✓	✓	✓	✓	✓	✓	1	1	0	10		
	26	1	1	1	✓	1	✓	✓	✓	1	1	0	10		
	27	√	✓	1	1	1	1	✓	✓	1	1	0	10		
	28	√	1	1	✓	1	1	✓	1	1	1	0	10		
	29	1	1	1	√	1	1	√	✓	1	1	0	10		
	30	√	1	√	1	√	1	1	√	1	1	0	10		
	31	√	√	√	√	1	1	√	1	1	1	0	10		
	32	√	1	1	1	1	√	1	√	1	1	0	10		
	33	1	1	1	V	1	1	√	√	1	1	0	10		
	34	√	1	1	√	1	√	√	1	1	1	0	10		
	35	√	1	√	√	1	1	V	√	1	1	0	10		
	totals	0	0	0	0	1	0	0	0	3	0	4	10		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received, Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

	1														
	D. E. A.											Total Live	# Live Adults	Analyst- Transfer	Analys Counts
	Day						licate					Young	Addits	Transier	Cour
Concentration	Number	A	В	С	D	Е	F	G	Н	I	J				
	0	√	√	√	✓	√	V	✓	√	√	√		10		
	1	√	V	√	V	✓	1	√	√	√	✓		9		-
	2	√	√	√	√	√	√	✓	√/x	✓	√	0	9		-
	3		√	√	/	√	/	√	X	√	✓	0	9		
	4	√	X	√	√	0	9		-						
	5	√	√	√	√	√	✓	√	X	✓	√	0	9		-
	6	√	1	√	√	V	1	1	X	✓	√	0	9		-
	7	√	√	√	√	1	√	√	X	√	✓	0	9		
	8	√	√	✓	√	1	√	√	X	✓	✓	0	9		-
	9	√	✓	✓	√	√	1	√	X	✓	✓	0	9		
	10	√	✓	√	✓	✓	√	✓	X	✓	√	0	9		
	11	√	✓	√	√	√	✓	✓	X	✓	✓	0	9		
	12	√	✓	√	1	✓	✓	✓	X	✓	1	0	9		
	13	√	√	✓	1	✓	✓	✓	X	✓	✓	. 0	9		
	14	✓	√	✓	✓	✓	✓	✓	X	✓	✓	0	9		_
	15	√	√	✓	✓	✓	✓	1	X	✓	√	0	9		
	16	√	✓	✓	✓	√	✓	✓	X	✓	✓	0	9		
	17	√	✓	✓	✓	✓	√	✓	X	✓	✓	0	9		
1.75 g/L	18	✓	✓	✓	√	✓	✓	✓	X	✓	✓	0	9		
	19	✓	1	✓	√	✓	1	√	X	1	✓	0	9		
	20	✓	✓	1	1	✓	✓	✓	X	✓	✓	0	9		
	21	✓	1	√	1	1	1	1	X	✓	1	0	9		
	22	✓	1	✓	1	1	1	1	X	1	1	0	9		
	23	✓	1	1	√	✓	✓	1	X	1	1	0	9		
	24	✓	1	√	1	1	1	1	X	1	1	0	9		
	25	✓	✓	√	1	√	✓	✓	X	✓	1	0	9		
	26	✓	1	1	1	✓	1	✓	X	1	1	0	9		
	27	✓	1	1	1	✓	1	√	X	1	1	0	9		
	28	✓	√	√	✓	1	1	✓	X	1	1	0	9		
	29	√	1	>	√	1	1	1	X	1	1	0	9		
	30	✓	1	√	√	1	1	1	X	1	1	0	9		
	31	√	1	√	√	1	1	1	X	1	√	0	9		
	32	√	√	·/	√	1	1	√	X	1	1	0	9		
	33	√	1	✓	1	1	1	1	X	1	1	0	9		
	34	√	1	\	1	1	√	√	X	1	1	0	9		
	35	√	1	\	√	1	1	1	X	1	1	0	9		
	totals	0	0	0	0	0	0	0	0	0	0	0	9		1

		TY TEST BROOD DATA SHEET	5/20/2018	
SAMPLE ID:	lectroffic i filling.	Received, Clerk's Office	0/29/2010	
NEB PROJECT NUMBER:	81.0220523.00	ORGANISM: Ceriodaphnia dubia	START DATE:	9/8/17

	Tel														
					Total	# Live	Analyst-	Analyst							
	Day					Rep	licate					Live Young	Adults	Transfer	Counts
Concentration	Number	Α	В	С	D	Е	F	G	Н	I	J				
	0	1	1	1	1	1	1	1	1	1	√		10		
	1		1	1	1	√	1	1	1	1	1		10		
	2	√	1	1	√	√	1	1	√	1	√	0	10		
	3	. ✓	1	V	√	√	√	1	✓	1	√	0	10		
	4	\	1	√	√	1	1	1	√	1	1	0	10		-
	5	>	1	√	√	1	1	1	√	1	1	0	10		i I
	6	>	1	√	√	√	√	1	1	1	1	0	10		
	7	\	1	√	1	1	1	1	√	1	1	0	10		
	8	\	1	√	1	1	1	1	1	1	1	0	10		
	9	√	1	1	√	1	1	✓	√/x	1	1	0	9		
	10	✓	1	√	√	1	✓	✓	X	1	1	0	9		
	11	✓	1	1	√	1	1	1	X	1	1	0	9		
	12	√	1	1	1	✓	1	✓	X	1	✓	0	9		
	13	1	1	✓	√	√/x	✓	1	X	1	1	0	8		
	14	√	√/x	√	√	X	✓	1	X	1	1	0	7		1
	15	√	X	V	√	X	✓	1	X	1	1	0	7		
	16	✓	X	√	1	X	√	✓	X	1	1	0	7		
	17	✓	X	✓	√	X	√	1	X	1	1	0	7		
2.0 g/L	18	✓	X	√	✓	X	✓	1	X	1	1	0	7		
	19	✓	X	√	✓	X	✓	✓	X	1	1	0	7		
	20	✓	X	2	1	X	✓	1	X	1	1	2	7		
	21	1	X	1	√	X	✓	✓	X	1	1	0	7		
	22	1	X	√	√	X	√	1	X	1	1	0	7		
	23	√	X	1	√	X	✓	1	X	1	1	0	7		1
	24	√	X	✓	√	X	✓	✓	X	1	✓	0	7		
	25	√	X	✓	✓	X	1	1	X	✓	1	0	7		
	26	✓	X	✓	✓	X	✓	1	X	1	1	0	7		-
	27	✓	X	✓	✓	Х	1	1	Х	1	✓	0	7		
	28	√	X	1	√	X	✓	✓	X	✓	1	0	7		
	29	√	X	√	1	X	√	1	X	✓	1	0	7		
	30	√	X	✓	✓	X	✓	1	X	1	1	0	7		
	31	✓	X	✓	√	X	√	1	X	1	1	0	7	<u></u>	
	32	√	X	✓	✓	X	✓	1	X	1	1	0	7		
	33	✓	X	√/x	√	X	1	1	X	1	1	0	6		
	34	√	X	X	✓	X	✓	1	X	√	1	0	6		
	35	√	X	X	√	X	√	V	X	1	1	0	6		
	totals	0	0	2	0	0	0	0	0	0	0	2	6		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17 NEB PROJECT NUMBER:

ED I ROJEC	I NUMBE.	IX,		01.022	0323.00		ORGA	11101111	Certodai	Jimic Co	1014	START	Dirie.	9/8	
												Total	# Live	Analyst-	Analy
	Day					Rep	olicate					Live Young	Adults	Transfer	Cour
Concentration	Number	Α	В	С	D	E	F	G	Н	I	J				
	0	√	1	√	1	1	1	1	1	1	1		10		
	1	_	1	√	1	√	1	√	1	1	1		10		
	2	√	1	√	1	1	1	1	1	1	1	0	10		
	3	√	1	√	1	√	√	1	1	1	1	0	10		
	4	√/x	1	√	1	√	√	√	1	1	1	0	9		
	5	X	1	√	V	√	1	√/x	1	1	1	0	8		
	6	X	√/x	1	1	√	1	X	1	1	1	0	7		
	7	X	Х	√	1	√	1	Х	√/x	1	1	0	6		
	8	X	Х	√	1	√	1	Х	X	1	1	0	6		
	9	X	Х	1	1	√/x	1	Х	Х	1	1	0	5		
	10	X	Х	√	1	Х	1	Х	Х	1	1	0	5		
	11	X	Х	√	1	Х	1	Х	Х	1	1	0	5		
	12	X	Х	√	1	Х	1	Х	Х	1	1	0	5		
	13	X	Х	1	1	Х	1	Х	Х	1	1	0	5		
	14	X	Х	√	1	Х	√/x	Х	Х	1	1	0	4		
	15	X	Х	√	1	Х	Х	Х	Х	1	1	0	4		
	16	X	Х	1	1	Х	Х	Х	Х	1	√/x	0	3		
	17	X	Х	√	1	Х	Х	Х	Х	1	X	0	3		
2.25 g/L	18	Х	Х	√	1	X	Х	Х	Х	1	X	0	3		
	19	X	Х	√	√/x	X	Х	Х	Х	1	X	0	2		
	20	X	Х	√	Х	Х	Х	Х	Х	1	X	0	2		
	21	X	Х	√	х	X	Х	Х	Х	1	х	0	2		
	22	Х	Х	√	Х	Х	Х	Х	X	1	X	0	2		
	23	X	Х	√	х	X	Х	Х	Х	1	Х	0	2		
	24	X	х	√	Х	Х	Х	Х	X	1	X	0	2		
	25	X	Х	1	Х	X	Х	Х	Х	V	Х	0	2		
	26	X	Х	√	Х	Х	Х	Х	X	1	Х	0	2		
	27	X	Х	/	Х	X	Х	Х	Х	1	X	0	2		
	28	Х	Х	1	Х	X	Х	Х	Х	1	Х	0	2		
	29	X	Х	√	Х	X	Х	Х	X	1	Х	0	2		
	30	X	Х	√	Х	Х	Х	Х	Х	1	Х	0	2		
	31	X	Х	/	Х	Х	Х	Х	Х	1	X	0	2		
	32	Х	Х	√	Х	Х	Х	Х	Х	1	Х	0	2		
	33	Х	Х	1	Х	Х	Х	Х	Х	1	Х	0	2		
	34	Х	Х	√	Х	X	Х	Х	X	1	X	0	2		
	35	X	Х	1	Х	X	Х	X	X	1	X	0	2		
	totals	0	0	0	0	0	0	0	0	0	0	0	2		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

						Dav	olicate					Total Live	# Live Adults	Analyst- Transfer	Analys Count
C	Day Number	Α	В	С	D	E	F	G	Н	I	J	Young			
Concentration	0		✓ /	✓	✓	✓	1	√ √		1	\ \	1	10		
	1	√	√	√	√	√	1	V	<i>\</i>	1	1		10		
	2	√	√	1	1	1	1	√	√	1	1	0	10		
	3	√/x	1	1	1	1	1	1	1	1	√/x	0	8		
	4	X	√/x	√/x	√/x	1	1	1	√/x	1	X	0	4		
	5	X	X	Х	Х	1	1	1	X	1	Х	0	4		
	6	Х	Х	Х	Х	1	√/x	√/x	Х	√/x	X	0	1		7
	7	X	Х	Х	Х	√/x	Х	Х	Х	X	X	0	0		
	8	X	Х	Х	Х	Х	Х	Х	Х	X	Х	0	0		7
	9	X	Х	Х	Х	Х	Х	Х	Х	X	Х	0	0		
	10	X	Х	Х	Х	Х	X	Х	X	X	Х	0	0		
	11	X	X	X	X	Х	Х	Х	Х	Х	X	0	0		
	12	X	X	X	X	X	X	Х	X	X	Х	0	0		
	13	X	X	X	X	X	Х	X	X	X	X	0	0		-
	14	X	X	X	X	X	Х	X	X	X	X	0	0		
	15	X	X	X	X	X	X	X	X	X	X	0	0		
	16	X	X	X	X	X	X	X	X	X	X	0	0		
	17	X	X	X	X	X	X	X	X	X	X	0	0		Ų.
2.5 g/L	18	X	X	X	X	X	X	X	X	X	X	0	0		
	19	X	X	X	X	X	X	X	X	X	X	0	0		
	20	X	X	X	X	X	Х	X	X	X	X	0	0		
	21	X	X	X	X	X	X	X	X	X	X	0	0		
	22	X	X	X	X	X	X	X	X	X	X	0	0		
	23	X	X	X	X	X	X	X	X	X	X	0	0		
	24	X	X	X	X	X	X	X	X	X	X	0	0		
	25	X	X	X	X	X	X	X	X	X	X	0	0		
	26	X	X	X	X	X	X	X	X	X	X	0	0		
	27	X	X	X	X	X	X	X	X	X	X	0	0		
	28	X	X	X	X	X	X	X	X	X	X	0	0		
	29	X	X	X	X	X	X	X	X	X	X	0	0		
	30	X	X	X	X	X	X	X	X	X	X	0	0	25	
	31	X	X	X	X	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	X	X	0	0		
	35	X	X	X	X	X	X	X	X	X	X	0	0		
	totals	0	0	0	0	0	0	0	0	0	0	0	0		

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

SAMPLE ID: Electronic Filing: Received Clerk's Office 5/29/2018 SAMPLE ID: NEB PROJECT NUMBER: 81.0220523.00 ORGANISM: Ceriodaphnia dubia START DATE: 9/8/17

	4														
												Total Live	# Live Adults	Analyst- Transfer	Analys Count
	Day						licate					Young	Adults	Transfer	Coun
Concentration	Number	Α	В	С	D	Е	F	G	Н	I	J				
	0	√	√	√	√	✓	✓	√	_ ✓	✓	√		10		
	1	√	√	✓	√	✓	√	✓	√	✓	✓		10		
	2	✓	✓	✓	1	✓	✓	✓	✓	✓	√/x	0	9		
	3	✓	✓	√/x	√/x	√/x	✓	√/x	√/x	√/x	X	0	7		
	4	√/x	√/x	X	X	X	✓	X	X	X	X	0	1		
	5	X	X	X	X	X	✓	X	X	X	X	0	1		
	6	X	X	X	X	X	√/x	X	X	X	X	0	0		
	7	X	X	X	X	X	X	X	X	X	X	0	0		
	8	X	X	X	X	X	X	X	X	X	X	0	0		
	9	X	X	X	X	X	X	X	X	X	X	0	0		
	10	X	X	X	X	X	X	X	X	X	X	0	0		
	11	X	X	X	X	X	X	X	X	X	X	0	0		
	12	X	X	X	X	X	X	X	X	X	X	0	0		
	13	X	X	X	X	X	X	X	X	X	X	0	0		
	14	X	X	X	X	X	X	X	X	X	X	0	0		
	15	X	X	X	X	X	X	X	X	X	X	0	0		
	16	Х	X	X	X	X	X	X	X	X	X	0	0		
	17	X	X	X	X	X	X	X	X	X	X	0	0		
2.75 g/L	18	X	X	X	X	X	X	X	X	X	X	0	0		
	19	X	X	X	X	X	X	X	X	X	X	0	0		
	20	X	Х	X	Х	X	X	X	X	Х	Х	0	0		
	21	Х	X	X	Х	Х	X	X	X	Х	Х	0	0		
	22	Х	Х	X	X	X	X	Х	X	X	Х	0	0		
	23	Х	Х	Х	Х	Х	X	Х	Х	Х	х	0	0		
	24	Х	Х	Х	X	Х	X	Х	X	Х	Х	0	0		
	25	Х	Х	Х	Х	х	X	Х	Х	Х	Х	0	0		
	26	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	0	0		
	27	Х	Х	Х	X	Х	X	Х	Х	X	Х	0	0		
	28	Х	Х	X	Х	Х	Х	Х	X	Х	Х	0	0		
	29	Х	Х	X	Х	Х	X	Х	Х	Х	Х	0	0		
	30	X	X	X	X	X	X	X	X	X	X	0	0		
	31	X	X	X	X	X	X	X	X	X	X	0	0		
	32	X	X	X	X	X	X	X	X	X	X	0	0		
	33	X	X	X	X	X	X	X	X	X	X	0	0		
	34	X	X	X	X	X	X	X	X	X	X	0	0		
	35	X	X	X	X	X	X	X	X	X	X	0	0		
	totals	0	0	0	0	0	0	0	0	0	0	0	0		

