

2021-2022 Permit Year

Ventura Countywide Stormwater Quality Management Program Annual Report

Attachment D Monitoring Appendices I - Part 2



Camarillo
County of Ventura
Fillmore
Moorpark
Ojai
Oxnard
Port Hueneme
Santa Paula
Simi Valley
Thousand Oaks

Ventura County Watershed Protection District



Toxicity Report for Ventura County Watershed Protection District

Most Sensitive Species Testing

PROJECT: 2021/22-2 (Wet)

PO: NA

CLIENT: Ms. Kelly Hahs

VCWPD

800 South Victoria Avenue, L#1670

Ventura, CA 93003-1670

SAMPLE I.D.: ME-CC, ME-VR2, ME-SCR

DATE RECEIVED: 12/14/2021

DATE REPORTED: 1/14/2022 Preliminary Results, 2/8/2022 Final Report

ABC LAB NO.: VCF1221.121, .122, .123

29 North Olive Street Ventura, California 93001 (805) 643-5621

INTRODUCTION

Toxicity tests using fathead (*P. promelas*), Ceriodaphnia (*C. dubia*), midge (*C. dilutus*), and Hyalella (*H. azteca*) were performed on freshwater samples ME-CC and ME-VR2. Toxicity tests using purple urchin (*S. purpuratus*), giant kelp (*M. pyrifera*), and Topsmelt (*A. affinis*) were performed on marine sample ME-SCR to evaluate the quality of samples for Ventura County Watershed Protection District. The samples were collected on December 14th, 2021 and delivered the same day. Testing was conducted at Aquatic Bioassay and Consulting Labs, Inc. in Ventura California from December 15th, through December 22nd, 2021.

MATERIALS AND METHODS

Test Material

Test material consisted of 3 grab samples collected by Ventura County Watershed Protection District (VCWPD) receiving water sites. Sample collection was performed by VCWPD personnel under the direction of Ms. Kelly Hahs. The samples were collected in 5-gallon low-density polyethylene buckets and were delivered to Aquatic Bioassay in immediately after sampling. Sample temperature was recorded upon acceptance at Aquatic Bioassay Laboratories and is included in the report for each station.

Samples were stored at 4°C. Upon arrival at Aquatic Bioassay, an aliquot of each sample was drawn and water quality parameters of pH, dissolved oxygen (DO), conductivity, temperature, salinity, alkalinity, and hardness were measured and recorded.

Bioassay Testing

The study was performed in accordance with the United States Environmental Protection Agency (USEPA) protocols:

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002, US EPA-821-R-02-013.

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002, US EPA-821-R-02-014.

Summary of results for 100% sample concentration:

Sample ID	Test	Endpoint	Control	100% Sample	Statistically Different From Control	TST Result	*Percent Effect
ME-CC	Chronic Fathead	Survival (%)	100	98.33	No	Pass	1.67
		Biomass (mg)	0.3723	0.3798	No	Pass	-2.01
ME-CC	Chronic Ceriodaphnia	Survival (%)	100	100	No	Pass	0.00
	Сеноцарнна	Reproduc tion #-	22.1	24.5	No	Pass	-10.86
ME-CC	Acute Hyalella	Survival (%)	100	98.33	No	Pass	10.00
ME-CC	Acute Chironomus	Survival (%)	100	90	No	Pass	5.00
ME-VR2	Chronic Fathead	Survival (%)	100	96.67	No	Pass	3.33
		Biomass (mg)	0.3723	0.3555	No	Pass	4.66
ME-VR2	Chronic Ceriodaphnia	Survival (%)	100	100	No	Pass	0.00
	Сопошрини	Reproduction #-Neonates	24.6	29.4	No	Pass	-19.51
ME-VR2	Acute Hyalella	Survival (%)	100	100	No	Pass	0.00
ME-VR2	Acute Chironomus	Survival (%)	100	100	No	Pass	5.00
ME-SCR	Chronic Topsmelt	Survival (%)	100	100	No	Pass	0.00
		Biomass (mg)	1.067	0.984	No	Pass	<mark>7.80</mark>

^{*}Percent Effect at IWC = (Mean Control Response - Mean IWC Response) * 100 / Mean Control Response.

Summary of	f results for	100% san	ple concentration:	(Cont.)
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Sample ID	Test	Endpoint	Control	100% Sample	Statistically Different From Control	TST Result	*Percent Effect
ME-SCR		Germination (%)	92.20	94.60	No	Pass	-2.60
	Chronic Kelp	Tube Length	13.10	13.12	No	Pass	-0.15
ME-SCR	Chronic Urchin	Fertilization (%)	96.0	95.0	No	Pass	2.08

^{*}Percent Effect at IWC = (Mean Control Response – Mean IWC Response) * 100 / Mean Control Response.

Quality Assurance

All samples were received in good condition at the appropriate temperatures, and all tests were initiated within 72 hours of sample collection. The negative controls met the minimum test acceptability criterion of 80 percent mean survival. Variability among replicates was minimal, and the ability to detect a statistical difference was deemed appropriate.