NEW ENGLAND BIOASSAY - CERIODAPHNIA CHRONIC TEST OBSERVATION SHEET Electronic Filing: Received, Clerk's Office 5/29/2018

SAMPLE ID:	NaCl 10°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are
		judged to be smaller in size than adults of the same age observed in standard testing

CONCENTRATION: CONTROL

DAY	OBSERVATION
1	
2	
3	Small
4	Small
5	
6	Small
7	Small
8	Small
9	Small
10	Small
11	
12	Organisms have "fungus" like growth on bodies.
13	Organisms have "fungus" like growth on bodies.
14	Organisms have "fungus" like growth on bodies.
15	
16	
17	
18	Organisms have "fungus" like growth on bodies.
19	Organisms have "fungus" like growth on bodies.
20	Organisms have "fungus" like growth on bodies.
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

NEW ENGLAND		HNIA CHRONIC TEST OBSERVATION SHEET
SAMPLE ID:	_{NaCFI} Electronic	Filing: Received, Clerk's Office 5/29/2018 Unless otherwise Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 0.25 g/L

DAY	OBSERVATION
1	
2	
3	
4	Small
5	
6	Small
7	Small
8	Small
9	
10	Small
11	
12	Organisms have "fungus" like growth on bodies.
13	Organisms have "fungus" like growth on bodies.
14	Organisms have "fungus" like growth on bodies.
15	
16	
17	
18	Organisms have "fungus" like growth on bodies.
19	Organisms have "fungus" like growth on bodies.
20	Organisms have "fungus" like growth on bodies.
21	Organisms have "fungus" like growth on bodies.
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

SAMPLE ID:	NaCT 10 Etron	ic Filing: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are
		judged to be smaller in size than adults of the same age observed in standard testing.

CONCENTRATION: 0.5 g/L

DAY	OBSERVATION
1	
2	
3	
4	Small
5	
6	Small
7	Small
8	Small
9	Small
10	Small
11	
12	Organisms have "fungus" like growth on bodies.
13	Organisms have "fungus" like growth on bodies.
14	Organisms have "fungus" like growth on bodies.
15	
16	
17	
18	Organisms have "fungus" like growth on bodies.
19	Organisms have "fungus" like growth on bodies.
20	Organisms have "fungus" like growth on bodies.
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	

NEW ENGLA	ND BIOASSAY - CERIODAPHI	NIA CHRONIC TEST OBSERVATION SHEET -iling: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaC TO CUTONIC F	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 0.75 g/L

1 Small 5 Small 7 Small 8 Small 9 Small 10 Small 11	AY	OBSERVATION
3	1	
4 Small 5 Small 7 Small 8 Small 9 Small 10 Small 11	2	
5 Small 7 Small 8 Small 9 Small 10 Small 11 12 13 14 Organisms have "fungus" like growth on bodies. 15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31 32	3	
6 Small 7 Small 8 Small 9 Small 10 Small 11	4	Small
Small Small Small Small Small Organisms have "fungus" like growth on bodies. Organisms have "fungus" like growth on bodies.	5	
Small Small Small Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31	6	Small
9 Small 10 Small 11 12 13 14 Organisms have "fungus" like growth on bodies. 15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31	7	Small
10 Small 11 12 13 14 Organisms have "fungus" like growth on bodies. 15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31 32	8	Small
11 12 13 14 Organisms have "fungus" like growth on bodies. 15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 Organisms have "fungus" like growth on bodies. 24 25 26 27 28 29 30 31 31	9	Small
12 13 14 Organisms have "fungus" like growth on bodies. 15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31	10	Small
13 14 Organisms have "fungus" like growth on bodies. 15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31	11	
Organisms have "fungus" like growth on bodies.	12	
15 16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31	13	
16 17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31	14	Organisms have "fungus" like growth on bodies.
17 18 Organisms have "fungus" like growth on bodies. 19 Organisms have "fungus" like growth on bodies. 20 Organisms have "fungus" like growth on bodies. 21 Organisms have "fungus" like growth on bodies. 22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31	15	
Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31	16	
Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31	17	
Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 31	18	Organisms have "fungus" like growth on bodies.
Organisms have "fungus" like growth on bodies.	19	Organisms have "fungus" like growth on bodies.
22 Organisms have "fungus" like growth on bodies. 23 24 25 26 27 28 29 30 31 32	20	Organisms have "fungus" like growth on bodies.
23 24 25 26 27 28 29 30 31 32	21	Organisms have "fungus" like growth on bodies.
24 25 26 27 28 29 30 31 32	22	Organisms have "fungus" like growth on bodies.
25 26 27 28 29 30 31 32	23	
26 27 28 29 30 31	24	
27 28 29 30 31 32	25	
28 29 30 31 32	26	
29 30 31 32	27	
30 31 32	28	
31 32	29	
32	30	
	31	
	32	
	33	
34		

NEW ENGLANI	BIOASSAY - CERIODAPHI	NIA CHRONIC TEST OBSERVATION SHEET
SAMPLE ID:	NaChi Curonic F	iling: Received Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 1.0 g/L

DAY	OBSERVATION
1	
2	
3	
4	Small
5	
6	Small
7	Small
8	Small
9	Small
10	Small
11	
12	
13	
14	
15	
16	
17	
18	Organisms have "fungus" like growth on bodies.
19	Organisms have "fungus" like growth on bodies.
20	2 still small
21	Small
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

NEW ENGLANI	D BIOASSAY - CERIODAPH	NIA CHRONIC TEST OBSERVATION SHEET - iling: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID: _	NaCF10°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 1.25 g/L

DAY	OBSERVATION
1	
2	
3	
4	Small
5	
6	Small
7	Small
8	Small
9	Small
10	Small
11	
12	
13	
14	
15	
16	
17	
18	Organisms have "fungus" like growth on bodies.
19	Organisms have "fungus" like growth on bodies.
20	Half are still small
21	Small, Organisms have "fungus" like growth on bodies.
22	Organisms have "fungus" like growth on bodies.
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	

NEW ENGLAND I	BIOASSAY - CERIODA	PHNIA CHRONIC TEST OBSERVATION SHEET C Filing: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaCT10°C	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are
		judged to be smaller in size than adults of the same age observed in standard testing.

CONCENTRATION: 1.5 g/L

DAY	OBSERVATION
1	
2	
3	
4	Small
5	
6	Small
7	Small
8	Small
9	Small
10	Small
11	
12	Small
13	
14	
15	
16	
17	
18	About half are still small
19	About half are still small
20	About half are still small
21	Small, Organisms have "fungus" like growth on bodies.
22	Small, Organisms have "fungus" like growth on bodies.
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	

NEW ENGLANI	BIOASSAY - CERIODAPH	INIA CHRONIC TEST OBSERVATION SHEET Filing: Received, Clerk's Office 5/29/2018 Organisms are considered to be healthy and swimming normally unless otherwise
SAMPLE ID:	NaCFIECTIONIC	Organisms are considered to be healthy and swimming normally unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 1.75 g/L

DAY		OBSERVATION
1		
2		
3		
4	Small	
5		
6	Small	
7	Small	
8	Small	
9		
10	Small	
11		
12	Small	
13		
14		
15		
16		
17		
18		
19	Small	
20	Small	
21	Small	
22	Small	
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34	201	

NEW ENGLAND I		NIA CHRONIC TEST OBSERVATION SHEET
SAMPLE ID:	NaC Electronic I	Filing: Received Clerk's Office 5/29/2018 unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 2.0 g/L

DAY	OBSERVATION	
1		
2		
3		
4	Small	
5		
6	Small	
7	Small	
8	Small	
9		
10	Small	
11		
12	Small	
13		
14		
15		
16		
17		
18	Small	
19	Small	
20	Small	
21	Small	
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

NEW ENGLAND		in Filing Possived Clerkle Office F/20/2049
SAMPLE ID:	NaCFIECTION	ic Filing: Received Clerk's Office 5/29/2018 unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 2.25 g/L

DAY	OBSERVATION	
1		
2		
3		
4	Small	
5		
6	Small	
7	Small	
8	Small	
9	Small	
10	Small	
11		
12	Small	
13		
14		
15		
16		
17		
18	Small	
19	Small	
20	Small	
21	Small	
22	Small	
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

		INIA CHRONIC TEST OBSERVATION SHEET
SAMPLE ID:	Nac Electronic	Filing: Received Clerk's Office 5/29/2018 unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 2.5 g/L

DAY	OBSERVATION	
1		
2		
3	Small and transparent	
4	Small and transparent	
5		
6	Small and transparent	
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

NEW ENGLAND D		AFRINIA CHRONIC LEST OBSERVATION SHEET
SAMPLE ID:	_{NaC} Electror	nic Filing: Received Clerk's Office 5/29/2018 unless otherwise
TEST DATE:	41524	noted in the observations below. If they are listed as "small", then the adults are

CONCENTRATION: 2.75 g/L

DAY	OBSERVATION	
1		
2		
3	Small, transparent.	
4	Small, transparent.	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		

NEB'S DATA SHE**E 1935 FOR ISOTHING: REGREVE ON GIFTK'S RELIGIOUS**

SAMPLE ID:		NaCl 10°C	1.0000500	20	TECT OR C	ANICAA		10-15-15-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
NEB PROJECT NUMBE DILUTION WATER SO			1.0220523.0 tely Hard S		TEST ORG		9/8/17	riodaphnia dubia TIME: 1245
ANALYST	TBP	TBP	TBP	КО	КО	PD	КО	THIVE. 1213
NEB Lab Synthetic Control	1	2	3	4	5	6	7	Remarks
Temp °C Initial	11.0	11.0	11.0	11.0	11.0	10.8	11.0	
D.O. mg/L Initial	9.0	9.3	9.9	10.9	10.6	10.8	10.3	
pH s.u. Initial	7.5	7.9	7.9	7.6	7.6	8.2	8.2	
Conductivity µS Initial	321	318	318	326	327	332	329	
Temp °C Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
D.O. mg/L Final	9.6	11.6	11.8	12.7	12.0	10.6	12.2	
pH s.u. Final	8.4	8.4	8.1	8.5	8.3	8.8	8.6	
Conductivity µS Final	365	349	365	356	365	367	359	
0.25 g/L	1	2	3	4	5	6	7	Remarks
Temp °C Initial	11.0	11.0	11.0	11.0	11.0	10.6	11.0	
D.O. mg/L Initial	8.8	9.3	9.9	10.9	10.6	10.9	10.7	
pH s.u. Initial	7.6	7.9	8.0	7.7	7.6	8.2	8.1	
Conductivity µS Initial	790	788	759	821	866	796	847 -	
Temp °C Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
D.O. mg/L Final	9.6	12.0	12.1	12.7	11.9	11.6	12.2	
pH s.u. Final	8.5	8.7	8.0	8.6	8.5	8.8	8.6	
Conductivity µS Final	829	805	768	832	882	803	852	
0.5 g/L	1	2	3	4	5	6	7	Remarks
Temp °C Initial	11.0	11.0	11.0	11.0	11.0	10.8	11.0	
D.O. mg/L Initial	8.9	9.3	9.8	10.9	10.9	11.0	10.8	
pH s.u. Initial	7.7	8.0	8.0	7.7	7.7	8.1	8.1	
Conductivity µS Initial	1,313	1,287	1,306	1,373	1,390	1,388	1,334	
Temp °C Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
D.O. mg/L Final	9.6	12.2	11.0	12.7	12.2	11.9	12.4	
pH s.u. Final	8.5	8.8	8.6	8.7	8.7	8.9	8.6	
Conductivity µS Final	1,319	1,270	1,333	1,347	1,380	1,363	1,315	
0.75 g/L	1	2	3	4	5	6	7	Remarks
Гетр °С Initial	11.0	11.0	11.0	11.0	11.0	10.7	11.0	
D.O. mg/L Initial	9.0	9.2	9.9	10.9	10.9	11.1	10.9	
pH s.u. Initial	7.7	8.0	8.0	7.8	7.7	8.1	8.1	
Conductivity µS Initial	1,831	1,746	1,800	1,872	1,871	1,894	1,875	
Гетр °С Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
D.O. mg/L Final	9.6	12.2	11.6	12.7	11.8	12.2	12.3	
pH s.u. Final	8.4	8.7	8.6	8.7	8.5	8.9	8.6	1
Conductivity µS Final	1,811	1,726	1,781	1,821	1,843	1,854	1,827	

NEB'S DATA SHEET GEORIGUTIING REPORT XEDANG OF KIS PHICE STORES AND ALL OF THE SHEET OF THE SHEE

SAMPLE ID:		NaCl 10°C							
NEB PROJECT NUMBE			1.0220523.0		TEST ORC		Ceriodaphnia dubia		
DILUTION WATER SO	URCE:	Moderately Hard Synthetic			START DA	ATE:	9/8/17 TIME: 1245		
1.0 g/L	1	2	3	4	5	6	7	Remarks	
Temp °C Initial	11.0	11.0	11.0	11.0	11.0	10.7	11.0		
D.O. mg/L Initial	8.9	9.3	9.9	10.8	11.1	11.1	10.9		
oH s.u. Initial	7.8	8.0	8.0	7.8	7.7	8.1	8.1		
Conductivity µS Initial	2,273	2,268	2,267	2,346	2,360	2,382	2,327		
Гетр °С Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0		
D.O. mg/L Final	9.6	11.9	11.9	12.7	12.1	12.3	12.2		
oH s.u. Final	8.5	8.7	0.6	8.8	8.7	8.9	8.6		
Conductivity µS Final	2,234	2,184	2,268	2,265	2,310	2,319	2,275		
1.25 g/L	1	2	3	4	5	6	7	Remarks	
Гетр °С Initial	11.0	11.0	11.0	11.0	11.0	10.6	11.0		
D.O. mg/L Initial	9.8	9.3	10.0	10.8	10.9	11.1	10.7		
oH s.u. Initial	7.8	8.0	8.0	7.8	7.8	8.1	8.1		
Conductivity µS Initial	2,799	2,778	2,737	2,811	2,830	2,881	2,846		
Temp °C Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0		
D.O. mg/L Final	9.6	12.1	12.0	12.6	12.1	12.3	12.1		
oH s.u. Final	8.5	8.8	8.6	8.8	8.7	8.9	8.6		
Conductivity µS Final	2,741	2,709	2,725	2,708	2,765	2,792	2,768		
1.5 g/L	1	2	3	4	5	6	7	Remarks	
remp °C Initial	11.0	11.0	11.0	10.9	11.0	11.0	11.0		
D.O. mg/L [nitial	9.7	9.4	10.0	10.7	10.9	10.7	10.8		
oH s.u. Initial	7.8	8.0	8.0	7.9	7.8	8.0	8.1		
Conductivity µS Initial	3,237	3,260	3,259	3,297	3,306	3,280	3,283		
Гетр °С Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0		
D.O. mg/L Final	9.5	11.8	12.1	12.2	11.6	12.2	12.1		
oH s.u. Final	8.4	8.7	8.6	8.6	8.7	8.7	8.6		
Conductivity µS Final	3,170	3,202	3,252	3,170	3,250	3,190	3,187		
1.75 g/L	1	2	3	4	5	6	7	Remarks	
Гетр °С Initial	11.0	11.0	11.0	10.7	11.0	11.0	12.0		
O.O. mg/L Initial	9.3	9.5	9.9	10.6	108.0	10.7	10.8		
oH s u Initial	7.8	8.0	8.0	7.9	7.8	8.0	8.1		
Conductivity µS Initial	3,747	3,690	3,705	3,809	3,683	3,890	3,786		
Temp °C Final	11.0	11.0	11.0	11.0	11.0	11.0	11.0		
D.O. mg/L Final	9.4	11.9	11.8	12.4	11.8	12.1	12.1		
oH s.u. Final	8.4	8.8	8.5	8.6	8.7	8.7	8.5		
Conductivity µS Final	3,580	3,592	3,684	3,649	3,710	3,748	3,686		

Table of Random Pern	nutations of 16	C.dubia Test ID#	17-1480
7 12 15 15 1 13 3 8 16 7	² Electronic Filing 14R	Ęcęjvęd, Clerks	Qffijge 5/29/2018
3 1 4 5 14	13 3 14 9 13 13	2 9 15 6 2	8 4 5 8
11 8 16 14 15 14 9 1 6 3	6 2 6 2 16 8 9 14 13 8 6 5	5 12 3 9 13 8 14 7 3 15	4 3 10 4 13 11 4 7
2 16 10 13 5	5 13 2 11 7 3	12 5 14 12 16	2 2 9 15
4 6 13 7 2 6 14 6 10 4		10 6 9 11 9 16 2 6 5 1	7 6 16 11 12 10 6 9
10 15 2 1 13	12 16 3 4 8 10	1 15 5 14 12	14 12 3 2
12 10 7 12 9 15 7 5 2 10	11 9 8 12 14 15 7 8 12 6 15 6	4 11 8 16 8 13 16 12 15 4	9 14 14 1 11 8 12 6
16 2 11 8 8 9 13 14 3 6	8 15 5 16 1 1 4 10 11 5 12 9	9 8 1 8 14 3 10 4 4 3	16 5 13 5 10 9 1 3
8 11 9 4 11		14 3 10 1 6	15 16 15 12
1 5 12 11 16 5 4 3 9 12	16 5 4 14 9 16 1 6 1 15 11 2	11 1 2 10 5 6 4 11 2 11	1 15 7 13 3 7 11 16
	CONC REP		
11 8 16 5 5 2 2 8 8 14		12 9 8 7 5 14 15 1 2 11	13 3 13 3 4 5 15 9
6 13 2 13 6	5 9 15 11 10 12	6 16 15 16 9	10 12 16 15
14 12 4 16 16 8 6 3 9 4	11 14 10 5 12 3 10 6 4 16 2 2	3 12 14 15 13 9 8 16 4 6	6 4 1 16 5 15 7 8
9 15 12 10 3	2 12 6 1 15 4	13 7 7 9 12	14 8 8 11
3 10 11 12 13 16 1 13 14 8	12 5 11 7 8 9 14 15 5 3 7 11	5 14 11 10 1 15 6 12 5 7	3 13 3 5 11 1 14 4
1 14 14 2 9	15 16 14 6 14 7	8 3 13 11 8	7 7 12 7
4 4 6 4 12 15 5 1 11 10	3 11 8 15 9 8 6 3 7 10 5 5	1 13 6 3 3 11 10 10 12 15	15 9 9 12 16 14 5 2
5 3 5 6 7 12 7 15 15 15	7 13 2 14 3 16 9 8 12 12 13 15	4 5 5 13 4 10 1 4 6 16	9 16 2 6 2 6 11 1
10 11 10 3 2	4 2 1 4 6 6	7 11 9 14 10	8 11 4 13
7 9 7 7 11 13 16 9 1 1	1 7 16 13 1 13 8 10 9 9 4 1	2 4 2 1 2 16 2 3 8 14	12 2 10 14 1 10 6 10
1 6 7 4 8 9 15 11 3 11	6 5 2 8 15 4 15 9 10 1 3 8	6 6 1 4 5 2 15 7 9 8	7 13 2 10 16 1 14 3
10 16 4 5 12 4 14 1 9 5		16 11 8 3 3 5 12 5 7 16	12
4 14 1 9 5 7 3 13 14 15	5 4 13 6 8 15 2 1 14 16 5 14	5 12 5 7 16 9 2 16 1 12	5 11 8 1 6 14 4 13
16 11 2 1 14 3 10 16 16 13		14 3 15 11 11 10 16 2 10 2	3 9 12 5 10 7 10 16
11 13 9 13 4	13 8 3 5 13 10	12 5 12 5 14	13 16 5 6
15 2 3 12 9 14 1 14 6 10	12 2 4 13 10 3 1 3 12 4 2 2	13 14 4 2 1 4 13 3 16 9	14 8 6 12 9 3 7 14
13 12 5 11 3	11 15 8 2 7 11	7 8 14 6 4	4 4 15 11
12 5 10 7 2 8 9 8 10 6	14 7 15 14 16 13 4 11 7 10 11 6	1 9 10 12 10 8 4 9 8 15	11 10 9 8 8 6 11 9
2 7 6 2 1	8 10 6 15 12 1	11 7 11 13 6	1 15 13 15
6 4 15 8 16 5 8 12 15 7	10 14 16 9 6 12 3 12 5 12 9 5	3 10 6 14 7 15 1 13 15 13	2 12 16 7 15 5 1 2
13 4 10 4 16	13 16 13 5 3 6	14 1 16 8 7	2 3 3 12
5 14 4 6 8	2 15 1 13 14 16	4 15 4 3 12	12 1 4 7
2 2 2 15 14 7 12 15 8 12		15 14 9 10 1 13 16 1 7 5	14 8 8 16 11 2 9 3
6 9 7 14 9	14 10 11 15 11 12	1 12 12 14 16	3 11 11 8
14 5 16 7 10 15 11 8 9 7	8 11 8 14 13 7 12 8 7 1 15 9	11 6 3 11 4 3 3 7 13 11	4 6 6 9 10 4 5 1
11 6 6 1 4 4 10 3 16 2	1 3 16 12 5 4 11 7 9 6 9 1	9 13 13 6 8 8 4 11 5 2	15 9 1 14 16 10 12 4
1 8 1 13 1	15 4 4 11 4 2	16 5 8 1 9	5 12 16 6
9 7 14 2 6 12 1 9 10 15	4 14 10 9 8 15 5 2 15 10 2 14	10 7 10 9 10 2 8 2 4 13	6 14 10 11 8 5 15 5
3 3 12 11 5	9 6 6 3 10 13	12 9 6 2 15	7 15 7 13
10 15 11 5 13 8 13 13 3 3	7 12 5 2 7 11 10 13 2 4 1 8	5 10 15 12 3 6 11 14 15 6	1 13 13 10 9 16 2 2
16 16 5 12 11	6 1 3 8 16 3	7 2 5 16 14	13 7 14 15

Brood mother source: RIMH 159 A) | Source's brood size: 20 (Qty.)

Huff and Huff 10° 9.8.17

Diood	111011101	source.	1-0.00.	12-1	7111	000	ICE S DIO	Ju 3126.	20	(Qty.)		H	UTT 9	ind 170	17 10	4.8
Tech	AH	AH	AH	AT		SIP	SIP	AH	2	AT	AT	Att	1			
Date	8,24	830	8.31	9-1		9.3	9-4	9-5		9-6	9.7	9.8	5.5			
Day acc.	0	1	2	3	4	5	6	7		8	9	10	11	12	13	14
Cup #	N	N	N	7		213	Y	y	1	Y	N	7				
2	N	N	N	N		28	Y	4	2	4	N	718				
3	N	N	2	2		2B	7	4	3	7	N	T2 Y 18				
4	N	N	2	N		2B 12	7	7	4	Y	N	73 717				
5	N	N	N	-N		2B 13	7	7	5	Y	N	T4 1/20				
6	N	N	2	7		2B 14	7	7	6	7	N	75 Y 17				
7	N	N	N	N		128	7	7	7	Y	2	717				
8	N	N	Λl	N		28	7	Y	8	4	N	× -		3 TH		
9	N	N	N	N		28	Y	Y	9	7	N	х-				
10	N	N	N	N	*>	28	4	7	10	4	2	T7 16				
11	N	N	N	N		2B 12	4	7	11	7	7	T8 Y17				
12	N	N	N	N		2B 13	4	Y	12	7	7	79 720				
13	N	N	7	N		28 13	7	7	13	7	2	T10 719				

Y = neonates present, and *criterion has been met:* ≥ 20 neonates produced in total by 3rd brood.

N = no neonates

Collection date / time

0630

2B = two broods present. **2Y** = two broods and criterion met: ≥ 20 neos. by 3rd brood.

X = brood mother dead **ae** = aborted eggs

✓ or **P** = neonates present after renewal on previous day (see time in log).

Test organism collection:

A→ = acceptable for acute testing only

T# = neonates used in test, replicate number of test noted (and brood counted).

acc. = if acclimated, H₂O type used w/ renewal this day.

Tray diagram

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:04 (p 1 of 2)

SETIS Ana	llytical Repo	orτ						Code:		17-1480 1	
Ceriodaphnia	7-d Survival an	d Reprodu	ction Te	est			1001			ew Englan	
Analysis ID:	06-0103-3211	End	dpoint:	7d Survival Ra	te		CET	IS Version:	: CETISv1	.9.2	
Analyzed:	02 Nov-17 11:0		alysis:	Untrimmed Sp		rber		ial Results			
Batch ID:	15-6387-4143	Tes	st Type:	Reproduction-	Survival (7d)	Anal	vet:			
Start Date:	08 Sep-17 12:45		otocol:	EPA/821/R-02	,	•	Dilu	-	oratory Wat	er	
=	13 Oct-17 11:20		ecies:	Ceriodaphnia d			Brin		Applicable		
Duration:	34d 23h		urce:	In-House Cultu			Age:				
					116						
Sample ID:	03-0070-8444	Cod		11EC725C			Clie		A GeoEnviro	onmental	
Sample Date:			terial:	Sodium chlorid			Proj	ect:			
Receipt Date:			urce:	GZA GeoEnvir	onmental		20		i .		
Sample Age:	13h	Sta	tion:				10	,7-0	day		
Spearman-Kä	rber Estimates							,	1		
Threshold Op	tion T	hreshold	Trim	Mu	Sigma		LC50	95% LCL	. 95% UCL		
Control Thresh	nold 0		0.00%	0.3366	0.01717		2.171	2.006	2.349		
Test Acceptal	oility Criteria	TAC L	_imits								
Attribute	Test Stat	Lower	Upper	r Overlap	Decision						
Control Resp	1	0.8	>>	Yes	Passes (Criteria					
7d Survival R	ate Summary				Calc	ulated Vari	ate(A/B)				
Conc-gm/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
0	D	10	1.0000	1,0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
0,25		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
0.5		10	0.9000	0.0000	1.0000	0.1000	0.3162	35.14%	10.0%	9	10
0,75		10	1.0000	1.0000	1,0000	0,0000	0.0000	0.00%	0.0%	10	10
1		10	1,000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1,25		10	1,000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1.5		10	1,000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1.75		10	0.9000	0.0000	1.0000	0.1000	0.3162	35.14%	10.0%	9	10
2		10	1.0000	1,0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
2.25		10	0.6000	0.0000	1.0000	0.1633	0.5164	86.07%	40.0%	6	10
2.5		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
2.75		10	0.0000	0.0000	0,0000	0.0000	0,0000		100.0%	0	10
7d Survival R	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2		Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1.0000	1.0000		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5		1,0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
0.75		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
l		1.0000	1,000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.25		1.0000	1.0000		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.5		1,0000	1,0000		1.0000	1.0000	1,0000	1.0000	1_0000	1.0000	1.0000
1.75		1.0000	1.0000		1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1,0000
2		1.0000	1.0000		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2.25		0.0000	0.0000		1.0000	1.0000	1.0000	0.0000	0.0000	1.0000	1.0000
2.5		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		0.0000	5.0000	5.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

2.75

0.0000

0.0000

0.0000

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report

Test Code:

02 Nov-17 11:04 (p 2 of 2)

17-1480 | 11-1372-5691

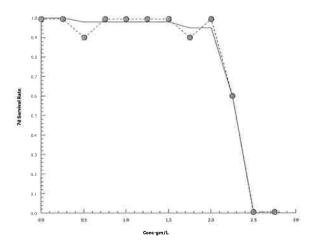
Ceriodaphnia 7-d Survival and Reproduction Test **New England Bioassay**

06-0103-3211 7d Survival Rate **CETIS Version:** CETISv1.9.2 Analysis ID: **Endpoint:** Analyzed: 02 Nov-17 11:04 Analysis: Untrimmed Spearman-Kärber Official Results: Yes

7d Survival Rate Binomials

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
2.25		0/1	0/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	1/1
2.5		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
2.75		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

Graphics



Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:04 (p 1 of 2)

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia	7-d Survival and	d Reproduction Te	est		New England Bioassay
Analysis ID:	11-1465-3370	Endpoint:	7d Survival Rate	CETIS Version	: CETISv1.9.2
Analyzed:	02 Nov-17 11:0	4 Analysis:	STP 2xK Contingency Tables	Official Result	s: Yes
Batch ID:	15-6387-4143	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	08 Sep-17 12:45	Protocol:	EPA/821/R-02-013 (2002)	Diluent: La	boratory Water
Ending Date:	13 Oct-17 11:20	Species:	Ceriodaphnia dubia	Brine: No	t Applicable
Duration:	34d 23h	Source:	In-House Culture	Age: <2	4h
Sample ID:	03-0070-8444	Code:	11EC725C	Client: GZ	A GeoEnvironmental
Sample Date:	08 Sep-17	Material:	Sodium chloride	Project:	
Receipt Date:	08 Sep-17	Source:	GZA GeoEnvironmental	vA.	
Sample Age:	13h	Station:		10,	7-day
Data Transfor	rm	Alt Hyp		NOEL LOEL	TOEL TU
Untransformed	1	C > T		2.25 > 2.25	n/a

Fisher Exa	ct/Bonterroni-Holm Test
	40000

Control vs	Group	Test Stat	P-Type	P-Value	Decision(a:5%)	
Dilution Water	0.25	1.0000	Exact	1.0000	Non-Significant Effect	
	0.5	0.5000	Exact	1.0000	Non-Significant Effect	
	0.75	1.0000	Exact	1.0000	Non-Significant Effect	
	1	1.0000	Exact	1.0000	Non-Significant Effect	
	1.25	1.0000	Exact	1.0000	Non-Significant Effect	
	1.5	1.0000	Exact	1.0000	Non-Significant Effect	
	1.75	0.5000	Exact	1.0000	Non-Significant Effect	
	2	1.0000	Exact	1.0000	Non-Significant Effect	
	2.25	0.0433	Exact	0.3901	Non-Significant Effect	

Test Acceptabili	ty Criteria	TAC Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

Conc-gm/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect	
0	D	10	0	10	1	0	0.0%	
0.25		10	0	10	1	0	0.0%	
0.5		9	1	10	0.9	0.1	10.0%	
0.75		10	0	10	1	0	0.0%	
1		10	0	10	1	0	0.0%	
1.25		10	0	10	1	0	0.0%	
1.5		10	0	10	1	0	0.0%	
1.75		9	1	10	0.9	0.1	10.0%	
2		10	0	10	1	0	0.0%	
2.25		6	4	10	0.6	0.4	40.0%	

7d Survival Rate Detail

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
0.75		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000
1		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1,5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.75		1.0000	1,0000	1,0000	1.0000	1.0000	1.0000	1,0000	0.0000	1.0000	1.0000
2		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000
2.25		0.0000	0,0000	1.0000	1_0000	1.0000	1.0000	0.0000	0.0000	1.0000	1.0000

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report

Test Code:

02 Nov-17 11:04 (p 2 of 2)

17-1480 | 11-1372-5691

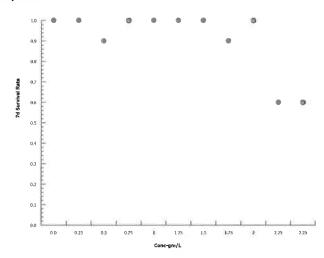
Ceriodaphnia 7-d Survival and Reproduction Test	New England Bioassay
---	----------------------

Endpoint: 7d Survival Rate CETISv1.9.2 Analysis ID: 11-1465-3370 **CETIS Version:** Analyzed: 02 Nov-17 11:04 Analysis: STP 2xK Contingency Tables Official Results: Yes

7d Survival Rate Binomials

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
2.25		0/1	0/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	1/1

Graphics



Analyst: Page 130 6/4:59

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:08 (p 1 of 3)

Test Code:

17-1480 | 11-1372-5691

							Test	Code:	17-1480 11-1372-569
Ceriodaphnia	7-d Survival an	d Reproduc	tion Test						New England Bioassay
Analysis ID:	09-0664-0873	End	point: 7	d Survival Rat	e		CET	IS Version:	CETISv1.9.2
Analyzed:	02 Nov-17 11:0		•	inear Regress	ion (GLM)		Offic	ial Results:	Yes
Batch ID:	15-6387-4143	Test	Type: R	eproduction-S	Survival (7d)		Anal	vst:	
	08 Sep-17 12:4			PA/821/R-02-			Dilu	-	ratory Water
	13 Oct-17 11:20			eriodaphnia d			Brin		Applicable
-	34d 23h	Sou		-House Cultu			Age:		
Sample ID:	03-0070-8444	Cod	o- 1	1EC725C			Clie	nt: GZA	GeoEnvironmental
Sample Date:				odium chloride	e		Proje		
Receipt Date:		Sou		ZA GeoEnviro			•	_	1 4 4
Sample Age:		Stat					10	0, 14	-day
Linear Regres	sion Options								
Model Name	Link Fund	ction	Thresho	old Option	Thresh	Optimized	d Pooled	Het Corr	Weighted
Log-Normal (Pr	obit) η=inv Φ[π	r]	Control	Threshold	0.000001	Yes	Yes	No	Yes
Regression Su	ımmary								
ters LL	AICc	ВІС	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(a:5%)
14 -7.796	24.59	23,05	0.3256	0.04618	0.9934				Lack of Fit Not Tested
Point Estimate	es								
Level gm/L	95% LCL	95% UCL							
LC50 2.117		2.239							
Test Acceptab	ility Criteria	TAC L	imito						
Attribute	Test Stat		Upper	Overlap	Decision				
Control Resp	1	0.8	>>	Yes	Passes C	riteria			
Regression Pa								. =0/\	
Parameter	Estimate	Std Error			t Stat	P-Value	Decision	<u> </u>	
Threshold	0.01608	0.015	-0.01333		1.072	0.3117	_	ficant Param	eter
Slope	21.65	5.471	10.93	32.38	3.958	0.0033 0.0042	-	t Parameter	
ntercept	-7_051	1.852	-10.68	-3.422	-3.808	0.0042	Significan	t Parameter	
ANOVA Table									
Source	Sum Squ		n Square		F Stat	P-Value	Decision		
Model	1351	675.		2	830.7	<1.0E-37	Significan	τ	
Residual	7.319	0.81	3 3	9				_	
Residual Analy				T (64)	0-141	0. 14.1	Dealth	(E0()	
Attribute	Method	DL: 0 00=	T1	Test Stat		P-Value	Decision		
Goodness-of-Fi		Chi-Sq GOF		7.319	16.92	0.6039	-	ficant Hetero	-
Distalle of the		Ratio GOF		6.39	16.92	0.7004	_	ficant Hetero	•
Distribution	•	Vilk W Norm	-	0.7985	0.8608	0.0090		nal Distributio	
	Anderson	-Darling A2 I	Normality '	re 1.233	2,492	0.0030	Non-Norm	nal Distributio	on

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:08 (p 2 of 3)

Test Code: 17-1480 | 11-1372-5691

0	7 4 0	1 0	. d 4) T.				1631	Code:		17-1400 1	
	7-d Survival a									ew Englan	a Bioass
Analysis ID: Analyzed:	09-0664-0873 02 Nov-17 11		Endpoint: Analysis:	7d Survival Ra Linear Regres				IS Version: ial Results:	CETISv1 Yes	.9.2	
7d Survival R	ate Summary				Calc	ulated Varia	ate(A/B)				
Conc-gm/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	В
0	D	10	1.000		1.0000	0.0000	0.0000	0.00%	0.0%	10	10
0.25		10	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
0.5		10	0.900	0.0000	1.0000	0.1000	0.3162	35.14%	10.0%	9	10
0.75		10	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1		10	1.000		1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1.25		10	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1.5		10	1.000	0 1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
1.75		10	0.900	0.0000	1.0000	0.1000	0.3162	35.14%	10.0%	9	10
2		10	0.700	0.0000	1.0000	0.1528	0.4830	69.01%	30.0%	7	10
2.25		10	0.400	0.0000	1.0000	0.1633	0.5164	129.10%	60.0%	4	10
2.5		10	0.000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
2.75		10	0.000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
7d Survival R	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 1
)	D	1,0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0,25		1,0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5		1.0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.000
0.75		1.0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
1		1.0000	1.000	0 1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.000
1.25		1:0000			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
1.5		1.0000			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
1.75		1.0000			1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000
2		1.0000			1.0000	0.0000	1,0000	1.0000	0.0000	1.0000	1.000
2.25		0.0000			1.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.000
		0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000
2.5											
2.75		0.0000	0.000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000
7d Survival R Conc-gm/L	ate Binomials Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 1
)	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.25	5	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.5 0.75											
		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	0/1	1/1	1/1	0/1	1/1	1/1	0/1	1/1	1/1
2.25		0/1	0/1	1/1	1/1	0/1	0/1	0/1	0/1	1/1	1/1
2.5		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
2.75		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

CETIS™ v1.9.2.4 002-570-915-7 Analyst: Page 132 6fAt59

Test Code:

02 Nov-17 11:08 (p 3 of 3)

17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

Analysis ID: Analyzed:

09-0664-0873

02 Nov-17 11:07

7d Survival Rate Analysis:

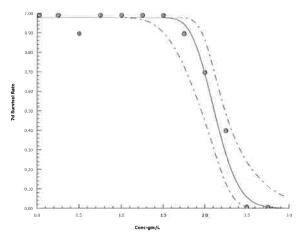
Linear Regression (GLM)

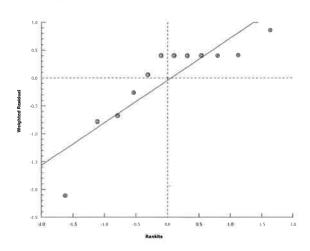
CETIS Version: Official Results: Yes

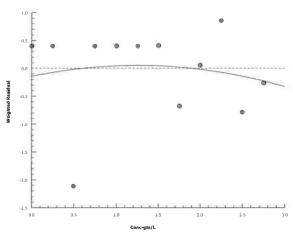
CETISv1.9.2

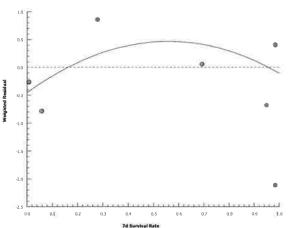
Graphics

Log-Normal: inv $\Phi[\pi]=\alpha+\beta \cdot \log[x]$









Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report

02 Nov-17 11:08 (p 1 of 2)

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia	7-d Survival and	d Reprodi	ıction Te	st					N	lew England	d Bioassa
Analysis ID:	08-3201-6081	En	dpoint:	7d Survival	Rate		CETI	S Version:	CETISV	1.9.2	
Analyzed:	02 Nov-17 11:0		•	STP 2xK Co	ontingency Tab	les	Offic	ial Results	: Yes		
Batch ID:	15-6387-4143	Te	st Type:	Reproduction	n-Survival (7d)	Anal	yst:			
Start Date:	08 Sep-17 12:45	. Pro	otocol:	EPA/821/R-	02-013 (2002)		Dilue	ent: Lab	oratory Wa	ter	
Ending Date:	13 Oct-17 11:20	Sp	ecies:	Ceriodaphn	ia dubia		Brine	e: Not	Applicable		
Duration:	34d 23h		urce:	In-House Co	ulture		Age:	<24	! h		
Sample ID:	03-0070-8444	Co	de:	11EC725C			Clier	ıt: GZ	A GeoEnvir	onmental	
Sample Date:	08 Sep-17	Ma	terial:	Sodium chlo	oride		Proje	ect:			
Receipt Date:		So	urce:	GZA GeoEr	vironmental			0		e	
Sample Age:	· ·	Sta	ition:					1.0.	4-1	ay	
Data Transfor	m	Alt Hyp					NOEL	LOEL	TOEL	TU	
Untransformed		C > T					2	2.25	2.121		
Fisher Exact/l	Bonferroni-Holm	ı Test									
	vs Group		Test S	tat P-Type	P-Value	Decision	(a:5%)				
Dilution Water	0.25		1.0000		1.0000		ificant Effect				
	0.5		0.5000		1.0000	Non-Sign	ificant Effect				
	0.75		1.0000		1.0000	_	ificant Effect				
	1		1.0000) Exact	1.0000		ificant Effect				
	1.25		1.0000		1.0000	_	ificant Effect				
	1.5		1.0000) Exact	1.0000	Non-Sign	ificant Effect				
	1.75		0.5000	Exact	1.0000	Non-Sign	ificant Effect				
	2		0.1053	Exact	0.8421	Non-Sign	ificant Effect				
	2.25*		0.0054	Exact	0.0488	Significan	t Effect				
Test Acceptab	oility Criteria	TAC	Limits								
Attribute	Test Stat		Upper	Overla	p Decision	1					
Control Resp	1	8.0	>>	Yes	Passes C	riteria					
Data Summar	y										
Conc-gm/L	Code	NR	R	NR + F	R Prop NR	Prop R	%Effect				
0	D	10	0	10	1	0	0.0%				
0.25		10	0	10	1	0	0.0%				
0.5		9	1	10	0,9	0.1	10.0%				
0.75		10	0	10	1	0	0.0%				
1						•	0.076				
		10	0	10	1	0	0.0%				
1.25		10	0 0	10	1 1		0.0% 0.0%				
				10 10	1 1	0	0.0% 0.0% 0.0%				
1.5		10	0	10 10 10	1	0 0 0 0,1	0.0% 0.0% 0.0% 10.0%				
1.5 1.75		10 10	0 0	10 10	1 1	0 0 0	0.0% 0.0% 0.0%				
1.5 1.75 2		10 10 9	0 0 1	10 10 10	1 1 0.9	0 0 0 0,1	0.0% 0.0% 0.0% 10.0%				
1.5 1.75 2 2.25	ate Detail	10 10 9 7	0 0 1 3	10 10 10 10	1 1 0.9 0.7	0 0 0 0,1 0,3	0.0% 0.0% 0.0% 10.0% 30.0%				
1.5 1.75 2 2,25 7d Survival Ra	ate Detail Code	10 10 9 7 4	0 0 1 3 6	10 10 10 10 10 10	1 1 0.9 0.7 0.4	0 0 0 0.1 0.3 0.6	0.0% 0.0% 0.0% 10.0% 30.0% 60.0%	Rep 7	Rep 8	Rep 9	Rep 10
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L		10 10 9 7 4	0 0 1 3 6	10 10 10 10 10 10	1 1 0.9 0.7 0.4	0 0 0 0.1 0.3 0.6	0.0% 0.0% 0.0% 10.0% 30.0% 60.0%	Rep 7 1.0000	Rep 8 1.0000	Rep 9 1.0000	
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L	Code	10 10 9 7 4	0 0 1 3 6	10 10 10 10 10 10 Rep 3	1 1 0.9 0.7 0.4 Rep 4	0 0 0 0.1 0.3 0.6	0.0% 0.0% 0.0% 10.0% 30.0% 60.0%				1.0000
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25	Code	10 10 9 7 4 Rep 1 1_0000	0 0 1 3 6 Rep 2	10 10 10 10 10 10 Rep 3 0 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5	0.0% 0.0% 10.0% 30.0% 60.0% Rep 6	1.0000	1.0000	1.0000	1.0000 1 ₋ 0000
1.5 1.75 2 2,25 7d Survival Ra Conc-gm/L 0 0.25	Code	10 10 9 7 4 Rep 1 1_0000 1.0000	0 0 1 3 6 Rep 2 1.0000	10 10 10 10 10 10 Rep 3 0 1.0000 0 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000	0.0% 0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000 0.0000
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25 0.5	Code	10 10 9 7 4 Rep 1 1_0000 1.0000 1.0000	0 0 1 3 6 Rep 2 1.0000 1.0000	10 10 10 10 10 10 Rep 3 1.0000 1.0000 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000 1.0000 1.0000	0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1 ₋ 0000 0.0000 1.0000
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25 0.75	Code	10 10 9 7 4 Rep 1 1_0000 1.0000 1.0000 1.0000	0 0 1 3 6 Rep 2 1.0000 1.0000 1.0000 1.0000	10 10 10 10 10 10 Rep 3 1.0000 1.0000 1.0000 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000 1.0000 1.0000 1.0000	0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 0.0000 1.0000
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25 0.5 0.75 1	Code	10 10 9 7 4 Rep 1 1_0000 1_0000 1_0000 1_0000 1_0000	0 0 1 3 6 Rep 2 1.0000 1.0000 1.0000 1.0000	10 10 10 10 10 10 Rep 3 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000 1.0000 1.0000 1.0000 1.0000	0.0% 0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 0.0000 1.0000 1.0000
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25 0.5 0.75 1 1,25 1.5	Code	10 10 9 7 4 Rep 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0 0 1 3 6 8 8 9 2 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.000000 1.000000 1.000000 1.000000 1.000000 1.0000000 1.0000000 1.00000000	Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 0.0000 1.0000 1.0000 1.0000
1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25 0.5 0.75 1 1.25 1.5	Code	10 10 9 7 4 Rep 1 1_0000 1_0000 1_0000 1_0000 1_0000 1_0000 1_0000	0 0 1 3 6 8 8 9 2 1.0000 1.000	10 10 10 10 10 10 10 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 0.0000 1.0000 1.0000 1.0000 1.0000
1.25 1.5 1.75 2 2.25 7d Survival Ra Conc-gm/L 0 0.25 0.5 0.75 1 1.25 1.75 2 2.25	Code	10 10 9 7 4 Rep 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0 0 1 3 6 8 8 9 2 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.000000 1.000000 1.000000 1.000000 1.000000 1.0000000 1.0000000 1.00000000	Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1 1 0.9 0.7 0.4 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0 0 0 0.1 0.3 0.6 Rep 5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.0% 0.0% 10.0% 30.0% 60.0% Rep 6 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Rep 10 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report

Test Code:

02 Nov-17 11:08 (p 2 of 2) 17-1480 | 11-1372-5691

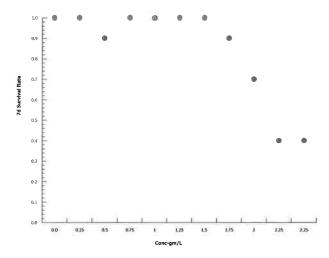
Ceriodaphnia 7-d Survival and Reproduction Test **New England Bioassay**

08-3201-6081 7d Survival Rate **CETIS Version:** CETISv1.9.2 Analysis ID: Endpoint: Analyzed: 02 Nov-17 11:08 Analysis: STP 2xK Contingency Tables Official Results: Yes

7d Survival Rate Binomials

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	0/1	1/1	1/1	0/1	1/1	1/1	0/1	1/1	1/1
2,25		0/1	0/1	1/1	1/1	0/1	0/1	0/1	0/1	1/1	1/1

Graphics



Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 11:21 (p 1 of 3)

Test Code:

17-1480 | 11-1372-5691

							1621	Code.	17-1400 11-1372-309
Ceriodaphnia	7-d Survival an	d Reproduc	tion Test						New England Bioassay
Analysis ID:	02-1286-4984	End	point: 7d	Survival Rat	e		CET	IS Version:	CETISv1.9.2
Analyzed:	02 Nov-17 11:2	20 Anal	ysis: Line	ear Regress	ion (GLM)		Offic	ial Results:	Yes
Batch ID:	15-6387-4143	Test	Type: Rep	oroduction-S	Survival (7d)		Anal	lyst:	
Start Date:	08 Sep-17 12:45		• •	A/821/R-02-			Dilu	ent: Labo	oratory Water
Ending Date:	13 Oct-17 11:20	Spec	cies: Cer	riodaphnia d	ubia		Brin	e: Not	Applicable
Duration:	34d 23h	Soul	rce: In-l	House Cultur	re		Age	<24	1
Sample ID:	03-0070-8444	Code	e: 11E	C725C			Clie	nt: GZA	GeoEnvironmental
Sample Date:	08 Sep-17	Mate	erial: Soc	dium chloride	е		Proj	ect:	
Receipt Date:	08 Sep-17	Soul	rce: GZ	A GeoEnviro	onmental			0 0	1
Sample Age:	13h	Stati	on:				10	121	- day>
Linear Regres	sion Options							1.0	,
Model Name	Link Fund	ction	Threshold	Option	Thresh	Optimized	d Pooled	Het Corr	Weighted
Log-Normal (P	robit) η=inv Φ[π	1	Control Th	reshold	0.000001	Yes	Yes	No	Yes
Regression S	ummary								
ters LL	AICc	BIC	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(a:5%)
20 -8.35	9 25.72	24.17	0.319	0.03734	0.9901				Lack of Fit Not Tested
Point Estimate	es								
Level gm/L	95% LCL	95% UCL							
LC50 2.084		2.198							
Test Acceptab	ility Criteria	TAC Li	mite						
Attribute	Test Stat		Upper	Overlap	Decision				
Control Resp	1	0.8	>>	Yes	Passes C	riteria			
Regression Pa	arametere								
Regression Fo	Estimate	Std Error	95% LCL	95% UCL	t Stat	P-Value	Decision	(a·5%)	
Threshold	0.0322	0.02064	-0.00826	0.07266	1.56	0.1532		ificant Param	neter
Slope	26.78	8.02	11.06	42.5	3.339	0.0087	_	t Parameter	
ntercept	-8.543	2.653	-13.74	-3.343	-3.22	0_0105	_	t Parameter	
ANOVA Table									
Source	Sum Squ	ares Mea	n Square	DF	F Stat	P-Value	Decision	(α:5%)	
Model	651.8	325.		2	550.3	<1.0E-37	Significan	t	
Residual	5.33	0.59	22	9					
Residual Anal	ysis								
Attribute	Method			Test Stat	Critical	P-Value	Decision	(α:5%)	
Goodness-of-F		hi-Sq GOF		5.33	16.92	0.8047	-	ificant Hetero	* -
		Ratio GOF		5.99	16.92	0.7409	•	ificant Hetero	• ,
Distribution	•	/ilk W Norma	-	0.8211	0.8608	0.0164		nal Distribution	
	Anderson-	-Darling A2 N	Normality Te	0.9568	2.492	0.0158	Non-Norn	nal Distribution	on

Electronic Filing: Received, Clerk's Office 5/29/2018 **CETIS Analytical Report**

Test Code:

02 Nov-17 11:21 (p 2 of 3) 17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Test **New England Bioassay** Analysis ID: 02-1286-4984 **Endpoint:** 7d Survival Rate **CETIS Version:** CETISv1.9.2 Linear Regression (GLM) Analyzed: 02 Nov-17 11:20 Analysis: Official Results: Yes 7d Survival Rate Summary Calculated Variate(A/B) Conc-gm/L Code Count Mean Min Max Std Err Std Dev CV% %Effect В Α 0 D 10 1.0000 1.0000 1.0000 0.0000 0.0000 0.00% 0.0% 10 10 10 1.0000 1.0000 1.0000 0.0000 0.0000 0.00% 10 10 0.25 0.0% 10 0.9000 0.0000 1.0000 0.1000 0.3162 35.14% 10.0% 9 10 0.5 0.75 10 0.9000 0.0000 1.0000 0.1000 0.3162 35.14% 10.0% 9 10 10 1.0000 0.0000 0.0000 0.00% 0.0% 10 10 1.0000 1.0000 1 1.25 10 1.0000 1.0000 1,0000 0.0000 0.0000 0.00% 0.0% 10 10 10 1.0000 0.0000 0.0000 10 10 1.5 1.0000 1.0000 0.00% 0.0% 0.1000 1.75 10 0.9000 0.0000 1.0000 0.3162 10.0% 9 10 35.14% 10 0.0000 7 2 0.7000 1.0000 0.1528 0.4830 69.01% 30.0% 10 2.25 10 0.2000 0.0000 1.0000 0.1333 0.4216 210.80% 80.0% 2 10 0.0000 0 10 2.5 10 0.0000 0.0000 0.0000 0.0000 100.0% 2.75 10 0.0000 0.0000 0.0000 0.0000 0.0000 100.0% 0 10 7d Survival Rate Detail Conc-gm/L Code Rep 1 Rep 2 Rep 3 Rep 4 Rep 5 Rep 6 Rep 7 Rep 8 Rep 9 Rep 10 0 D 1.0000 1.0000 1.0000 1.0000 1,0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.25 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000 0.75 1.0000 0.0000 1,0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1,0000 1.0000 1,0000 1,0000 1.0000 1 1.0000 1.25 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.75 1.0000 1.0000 1.0000 1:0000 1.0000 1.0000 1.0000 0.0000 1.0000 1.0000 2 1.0000 0.0000 1.0000 1.0000 0.0000 1.0000 1.0000 0.0000 1.0000 1.0000 2.25 0.0000 1.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 1.0000 2.5 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 2.75 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 7d Survival Rate Binomials Conc-gm/L Code Rep 1 Rep 2 Rep 3 Rep 4 Rep 5 Rep 6 Rep 7 Rep 8 Rep 9 Rep 10 1/1 0 D 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0.25 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0.5 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0/1 0.75 1/1 0/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1 1.25 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1.5 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0/1 1.75 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 2 1/1 0/1 1/1 1/1 0/1 1/1 1/1 0/1 1/1 1/1 2.25 0/1 0/1 1/1 0/1 0/1 0/1 0/1 0/1 1/1 0/1 2.5 0/1 0/1 0/1 0/1 0/1 0/1 0/1 0/1 0/1 0/1 0/1 2.75 0/1 0/1 0/1 0/1 0/1 0/1 0/1 0/1 0/1

002-570-915-7 CETIS™ v1.9.2.4 Analyst: Page 137 6/A159

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

Analysis ID:

02-1286-4984

02 Nov-17 11:20

Endpoint: 7d Survival Rate

Analysis:

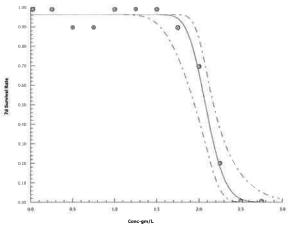
Linear Regression (GLM)

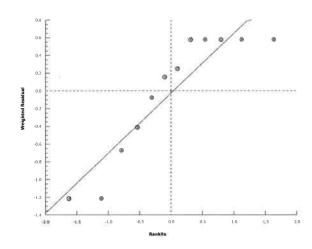
CETIS Version: CETISv1.9.2

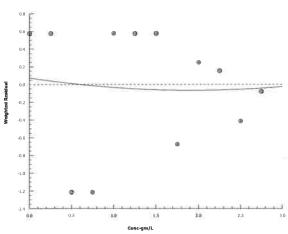
Official Results: Yes

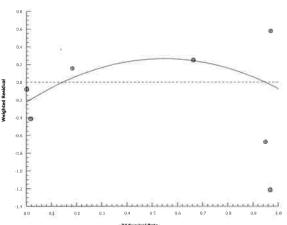
Analyzed: **Graphics**

Log-Normal: inv $\Phi[\pi] = \alpha + \beta \cdot \log[x]$









Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 13:51 (p 1 of 2)

Test Code:

17-1480 | 11-1372-5691

								lest	Code:		17-1460 11	-13/2-508
Ceriodaphnia	7-d Surviva	l and Repi	oduction Te	est						N	ew England	Bioassa
Analysis ID:	18-1036-36	524	Endpoint:	Reproduction					IS Version:	CETISv1	.9.2	
Analyzed:	02 Nov-17	13:51	Analysis:	Nonparametri	c-Control	vs T	reatments	Offic	cial Results:	Yes		
Batch ID:	15-6387-41	43	Test Type:	Reproduction-	Survival ((7d)		Anal	lyst:			
Start Date:	08 Sep-17 1	2:45	Protocol:	EPA/821/R-02	2-013 (20	02)		Dilu	ent: Lab	oratory Wat	er	
Ending Date:	13 Oct-17 1	1:20	Species:	Ceriodaphnia	dubia			Brin	e: Not	Applicable		
Duration:	34d 23h		Source:	In-House Cult	ure			Age	<24	h		
Sample ID:	03-0070-84	44	Code:	11EC725C				Clie	nt: GZA	A GeoEnviro	onmental	
Sample Date:	08 Sep-17		Material:	Sodium chlori	de			Proj	ect:			
Receipt Date:	08 Sep-17		Source:	GZA GeoEnvi	ironmenta	ıl			~ P)			
Sample Age:	13h		Station:					- 1	D. 2	1 de	aus	
Data Transfor	m	Alt I	lур					NOEL	LOEL	TOEL	TU	PMSD
Untransformed	1	C > 1						1.25	1.5	1.369		96.42%
Steel Many-O	ne Rank Sur	m Test										
Control	vs Cond	-gm/L	Test	Stat Critical	Ties	DF	P-Type	P-Value	Decision(a:5%)		
Dilution Water	0.25		120	74	2	18	Asymp	0.9929	Non-Signi	ficant Effec	t	
	0.5		102.5	74	3	18	Asymp	0.7993	Non-Signi	ficant Effec	t	
	0.75		88	74	2	18	Asymp	0.3191	Non-Signi	ficant Effec	t	
	1		101.5	74	4	18	Asymp	0.7728	Non-Signi	ficant Effec	t	
	1.25		89	74	4	18	Asymp	0.3517	Non-Signi	ficant Effec	t	
	1.5*		71.5	74	1	18	Asymp	0.0274	Significant	t Effect		
Test Acceptab	oility Criteria	т.	AC Limits									
Attribute	Test S			r Overlap	Decis	ion						
Control Resp	2.3	15	>>	Yes	Below	Crit	eria					
PMSD	0.9642	2 0.13	0.47	Yes	Above	Crit	teria					
ANOVA Table												
Source	Sum S	Squares	Mean	Square	DF		F Stat	P-Value	Decision(α:5%)		
Between	76.68	57	12.78	1	6		2.851	0.0161	Significant	t Effect		
Error	282.4		4.482	54	63							
Total	359.0	86			69							
Distributional	Tests											
Attribute	Test				Test S	tat	Critical	P-Value	Decision(α:1%)		
Variances	Bartle	tt Equality	of Variance 1	est	30.41		16.81	3.3E-05	Unequal V	/ariances		
Distribution	Shapi	ro-Wilk W I	Normality Te	st	0.9476	3	0.9526	0.0055	Non-Norm	al Distribut	ion	
Reproduction	Summary											
Conc-gm/L	Code	Cour		95% LCI	_ 95% U	ICL	Median	Min	Max	Std Err	CV%	%Effect
	D	10	2.3	0.949	3.651		2.5	0	5	0.5972	82.11%	0.00%
-		10	3.7	1.412	5.988		4	0	10	1.012	86.46%	-60.87%
0.25							^	^	7	0.7400		4.050/
0.25		10	2.4	0.7072	4.093		2	0	,	0.7483	98.60%	-4.35%
0.25 0.5				0.7072 -0.1822	4.093 2.582		0.5	0	6	0.7483	98.60% 161.02%	
).25).5).75		10	2.4									
0.25 0.5 0.75 1		10 10	2.4 1.2	-0.1822	2.582		0,5	0	6	0.611	161.02%	47.83%
0.25 0.5 0.75 1 1.25		10 10 10	2.4 1.2 2.1	-0.1822 0.3988	2.582 3.801	2	0.5 1	0 0	6 5	0.611 0.752	161.02% 113.24%	47.83% 8.70%
0 0.25 0.5 0.75 1 1.25 1.5		10 10 10 10	2.4 1.2 2.1 1.4	-0.1822 0,3988 0.2714	2.582 3.801 2.529	2	0.5 1 1.5	0 0 0	6 5 5	0.611 0.752 0.4989	161.02% 113.24% 112.69%	47.83% 8.70% 39.13%

Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 13:51 (p 2 of 2)

Test Code:

17-1480 | 11-1372-5691

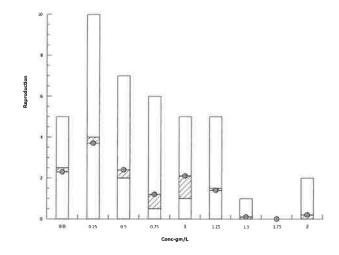
Ceriodaphnia 7-d Survival and Reproduction Test

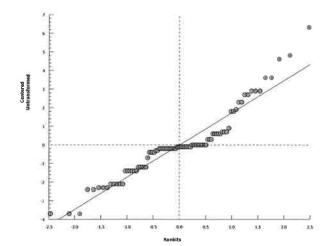
Ceriouapiiiia	New England Bloassay				
Analysis ID:	18-1036-3624	Endpoint:	Reproduction	CETIS Version:	CETISv1.9.2
Analyzed:	02 Nov-17 13:51	Analysis:	Nonparametric-Control vs Treatments	Official Results:	Yes

кері	oau	CTIO	ı De	taii

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	2	5	2	3	3	0	3	0	5	0
0.25		0	4	4	4	6	10	0	0	6	3
0.5		2	2	1	6	2	0	1	3	7	0
0.75		1	0	3	6	1	0	0	1	0	0
1		2	0	4	5	0	0	0	0	5	5
1,25		0	0	1	2	2	5	0	2	0	2
1.5		0	0	0	0	1	0	0	0	0	0
1.75		0	0	0	0	0	0	0	0	0	0
2		0	0	2	0	0	0	0	0	0	0

Graphics





Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:21 (p 1 of 2)

Test Code:

17-1480 | 11-1372-5691

				1001 0040.	17 1400 11 1072 0001
Ceriodaphnia	7-d Survival and	Reproduction Te	est		New England Bioassay
Analysis ID:	20-4148-0489	Endpoint:	7d Survival Rate	CETIS Version	: CETISv1.9.2
Analyzed:	02 Nov-17 11:20	Analysis:	STP 2xK Contingency Tables	Official Results	s: Yes
Batch ID:	15-6387-4143	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	08 Sep-17 12:45	Protocol:	EPA/821/R-02-013 (2002)	Diluent: Lai	poratory Water
Ending Date:	13 Oct-17 11:20	Species:	Ceriodaphnia dubia	Brine: No	t Applicable
Duration:	34d 23h	Source:	In-House Culture	Age: <24	1h
Sample ID:	03-0070-8444	Code:	11EC725C	Client: GZ	A GeoEnvironmental
Sample Date:	08 Sep-17	Material:	Sodium chloride	Project:	
Receipt Date:	08 Sep-17	Source:	GZA GeoEnvironmental	. 0	21 /2/16
Sample Age:	13h	Station:		(0)	11 - days
Data Transfor	rm	Alt Hyp		NOEL LOEL	TOEL TU
Untransformed	4	C > T		2 2.25	2.121

Fisher	Exact/	Bonf	erroni-	Holm	Test
--------	--------	------	---------	------	------

Control vs	Group	Test Stat	P-Type	P-Value	Decision(a:5%)	
Dilution Water	0.25	1.0000	Exact	1.0000	Non-Significant Effect	
	0.5	0.5000	Exact	1.0000	Non-Significant Effect	
	0.75	0.5000	Exact	1.0000	Non-Significant Effect	
	1	1.0000	Exact	1.0000	Non-Significant Effect	
	1.25	1.0000	Exact	1.0000	Non-Significant Effect	
	1.5	1.0000	Exact	1.0000	Non-Significant Effect	
	1.75	0.5000	Exact	1.0000	Non-Significant Effect	
	2	0.1053	Exact	0.8421	Non-Significant Effect	
	2.25*	0.0004	Exact	0.0032	Significant Effect	

Test Acceptability	Criteria	TAC I	_imits		
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

Conc-gm/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect	
0	D	10	0	10	1	0	0.0%	
0.25		10	0	10	1	0	0.0%	
0.5		9	1	10	0.9	0.1	10.0%	
0.75		9	1	10	0.9	0.1	10.0%	
1		10	0	10	1	0	0.0%	
1.25		10	0	10	1	0	0.0%	
1.5		10	0	10	1	0	0.0%	
1.75		9	1	10	0.9	0.1	10.0%	
2		7	3	10	0.7	0.3	30.0%	
2,25		2	8	10	0.2	0.8	80.0%	

7d Survival Rate Detail

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	0.0000
0.75		1.0000	0.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1,0000	1.0000	1.0000
1		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1,0000	1.0000
1.25		1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000
1.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.75		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000
2		1.0000	0.0000	1.0000	1.0000	0.0000	1.0000	1.0000	0.0000	1.0000	1,0000
2.25		0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1,0000	0.0000

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:21 (p 2 of 2)

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Test

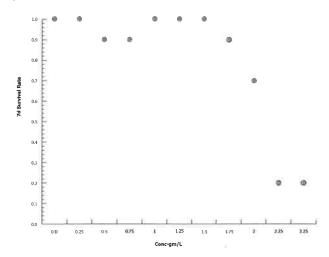
New England Bioassay

Analysis ID:	20-4148-0489	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	02 Nov-17 11:20	Analysis:	STP 2xK Contingency Tables	Official Results:	Yes

7d Survival Rate Binomial

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.75		1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	0/1	1/1	1/1	0/1	1/1	1/1	0/1	1/1	1/1
2.25		0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1

Graphics



Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 13:58 (p 1 of 2)

Test Code:

17-1480 | 11-1372-5691

								lest	Code:	1	7-1480 11	-13/2-569
Ceriodaphnia	7-d Survival an	d Reproduc	tion Test							Ne	ew England	Bioassay
Analysis ID:	04-0704-7535	Endr	point: Re	eproduction				CET	IS Version:	CETISv1	.9.2	
Analyzed:	02 Nov-17 13:5	•		onparametric	-Control	vs T	Freatments	Offic	ial Results:	Yes		
Batch ID:	15-6387-4143	Test	Type: Re	eproduction-S	Survival ((7d)		Anal	yst:			
Start Date:	08 Sep-17 12:45	5 Prote	ocol: EF	PA/821/R-02-	013 (20	02)		Dilue	ent: Labo	oratory Wat	er	
Ending Date:	13 Oct-17 11:20	Spec	ies: Ce	eriodaphnia d	ubia			Brine	e: Not	Applicable		
Duration:	34d 23h	Sour	ce: In-	-House Cultu	re			Age:	<24	1		
Sample ID:	03-0070-8444	Code	e: 11	EC725C		Client: GZA GeoEnvironm					nmental	
Sample Date:	08 Sep-17	Mate	rial: So	odium chlorid	е			Proje	ect:			
Receipt Date:	08 Sep-17	Sour	ce: G	ZA GeoEnviro	onmenta	ıl			0 -	~ 0 4	(15	
Sample Age:	13h	Stati	on:					10	12	8 00	WS	
Data Transfor	rm	Alt Hyp						NOEL	LOEL	TOEL	TU	PMSD
Untransformed	t	C > T						1.25	1.5	1.369		84.89%
Steel Many-O	ne Rank Sum Te	est										
Control	vs Conc-gm	ı/L	Test Sta	t Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)		
Dilution Water	0.25		116	74	4	18	Asymp	0.9813		icant Effect		
	0.5		104	74	5	18	Asymp	0.8355	Non-Signif	ficant Effect	t	
	0.75		81	74	3	18	Asymp	0.1376	Non-Signif	ficant Effect	t	
	1		87.5	74	4	18	Asymp	0.3034	-	ficant Effect		
	1.25		79.5	74	4	18	Asymp	0.1106	Non-Signif	ficant Effect	t	
	1.5*		64.5	74	2	18	Asymp	0.0059	Significant	Effect		
Test Acceptal	bility Criteria	TAC Li	mits									
Attribute	Test Stat		Upper	Overlap	Decis	ion						
Control Resp	4.1	15	>>	Yes	Below	Crit	teria					
PMSD	0.8489	0.13	0.47	Yes	Above	Crit	teria					
ANOVA Table												
Source	Sum Squ	ares	Mean Sq	luare	DF		F Stat	P-Value	Decision(α:5%)		
Between	225.143		37.5238		6		3.399	0.0057	Significant	Effect		
Error	695.5		11.0397		63							
Total	920.643				69							
Distributional	Tests											
Attribute	Test				Test S	tat	Critical	P-Value	Decision(α:1%)		
Variances	Bartlett Ed	quality of Var	iance Test	t	33.83		16.81	7.3E-06	Unequal V	ariances		
Distribution	Shapiro-W	Vilk W Norma	ality Test		0.8892	2	0.9526	1.5E-05	Non-Norm	al Distributi	on	
Reproduction	Summary											
Conc-gm/L	Code	Count	Mean	95% LCL		ICL	Median	Min	Max	Std Err	CV%	%Effect
0	D	10	4.1	2.179	6.021		5	0	8	0.8492	65.50%	0.00%
0 25		10	6.4	2.026	10.77		6.5	0	20	1.933	95.53%	-56.10%
0.5		10	3.9	2,302	5 498		4	0	7	0.7063	57.27%	4.88%
0.75		10	2.4	-0.5048	5.305		1	0	13	1.284	169.19%	41.46%
1		10	2.6	0.5993	4.601		2	0	8	0.8844	107.57%	36.59%
1.25		10	1.7	0.579	2.821		2	0	5	0.4955	92.18%	58.54%
1.5		10	0.4	-0.2911	1.091		0	0	3	0.3055	241.52%	90.24%
1.75		10	0	0	0		0	0	0	0		100.00%
2		10	0.2	-0.2524	0.6524	1	0	0	2	0.2	316.23%	95.12%

Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 13:59 (p 2 of 2)

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Te	est
---	-----

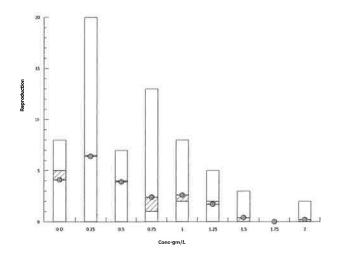
New England Bioassay

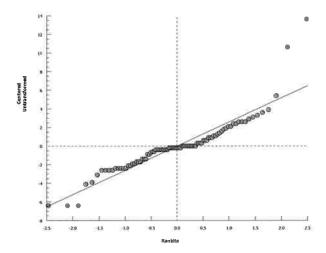
Analysis ID:	04-0704-7535	Endpoint:	Reproduction	CETIS Version:	CETISv1.9.2
Analyzed:	02 Nov-17 13:58	Analysis:	Nonparametric-Control vs Treatments	Official Results:	Yes

Reprod	luction	Detail

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	2	5	5	6	7	2	8	0	5	1
0.25		0	7	9	4	6	20	0	0	10	8
0.5		3	2	5	6	6	5	2	3	7	0
0.75		1	0	3	13	5	0	0	1	1	0
1		2	2	4	5	0	0	0	0	5	8
1.25		0	0	1	3	2	5	0	2	2	2
1.5		0	0	0	0	1	0	0	0	3	0
1.75		0	0	0	0	0	0	0	0	0	0
2		0	0	2	0	0	0	0	0	0	0

Graphics





Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 13:59 (p 1 of 3)

Test Code:

								Test	Code:	17-1480 11-1372-569
Ceriodaphnia	a 7-d Surviva	l and Rep	oroduc	tion Tes	t					New England Bioassay
Analysis ID:	17-2165-56	62	Endo	oint: 7	'd Survival Rat	e		CET	S Version:	CETISv1.9.2
Analyzed:	02 Nov-17		Analy		inear Regress	ion (GLM)		Offic	ial Results:	
Batch ID:	15-6387-414	13	Test	Type: F	Reproduction-S	Survival (7d)		Anal	vet:	
Start Date:	08 Sep-17 1	-	Proto		PA/821/R-02-			Dilue		oratory Water
Ending Date:	•		Spec		Ceriodaphnia d	` .		Brin		Applicable
Duration:	34d 23h		Sour		n-House Cultui			Age:		
Sample ID:	03-0070-844	14	Code	e: 1	1EC725C			Clier	nt: GZA	GeoEnvironmental
Sample Date	: 08 Sep-17		Mate	rial: S	Sodium chloride	е		Proje	ect:	
Receipt Date			Sour	ce: C	SZA GeoEnviro	onmental		.06.9	0 -	
Sample Age:			Statio	on:				10	28	days
Linear Regre	ssion Option	s								V
Model Name	Link F	unction		Thresh	old Option	Thresh	Optimized	d Pooled	Het Corr	Weighted
Log-Normal (F	Probit) η=inv	Φ[π]		Control	Threshold	0.000001	Yes	Yes	No	Yes
Regression S	Summary									
lters LL	AICc	BIC		Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(a:5%)
20 -13.9	36.86	35.3	32	0.3261	0.0303	0.9279				Lack of Fit Not Tested
Point Estima	tes									
Level gm/l	L 95% L	CL 95%	UCL							
LC50 2.11		2,23	35							
Test Accepta	bility Criteria		TAC Lir	mite						
Attribute	Test S			Upper	Overlap	Decision				
Control Resp	1	0.8		>>	Yes	Passes C	riteria			
Regression F	Parameters									
Parameter	Estima	ate Std	Error	95% LC	L 95% UCL	t Stat	P-Value	Decision(α:5%)	
Threshold	0.1001	0.03	379	0.03389	0.1663	2.963	0.0159	Significan	t Parameter	
Slope	33.01	11.6	3 7	10.14	55.87	2.829	0.0198	Significan	t Parameter	
ntercept	-10.76	3.92	28	-18.46	-3.065	-2.74	0.0228	Significan	t Parameter	
ANOVA Table	•									
Source	Sum S	quares	Mean	Square	DF	F Stat	P-Value	Decision((α:5%)	
Model	179.2		89.6		2	71.76	2.9E-06	Significan	t	
Residual	11.24		1.249)	9					
Residual Ana	lysis									
Attribute	Metho	d			Test Stat	Critical	P-Value	Decision(<u> </u>	
Goodness-of-		on Chi-Sq			11.24	16.92	0.2598	_	ficant Hetero	•
		ood Ratio			13.49	16.92	0.1415		ficant Hetero	geneity
Distribution	· · · · · · · · · · · · · · · · · · ·	o-Wilk W		-	0.8941	0.8608	0.1329	Normal Di		
	Anders	son-Darlir	ng A2 N	ormality	Te 0.5723	2.492	0.1412	Normal Di	stribution	

Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 13:59 (p 2 of 3) **CETIS Analytical Report**

0/1

0/1

0/1

1/1

0/1

0/1

0/1

0/1

0/1

Test Code: 17-1480 | 11-1372-5691 Ceriodaphnia 7-d Survival and Reproduction Test New England Bioassay 7d Survival Rate **CETIS Version:** CETISv1.9₁2 Analysis ID: 17-2165-5662 Endpoint: Analysis: Linear Regression (GLM) Official Results: Yes Analyzed: 02 Nov-17 13:58 7d Survival Rate Summary Calculated Variate(A/B) CV% %Effect В Conc-gm/L Code Count Mean Min Max Std Err Std Dev A 1.0000 0.0000 0.00% 0.0% 10 10 0 10 1.0000 1.0000 0.0000 1.0000 10 0.25 10 1.0000 1.0000 0.0000 0.0000 0.00% 0.0% 10 0.5 10 0.8000 0.0000 1.0000 0.1333 0.4216 52.70% 20.0% 8 10 0.75 10 0.7000 0.0000 1.0000 0.1528 0.4830 69.01% 30.0% 7 10 10 1.0000 1.0000 1.0000 0.0000 0.0000 0.00% 0.0% 10 10 1 0.0000 52.70% 20.0% 8 10 1.25 10 0.8000 1.0000 0.1333 0.4216 10 1.0000 1.0000 1.0000 0.0000 0.0000 0.00% 0.0% 10 10 1.5 0.0000 9 10 1.75 10 0.9000 1.0000 0.1000 0.3162 35.14% 10.0% 0.0000 0.1528 0.4830 69.01% 30.0% 7 10 2 10 0.7000 1.0000 2 10 0.0000 1 0000 0.1333 0.4216 210.80% 80.0% 10 2.25 0.2000 10 0.0000 0.0000 0.0000 0.0000 0.0000 100.0% 0 10 2.5 100.0% 2.75 10 0.0000 0.0000 0.0000 0.0000 0.0000 0 10 7d Survival Rate Detail Conc-gm/L Code Rep 2 Rep 3 Rep 4 Rep 5 Rep 6 Rep 7 Rep 8 Rep 9 Rep 10 Rep 1 0 D 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1,0000 1.0000 1.0000 1.0000 1.0000 0.25 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1_0000 1.0000 0.0000 0.5 1.0000 1.0000 0.0000 1.0000 1.0000 1.0000 1.0000 1,0000 1.0000 0.0000 1.0000 1.0000 0.75 0.0000 0.0000 1.0000 1.0000 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.25 0.0000 1.0000 1.0000 1.0000 1.0000 0.0000 1.0000 1.0000 1.0000 1.0000 1,0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000 1.0000 1.0000 1.75 1.0000 2 1.0000 0.0000 1.0000 1.0000 0.0000 1.0000 1.0000 0.0000 1.0000 1.0000 2.25 0.0000 0.0000 1.0000 0.0000 0.0000 0.0000 0.0000 0.0000 1.0000 0.0000 0.0000 0.0000 2.5 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 2.75 7d Survival Rate Binomials Conc-gm/L Rep 3 Rep 4 Rep 5 Rep 6 Rep 7 Rep 8 Rep 9 Rep 10 Code Rep 1 Rep 2 0 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0.25 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0/1 0.5 1/1 1/1 1/1 0/1 1/1 1/1 1/1 1/1 1/1 0.75 0/1 0/1 1/1 1/1 1/1 1/1 0/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1 0/1 0/1 1/1 1/1 1/1 1/1 1.25 1/1 1/1 1/1 1/1 1.5 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0/1 1/1 1.75 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0/1 2 1/1 0/1 1/1 1/1 0/1 1/1 1/1 1/1 1/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

1/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

2.25

2.5

2.75

Test Code:

02 Nov-17 13:59 (p 3 of 3) 17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

Analysis ID: Analyzed:

17-2165-5662

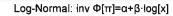
02 Nov-17 13:58

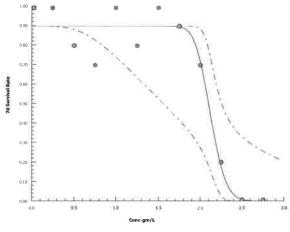
7d Survival Rate Endpoint: Analysis:

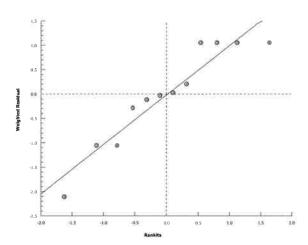
Linear Regression (GLM)

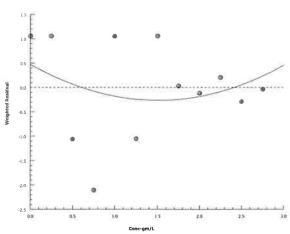
CETIS Version:

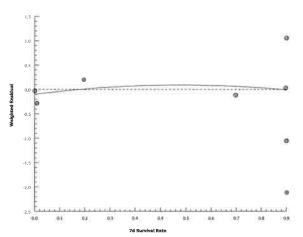
CETISv1.9.2 Official Results:











Electronic Filing: Received, Clerk's Office 5/29/2018 (Date: 02 Nov-17 13:59 (p 1 of 2)

JE 1 13 MII0	uyucai itebu			
	,			Test Code: 17-1480 11-1372-
Ceriodaphnia	7-d Survival and	d Reproduction To	est	New England Bioas
Analysis ID:	10-8944-2045	Endpoint:	7d Survival Rate	CETIS Version: CETISv1.9.2
Analyzed:	02 Nov-17 13:5	8 Analysis:	STP 2xK Contingency Tables	Official Results: Yes
Batch ID:	15-6387-4143	Test Type:	Reproduction-Survival (7d)	Analyst:
Start Date:	08 Sep-17 12:45	Protocol:	EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date:	13 Oct-17 11:20	Species:	Ceriodaphnia dubia	Brine: Not Applicable
Duration:	34d 23h	Source:	In-House Culture	Age : <24h
Sample ID:	03-0070-8444	Code:	11EC725C	Client: GZA GeoEnvironmental
Sample Date:	08 Sep-17	Material:	Sodium chloride	Project:
Receipt Date:	08 Sep-17	Source:	GZA GeoEnvironmental	00 79 Jans
Sample Age:	13h	Station:		10° /0 0000/
Data Transfor	rm	Alt Hyp		NOEL LOEL TOEL TU
Untransformed	t	C > T		2 2.25 2.121

Control vs	Group	Test Stat	P-Type	P-Value	Decision(a:5%)
Dilution Water	0.25	1.0000	Exact	1.0000	Non-Significant Effect
	0.5	0.2368	Exact	1.0000	Non-Significant Effect
	0.75	0.1053	Exact	0.8421	Non-Significant Effect
	1	1.0000	Exact	1.0000	Non-Significant Effect
	1.25	0.2368	Exact	1.0000	Non-Significant Effect
	1.5	1.0000	Exact	1.0000	Non-Significant Effect
	1.75	0.5000	Exact	1.0000	Non-Significant Effect
	2	0.1053	Exact	0.8421	Non-Significant Effect
	2.25*	0.0004	Exact	0.0032	Significant Effect

rest Acceptabili	bute Test Stat Lower		Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision	
Control Resp	1	0.8	>>	Yes	Passes Criteria	

Data Summary

Conc-gm/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect	
0	D	10	0	10	1	0	0.0%	
0.25		10	0	10	1	0	0.0%	
0.5		8	2	10	0.8	0.2	20.0%	
0.75		7	3	10	0.7	0.3	30.0%	
1		10	0	10	1	0	0.0%	
1.25		8	2	10	0.8	0.2	20.0%	
1.5		10	0	10	1	0	0.0%	
1.75		9	1	10	0.9	0.1	10.0%	
2		7	3	10	0.7	0.3	30.0%	
2.25		2	8	10	0.2	0.8	80.0%	

7d Survival Rate Detail

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000
0.25		1.0000	1.0000	1.0000	1.0000	1,0000	1,0000	1.0000	1.0000	1.0000	1.0000
0.5		1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1,0000	1.0000	0.0000
0.75		0.0000	0.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1,0000
1		1.0000	1,0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.25		0.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1,0000
1.5		1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1,0000	1.0000	1.0000	1.0000
1.75		1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	0.0000	1.0000	1.0000
2		1.0000	0.0000	1.0000	1.0000	0.0000	1.0000	1,0000	0.0000	1.0000	1.0000
2.25		0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000

Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 13:59 (p 2 of 2)

Test Code:

17-1480 | 11-1372-5691

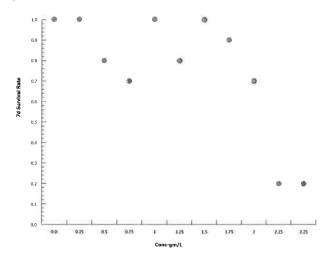
Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

10-8944-2045 Endpoint: 7d Survival Rate **CETIS Version:** CETISv1.9.2 Analysis ID: 02 Nov-17 13:58 Analysis: STP 2xK Contingency Tables Official Results: Yes Analyzed:

7d Surviva	l Rate B	inomia	ls
------------	----------	--------	----

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0.5		1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	0/1
0.75		0/1	0/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		0/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	0/1	1/1	1/1	0/1	1/1	1/1	0/1	1/1	1/1
2.25		0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1



Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:49 (p 1 of 2)

Test Code:

								Test	Code:		17-1480 11	-1372-569
Ceriodaphnia	a 7-d Survival an	nd Reprodu	ction Tes	st						N	lew England	d Bioassa
Analysis ID:	05-3970-2589	En	dpoint:	Reproduction				CET	IS Version	ı: CETISv	1,9,2	
Analyzed:	02 Nov-17 11:4		-	Nonparametric	-Control	vs T	reatments	Offic	cial Result	s: Yes		
Batch ID:	15-6387-4143	Te	st Type:	Reproduction-S	Survival	(7d)		Analyst:				
Start Date:	08 Sep-17 12:4			EPA/821/R-02	-013 (20	02)		Dilu	-	boratory Wa	ter	
Ending Date:	: 13 Oct-17 11:20	Sp		Ceriodaphnia dubia				Brin	e: No	t Applicable		
Duration:	34d 23h	So	urce:	n-House Cultu	ire			Age	<2	4h		
Sample ID:	03-0070-8444	Co	de:	11EC725C				Clie	nt: GZ	ZA GeoEnvir	onmental	
Sample Date:	: 08 Sep-17	Ma	terial:	Sodium chlorid	le			Proj	ect:			
Receipt Date:	: 08 Sep-17	So	urce: (GZA GeoEnvir	onmenta	ıl			.00	1/	Jack	5
Sample Age:	13h	Sta	ıtion:						10 -	50	am	//
Data Transfoi	rm	Alt Hyp						NOEL	LOEL	TOEL	ΤU	PMSD
Untransformed	d	C > T						1.25	1.5	1.369		63.45%
Steel Many-O	ne Rank Sum T	est										
Control	vs Conc-gn	n/L	Test St	at Critical	Ties		P-Type	P-Value	Decision	n(α:5%)		
Dilution Water	r 0.25		112	74	2	18	Asymp	0.9564	Non-Sigi	nificant Effec	ct	
	0.5		92	74	6		Asymp	0.4555	•	nificant Effec		
	0.75		82.5	74	4	18	Asymp	0.1689	Non-Sigi	nificant Effec	ct	
	1		84	74	2	18	Asymp	0.2044	_	nificant Effec		
	1.25		75	74	4	18	Asymp	0.0530	Non-Sigi	nificant Effec	t	
	1.5*		56.5	74	1	18	Asymp	7.1E-04	Significa	nt Effect		
Test Acceptal	bility Criteria	TAC	Limits									
Attribute	Test Stat	Lower	Upper	Overlap	Decis	ion						
Control Resp	6.9	15	>>	Yes	Below	Crit	eria					
PMSD	0.6345	0.13	0.47	Yes	Above	Crit	eria					
ANOVA Table)											
Source	Sum Squ	ares	Mean S	Square	DF		F Stat	P-Value	Decision	n(a:5%)		
Between	431.943		71.990	5	6		4,122	0.0015	Significa	nt Effect		
Error	1100.4		17.466	7	63							
Total	1532.34				69							
Distributional	l Tests											
Attribute	Test					tat	Critical	P-Value	Decision			
Variances		quality of V			29.03		16.81	6.0E-05	-	Variances		
Distribution	Shapiro-W	Vilk W Norr	nality Test		0.9744		0.9526	0.1614	Normal [Distribution		
Reproduction	n Summary											
Conc-gm/L	Code	Count	Mean	95% LCL		CL		Min	Max	Std Err	CV%	%Effect
0	D	10	6.9	4.214	9.586		6	2	13	1.187	54.42%	0.00%
0.25		10	8.7	3.541	13.86		9	0	21	2,281	82,90%	-26.09%
		10	5.1	2.705	7.495		5.5	0	11	1,059	65,65%	26.09%
			_	4 000	7.378		3	0	13	1.405	105.77%	39.13%
		10	4.2	1.022			-	_				000.
0.75		10 10	4.2	1,022 1,169	7.376 7 _: 231		2	0	10	1.34	100.89%	
0.75 1												39.13%
0.75 1 1.25 1.5		10	4.2	1,169	7,231		2	0	10	1.34	100.89%	39.13% 57.97%
0.5 0.75 1 1.25 1.5 1.75		10 10	4.2 2.9	1,169 1.101	7,231 4.699		2 2.5	0 0	10 7	1.34 0.7951	100.89% 86.70%	39.13% 57.97% 94.20% 100.00%

Electronic Filing: Received, Clerk's Office 5/29/2018 CETIS Analytical Report Date: 02 Nov-17 11:49 (p 2 of 2)

Test Code:

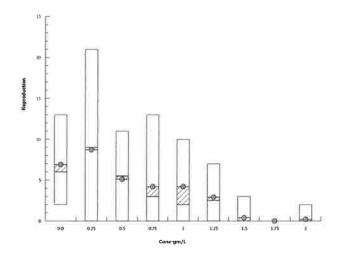
17-1480 | 11-1372-5691

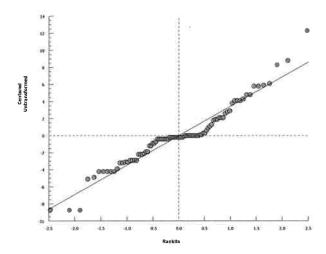
Ceriodaphnia	a 7-d Survival and F	Reproduction Test		New England Bioassay
Analysis ID:	05-3970-2589	Endpoint: Reproduction	CETIS Version:	CETISv1.9.2

Analyzed: 02 Nov-17 11:49 Analysis: Nonparametric-Control vs Treatments Official Results: Yes

Reproduction Detail

Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Đ	4	5	11	13	7	2	8	3	11	5
0.25		0	9	17	9	8	21	0	0	10	13
0.5		5	2	11	6	8	7	2	3	7	0
0.75		1	0	7	13	10	3	0	1	3	4
1		2	2	9	9	0	0	0	2	8	10
1.25		0	0	3	5	2	5	0	2	7	5
1.5		0	0	0	0	1	0	0	0	3	0
1.75		0	0	0	0	0	0	0	0	0	0
2		0	0	2	0	0	0	0	0	0	0





Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 11:49 (p 1 of 3)

Test Code:

Ceriodaphni	a 7-d Surviv	al and R	eproduc	tion Tes	t					Nev	v England Bioass
Analysis ID:	20-7059-6	800	End		'd Survival Rat			CET	'IS Version:	CETISv1.9	2
Analyzed:	02 Nov-1	7 11:49	Anal	lysis: L	inear Regress	near Regression (GLM)				Yes	
Batch ID:	15-6387-4	143	Test	Type: F	Reproduction-S	Survival (7d)	Ana	lyst:		
Start Date:	08 Sep-17	12:45	Prot	ocol: E	PA/821/R-02-	A/821/R-02-013 (2002)				ratory Water	
Ending Date	: 13 Oct-17	11:20	Spec	cies: (Ceriodaphnia d	ubia		Brin	e: Not /	Applicable	
Duration:	34d 23h		Sou	rce: I	n-House Cultu	re		Age	: <24h	1	
Sample ID:	03-0070-8	144	Cod	e: 1	1EC725C			Clie	nt: GZA	GeoEnviron	mental
Sample Date	e: 08 Sep-17		Mate	erial: S	Sodium chlorid	е		Proj	ect:		
Receipt Date			Soul	rce: (SZA GeoEnviro	onmental			120	21	MALC
Sample Age:	: 13h		Stati	ion:					(0 -	55	day
_inear Regre	ssion Optic	ns									
Model Name	Link	Functio	n	Thresh	old Option	Thresh	Optimized	Pooled	Het Corr	Weighted	
Log-Normal (Probit) η=in	/ Φ[π]		Control	Threshold	0.1	Yes	Yes	No	Yes	
Regression S	Summary										
ters LL	AlCo	В	ıc	Mu	Sigma	Adj R2	F Stat	Critical	P-Value	Decision(α	:5%)
10 -13.			5.31	0.3205	0.03478	0.9324				Lack of Fit I	
Point Estima ∟evel gm/		LCL 9	5% UCL								
LC50 2.09			213								
Test Accepta	ability Criter	ıa	TAC Li	mits							
Attribute		Stat Lo	ower	Upper	Overlap	Decision					
Control Resp	0.9	0.	8	>>	Yes	Passes C	Criteria				
Regression I	Parameters										
Parameter	Estir	nate St	td Error	95% LC	L 95% UCL	t Stat	P-Value	Decision	(α:5%)		
Threshold	0.11	21 0.	03604	0.04146	0.1828	3.11	0 0125		nt Parameter		
Slope	28.70	3 10	0.2	8.764	48.75	2.819	0.0201	Significar	nt Parameter		
Intercept	-9.21	7 3.	412	-15_91	-2.529	-2.701	0.0244	Significar	nt Parameter		
ANOVA Table	e										
Source	Sum	Squares	s Mea	n Square	DF	F Stat	P-Value	Decision	(α:5%)		
Model	157_0		78.7	8	2	76.82	2.2E-06	Significar	nt		
Residual	9.23	1	1.02	6	9						
Residual Ana	alysis										
Attribute	Meth	od			Test Stat	Critical	P-Value	Decision			
Goodness-of-	ness-of-Fit Pearson Chi-Sq GOF Test			9.23	16.92	0.4163	Non-Sign	ificant Hetero	geneity		
Likelihood Ratio GOF Test				11.46	16,92	0.2452	Non-Sign	ificant Hetero	geneity		
Distribution	-			ality Test		0.8608	0.4307		istribution		
	Ande	rson-Dar	rling A2 N	Normality	Te 0.3547	2.492	0.4654	Normal D	istribution		

Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 11:49 (p 2 of 3)

Test Code:

17-1480 | 11-1372-5691

							Test	Code:		17-1480 1	1-1372-56
Ceriodaphnia	7-d Survival a	ınd Reprod	uction Test						N	ew Englan	d Bioassa
Analysis ID: Analyzed:	20-7059-6800 02 Nov-17 11		Endpoint: 7d Survival Rate Analysis: Linear Regression (GLM)				CETIS Version: Official Results:				
d Survival R	ate Summary				Calc	ulated Varia	ate(A/B)				
Conc-gm/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
)	D	10	0,9000	0,0000	1.0000	0.1000	0.3162	35.14%	0.0%	9	10
0.25		10	1.0000	1,0000	1.0000	0.0000	0.0000	0.00%	-11.11%	10	10
0.5		10	0.8000	0.0000	1.0000	0.1333	0.4216	52.70%	11.11%	8	10
0.75		10	0,7000	0,0000	1.0000	0.1528	0.4830	69.01%	22.22%	7	10
		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	-11.11%	10	10
1.25		10	0,8000	0.0000	1.0000	0.1333	0.4216	52.70%	11.11%	8	10
1.5		10	1.0000	1,0000	1.0000	0.0000	0.0000	0.00%	-11.11%	10	10
1.75		10	0.9000	0.0000	1.0000	0.1000	0.3162	35.14%	0.0%	9	10
2		10	0.6000	0.0000	1.0000	0.1633	0.5164	86.07%	33.33%	6	10
2.25		10	0.2000	0.0000	1.0000	0.1333	0.4216	210.80%	77.78%	2	10
2.5		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
2.75		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10
7d Survival R	ate Detail										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
)	D	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1,0000	1.0000	0.0000
0.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000
).5		1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
0.75		0,0000	0.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000
1		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.25		0.0000	1.0000	1.0000	1,0000	1.0000	0.0000	1.0000	1,0000	1.0000	1,0000
1.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.75		1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000
2		1.0000	0,0000	0.0000	1.0000	0.0000	1.0000	1.0000	0.0000	1.0000	1.0000
2.25		0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000
2.5		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2.75		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7d Survival R	ate Binomials										
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
)	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
).5		1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	0/1
).75		0/1	0/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.25		0/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1
2		1/1	0/1	0/1	1/1	0/1	1/1	1/1	0/1	1/1	1/1
											0/1
2.25		0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1	1/1	U/T

CETIS™ v1.9.2.4 002-570-915-7 Analyst: ____Page 153 8 159

0/1

0/1

0/1

0/1

2.5

2.75

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

0/1

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 11:49 (p 3 of 3)

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

Analysis ID: Analyzed:

20-7059-6800 02 Nov-17 11:49 Endpoint: 7d Survival Rate Analysis:

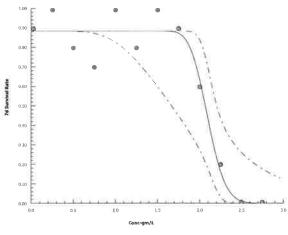
Linear Regression (GLM)

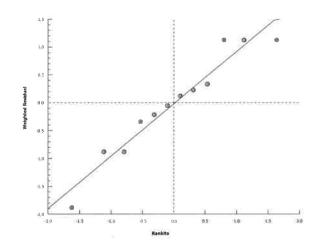
CETIS Version: CETISv1.9.2

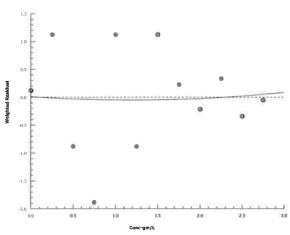
Official Results: Yes

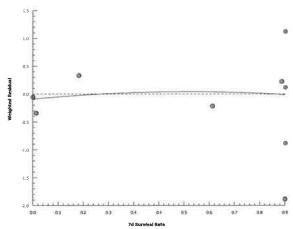
Graphics

Log-Normal: inv $\Phi[\pi]=\alpha+\beta \cdot \log[x]$









CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 11:49 (p 1 of 2)

Test Code:

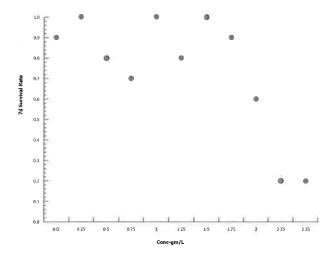
Ceriodaphnia 1	7-d Survival an	d Repro	duction Tes	st					N	ew Englan	d Bioassa		
Analysis ID: 20-4056-1321 Endpoint: Analyzed: 02 Nov-17 11:49 Analysis:				7d Survival Ra STP 2xK Cont		es		CETIS Version: CETISv1.9.2 Official Results: Yes					
Batch ID:	15-6387-4143	Т	est Type:	Reproduction-	Survival (7d)		Anal	yst:					
Start Date:	08 Sep-17 12:45		• •	EPA/821/R-02			Dilu		aboratory Wa	er			
Ending Date:	13 Oct-17 11:20	S	pecies:	Ceriodaphnia	dubia		Brin	e: N	ot Applicable				
-	34d 23h		ource:	In-House Culti	ure		Age:	<	24h				
Sample ID:	03-0070-8444		ode:	11EC725C			Clie	nt: G	ZA GeoEnviro	onmental			
Sample Date:		_		Sodium chloric	de		Proj	-					
Receipt Date:	•			GZA GeoEnvi					01	- 1 .	21.		
Sample Age:			station:					10	<u>4</u>) du	$M \supset$		
Data Transforr		Alt Hy	n				NOEL	LOEL	TOEL	TU			
Untransformed		C > T	Р				2	2,25	2.121	-10			
	3onferroni-Holn												
		i iesi	Toot S	tot B.Tuno	P-Value	Decision	(a.E9/)						
Dilution Water	vs Group 0.25		1.0000		1.0000		ificant Effect	1					
Judion Water	0.23		0.5000		1.0000	_	ificant Effect						
	0.75		0.2910		1.0000	_	ificant Effect						
	1		1.0000		1.0000	_	ificant Effect						
	1.25		0.5000		1.0000	_	ificant Effect						
	1.5		1.0000		1.0000	-	ificant Effect						
	1.75		0.7632		1.0000	-	ificant Effect						
	2		0.1517		1.0000	_	ificant Effect						
	2.25*		0,0027	Exact	0.0246	Significar							
Test Acceptab	oility Criteria	TAC	C Limits										
Attribute	Test Stat		Upper	Overlap	Decision								
Control Resp	0.9	0.8	>>	Yes	Passes C	riteria							
Data Summary	v												
Conc-gm/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect						
0	D	9	1	10	0.9	0.1	0.0%						
0.25		10	0	10	1	0	-11.11%						
0.5		8	2	10	0.8	0.2	11.11%						
0.75		7	3	10	0.7	0.3	22.22%						
1		10	0	10	1	0	-11.11%						
1.25		8	2	10	0.8	0.2	11.11%						
1,5		10	0	10	1	0	-11.11%						
1.75		9	1	10	0.9	0.1	0.0%						
2		6	4	10	0.6	0.4	33.33%						
2.25		2	8	10	0.2	8.0	77,78%						
7d Survival Ra	ate Detail												
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10		
)	D	1.0000			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000		
0.25		1.0000			1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000		
0.5		1.0000			0.0000	1.0000	1.0000	1.0000	1.0000	1,0000	0.0000		
0.75		0.0000			1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000		
		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
		0.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000			
1.25					1.0000 1.0000	1.0000 1.0000	0.0000 1.0000	1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000		
1.25 1.5		0.0000	1.0000	1.0000									
1 1,25 1.5 1.75 2		0.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		

CETIS Analytical Report Electronic Filing: Received, Clerk's Office 5/29/2018 02 Nov-17 11:49 (p 2 of 2)

Test Code:

17-1480 | 11-1372-5691

Ceriodaphnia	a 7-d Survival a	nd Repro	duction Te			ı	lew Englan	d Bioassay				
Analysis ID: Analyzed:	20-4056-1321 02 Nov-17 11		Endpoint: Analysis:	7d Survival R STP 2xK Con		bles	CETIS Version: CETISv1.9.2 Official Results: Yes					
7d Survival R	Rate Binomials											
Conc-gm/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10	
0	D	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	
0.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
0.5		1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	0/1	
0.75		0/1	0/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	
1		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
1.25		0/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	
1.5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
1.75		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	
2		1/1	0/1	0/1	1/1	0/1	1/1	1/1	0/1	1/1	1/1	
2.25		0/1	0/1	1/1	0/1	0/1	0/1	0/1	0/1	1/1	0/1	



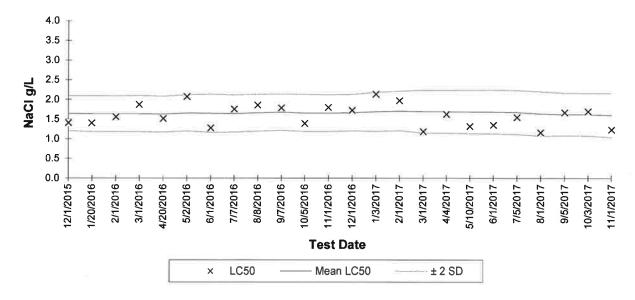
Electronic Filing: Received, Clerk's Office 5/29/2018

Attachment C

Reference Toxicant Chart

Electronic Filing: Received, Clerk's Office 5/29/2018

New England Bioassay Reference Toxicant Data: Sodium chloride (NaCl) Ceriodaphnia dubia 48-hour LC50

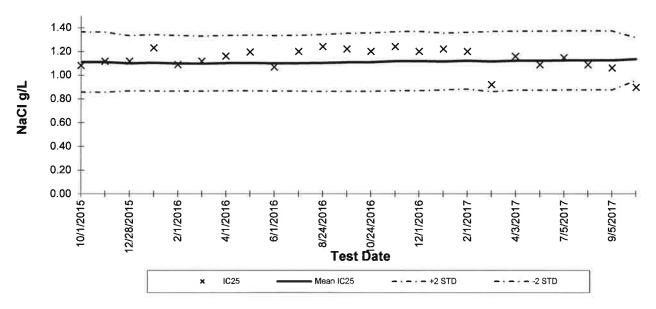


								CV National	CV National
Test ID	Date	LC ₅₀	Mean LC ₅₀	STD	-2 STD	+2 STD	CV	75th %	90th %
15-1772	12/1/2015	1.4	1.6	0.2	1.2	2.1	0.13	0.29	0.34
16-107	1/20/2016	1.4	1.6	0.2	1.2	2.1	0.14	0.29	0.34
16-134	2/1/2016	1.6	1.6	0.2	1.2	2.1	0.14	0.29	0.34
16-298	3/1/2016	1.9	1.6	0.2	1.2	2.1	0.14	0.29	0.34
16-563	4/20/2016	1.5	1.6	0.2	1.2	2.1	0.14	0.29	0.34
16-592	5/2/2016	2.1	1.7	0.2	1.2	2.1	0.14	0.29	0.34
16-703	6/1/2016	1.3	1.7	0.2	1.2	2.1	0.15	0.29	0.34
16-885	7/7/2016	1.8	1.6	0.2	1.2	2.1	0.14	0.29	0.34
16-1156	8/8/2016	1.9	1.7	0.2	1.2	2.1	0.14	0.29	0.34
16-1252	9/7/2016	1.8	1.7	0.2	1.2	2.1	0.14	0.29	0.34
16-1466	10/5/2016	1.4	1.7	0.2	1.2	2.1	0.14	0.29	0.34
16-1586	11/1/2016	1.8	1.7	0.2	1.2	2.1	0.14	0.29	0.34
16-1730	12/1/2016	1.7	1.7	0.2	1.2	2.1	0.14	0.29	0.34
17-5	1/3/2017	2.1	1.7	0.2	1.2	2.2	0.15	0.29	0.34
17-147	2/1/2017	2.0	1.7	0.3	1.2	2.2	0.15	0.29	0.34
17-274	3/1/2017	1.2	1.7	0.3	1.2	2.2	0.16	0.29	0.34
17-475	4/4/2017	1.6	1.7	0.3	1.1	2.2	0.16	0.29	0.34
17-695	5/10/2017	1.3	1.7	0.3	1.1	2.2	0.16	0.29	0.34
17-772	6/1/2017	1.4	1.7	0.3	1.1	2.2	0.17	0.29	0.34
17-968	7/5/2017	1.6	1.7	0.3	1.1	2.2	0.17	0.29	0.34
17-1140	8/1/2017	1.2	1.6	0.3	1.1	2.2	0.17	0.29	0.34
17-1325	9/5/2017	1.7	1.6	0.3	1.1	2.2	0.17	0.29	0.34
17-1521	10/3/2017	1.7	1.6	0.3	1.1	2.2	0.17	0.29	0.34
17-1689	11/1/2017	1.2	1.6	0.3	1.0	2.2	0.18	0.29	0.34

Electronic Filing: Received, Clerk's Office 5/29/2018

New England Bioassay Reference Toxicant Data: Ceriodaphia dubia Chronic Reproduction IC25

Reference Toxicant: Sodium chloride Test Dates: Oct 2015 - Oct 2017



								CV National	CV National
Test ID	Date	IC ₂₅	Mean IC ₂₅	STD	-2STD	+2STD	CV	75th%	90th%
15-1540	10/1/2015	1.08	1.11	0.13	0.86	1.37	0.11	0.45	0.62
15-1691	11/2/2015	1.12	1.11	0.13	0.86	1.36	0.11	0.45	0.62
15-1897	12/28/2015	1.12	1.10	0.12	0.87	1.33	0.11	0.45	0.62
16-37	1/4/2016	1.23	1.11	0.12	0.87	1.34	0.11	0.45	0.62
16-138	2/1/2016	1.09	1.10	0.12	0.87	1.34	0.11	0.45	0.62
16-307	3/1/2016	1.12	1.10	0.12	0.87	1.33	0.11	0.45	0.62
16-463	4/1/2016	1.16	1.10	0.12	0.87	1,34	0.11	0.45	0.62
16-596	5/2/2016	1.19	1.10	0.12	0.87	1.34	0.11	0.45	0.62
16-707	6/1/2016	1.07	1.10	0.12	0.87	1.34	0.11	0.45	0.62
16-880	7/1/2016	1.20	1.10	0.12	0.87	1.34	0.11	0.45	0.62
16-1212	8/24/2016	1.24	1.10	0.12	0.86	1.34	0.11	0.45	0.62
16-1258	9/8/2016	1.22	1.11	0.12	0.87	1.35	0.11	0.45	0.62
16-1553	10/24/2016	1.20	1.11	0.12	0.87	1.36	0.11	0.45	0.62
16-1592	11/1/2016	1.24	1.12	0.12	0.87	1.37	0.11	0.45	0.62
16-1734	12/1/2016	1.20	1,12	0.13	0.87	1.37	0.11	0.45	0.62
17-14	1/3/2017	1.22	1.12	0.12	0.88	1.36	0.11	0.45	0.62
17-151	2/1/2017	1.20	1.12	0.12	0.88	1.36	0.11	0.45	0.62
17-267	3/1/2017	0.92	1.12	0.13	0.86	1.37	0.11	0.45	0.62
17-480	4/3/2017	1.16	1.12	0.12	0.87	1.37	0.11	0.45	0.62
17-616	5/1/2017	1.09	1.12	0.12	0.88	1.37	0.11	0.45	0.62
17-972	7/5/2017	1.15	1.13	0.12	0.88	1.37	0.11	0.45	0.62
17-1146	8/2/2017	1.09	1.13	0.12	0.88	1.38	0.11	0.45	0.62
17-1317	9/5/2017	1.06	1.13	0,12	0.88	1.38	0,11	0.45	0.62
17-1516	10/2/2017	0.90	1.14	0.09	0.95	1.32	0.08	0.45	0.62