Survival counts were recorded daily to ensure tests were progressing as expected. Counts were conducted daily on the control replicates. The temperatures in samples were within the recommended range for the entire test duration.

Reference Toxicant Test

A concurrent reference toxicant test using copper chloride was conducted to assess the health of the test organisms. Mean control survival met the test acceptability criterion. The median lethal concentration (LC50) calculated for this test was within two standard deviations of the internal control chart mean, indicating test organism sensitivity was typical. Reference toxicant test results are summarized in the report.

Results and Discussion

Mean survival and statistical differences from control for the tests, error bars, results summaries including individual replicate data, statistical summaries, and raw datasheets are located in in the appendix. Appropriate chain-of-custody (COC) procedures were followed during all phases of this study, and copies of the COC forms are provided in the appendix.

Results of the species sensitivity screen are as follows: ME-CC most sensitive species is Hyalella with a percent effect of 10.00, ME-VR2 most sensitive species is Chironomus with a percent effect of 5.00, and ME-SCR most sensitive species is Topsmelt with percent effect of 7.80. The most sensitive species for each site is highlighted in the table above.

Data Analysis and Reporting

The response observed in this test includes survival of the test organism. Two statistical methods were employed to determine whether there was an effect between the control and test sample: 1) A standard t-test approach following the statistical analysis decision tree in EPA 2002; and 2) A more recent EPA-recommended Test of Significant Toxicity (TST) approach (EPA 2010).

References:

United States Environmental Protection Agency, 1995. Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136.

United States Environmental Protection Agency, 2002. Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/821/R-02-014.

United States Environmental Protection Agency, 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA/821/R-02/012.

United States Environmental Protection Agency, 2010. National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document. Office of Wastewater Management. EPA 833-R-10-003.



Chain of Custody Record

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE20-007)

Most Sensitive Species Testing - Toxicity - ABC Laboratories

Sampling Date: Sampling Team:	Side 1 of 1 Project Number: 2021/22-2 (Wet) W. Carly & S. Morns												
SAMPLE ID	DATE/TIME COLLECTED	Chronic toxicity - Pimephales promelas (fathead minnow)	Chronic toxicity - Ceriodaphnia dubia (daphnid)	Chronic toxicity - Hyalella azteca (Amphipod)	Chronic toxicity - Chironomus dilutus (midge)	Chronic toxicity - Atherinops affinis (topsmelt)	Chronic toxicity - Macrocystis pyrifera (giant kelp)	Chronic toxicity - Strongylocentrotus purpuratus (purple sea urchin)	Number of 5-Gallon Buckets	NOTES			
ME-CC	12/14/2021 12:20 PM	X	Х	Х	Х				3	Note 1, Note 2, Note 3			
ME-VR2	12/14/2021 9:15 AM	X	X	X	Х				3	Note 1, Note 2, Note 3			
ME-SCR	12/4/2021 IT:00AM					X	X	X	3	Note 1, Note 2, Note 3			
			w	= V	12	251	N			- 1			
			65	2 =	200	11	60	1					
			101		رالمعن	-	4	1.					
					- 0			91 = 1					
			£0,	1	₹0,	-	200	71					
Relinquished Received	Printed Name Signature Affiliation Printed Name Signature	Cons	1			Date/7	Гim <u>e</u>	12 1	4(2	-1 150D			
	Affiliation ABC	LAB	36			Date/]	Time !	2/14/	121	1500			
Other Notes:	Note 1: Dilutions - 6.25%	6 12 5º	/o 25º/	50%									
	Note 2: Please contact Ke					thal or	subleth	al effec	t > 5	50%. TIE may be needed.			
	Note 3: Notify District w												



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.: DATE RECEIVED: ME-CC 12/14/2021

DATE RECEIVE

12/17/2021

ABC LAB. NO.:

VCF1221.121

CHRONIC FATHEAD MINNOW SURVIVAL & GROWTH BIOASSAY

SURVIVAL NOEC = 100.00 %

TUc = 1.00

EC25 = >100.00 %

EC50 = >100.00 %

BIOMASS NOEC = 100.00%

TUc = 1.00

IC25 = >100.00 %

IC50 = >100.00 %

Yours very truly

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

13 Jan-22 10:21 (p 1 of 2)

Test Code/ID:

Fathead Minn	ow 7-d Larval Surviv	al and Growt	th Test					Aquatic	Bioassay &	Consulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	19-7569-4089 15 Dec-21 15:23 22 Dec-21 14:10 6d 23h	Test Type: Protocol: Species: Taxon:	Growth-Surviv EPA/821/R-02 Pimephales pr Actinopterygii	-013 (2002)			Anal Dilue Brin Soul	ent: La e: No	aboratory Wat ot Applicable quatic Biosyst		Age:	<24
Receipt Date:	17-8842-5931 14 Dec-21 12:20 14 Dec-21 15:00	Code: Material: CAS (PC):	VCF1221.121f Sample Water				Proje Sour Stati	rce: Bi	PDES Stormw oassay Repoi E-CC		eason	
Sample Age:		Client:	Ventura Count	y vvatersned	Protection	Distr						
	parison Summary											
Analysis ID	Endpoint		parison Method		•	/ NO		LOEL	TOEL	PMSD	TU	
	7d Survival Rate		Many-One Ranl			100		>100		3.72%	1	
09-9249-7531	Mean Dry Biomass-m	g Dunn	ett Multiple Com	iparison Tes	t	100)	>100	1444	5.95%	1	
Point Estimate	e Summary											
Analysis ID	Endpoint	Point	Estimate Meth	od		/ Le	vel	%	95% LCL	95% UCL	TU	
04-9756-7619	7d Survival Rate	Linea	r Interpolation (I	CPIN)		/ EC		>100			<1	
						/ EC		>100			<1	
						/ EC		>100	1	***	<1	
						/ EC		>100			<1	
						/ EC		>100	***		<1	
						/ EC		>100	***		<1	
16-5003-4299	Mean Dry Biomass-m	g Linea	r Interpolation (I	CPIN)		/ IC1		>100	***	***	<1	
						/ IC1		>100			<1	
						/ IC2		>100			<1	
						/ IC2		>100			<1	
						/ IC4 / IC5		>100 >100			<1	
T	***					/ 100		7100	***		<1	_
Test Acceptab	-	A44! L		T4 C4-4		Limits		0	D. data			
	7d Survival Rate	Attrib		Test Stat		_	per	Overlap				_
	7d Survival Rate		ol Resp		0.8	>>		Yes	Passes C			
	Mean Dry Biomass-m		ol Resp ol Resp	1 0.3723	0.8	>>		Yes	Passes Ci			
	Mean Dry Biomass-m	_	ol Resp ol Resp	0.3723	0.25 0.25	>> >>		Yes	Passes C			
	Mean Dry Biomass-m	•	· ·	0.05953	0.25	0.3		Yes Yes	Passes Ci Below Crit			
7d Survival Ra		9 111101		0.00000	0.12	0.0		103	Delow Citi	teria		
Conc-%	Code Cou	nt Mean	95% LCL	95% UCL	Min	Ma	×	Std Err	Std Dev	CV%	%Effe	ect
0	N 4	1.000		1.0000	1.0000		000	0.0000	0.0000		0.00%	_
6.25	4	1.000		1.0000	1.0000		000	0.0000	0.0000		0.00%	
12.5	4	1.000		1.0000	1.0000		000	0.0000	0.0000		0.00%	
25	4	0.983		1.0360	0.9333		000	0.0167	0.0333	3.39%	1.67%	
50	4	1.000	0 1.0000	1.0000	1.0000	1.0	000	0.0000	0.0000	***	0.00%	
100	4	0.983	3 0.9303	1.0360	0.9333	1.0	000	0.0167	0.0333	3.39%	1.67%	
Mean Dry Bior	mass-mg Summary											
Conc-%	Code Cou	nt Mean	95% LCL	95% UCL	Min	Ma	x	Std Err	Std Dev	CV%	%Effe	ect
0	N 4	0.372	3 0.3471	0.3976	0.3573	0.3	913	0.00793	7 0.01587	4.26%	0.00%	6
5.25	4	0.381	7 0.368	0.3953	0.372	0.3	927	0.00429	0.008581	2.25%	-2.51	%
12.5	4	0.376	7 0.3515	0.4018	0.364	0.3	98	0.00791	2 0.01582	4.20%	-1.16	%
25	4	0.372		0.3919	0.3573	0.3	86	0.00609	4 0.01219	3.27%	-0.04	%
50	4	0.375		0.3873	0.3693	0.3		0.00371		1.98%	-0.85	%
100	4	0.379	8 0.3553	0.4044	0.3647	0.3	973	0.00770	9 0.01542	4.06%	-2.019	%

CETIS Summary Report

Report Date:

13 Jan-22 10:21 (p 2 of 2)

Test Code/ID:

						Test Code/ID:	VCF1221.121fml / 13-0545-3821
Fathead Minn	ow 7-d Larval	Survival an	d Growth T	est		Aquatic Bi	oassay & Consulting Labs, Inc.
7d Survival R	ate Detail					MD5: B67EFD7:	3A631D4AD26ED14790BC2B3D0
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	1.0000	1.0000	1.0000	1.0000		
6.25		1.0000	1.0000	1.0000	1.0000		
12.5		1.0000	1.0000	1.0000	1.0000		
25		1.0000	0.9333	1.0000	1.0000		
50		1.0000	1.0000	1.0000	1.0000		
100		1.0000	1.0000	0.9333	1.0000		
Mean Dry Bio	mass-mg Deta	ail				MD5: 9B6334E2	2785C8D43846ECFD896A47D40
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	0.3793	0.3913	0.3613	0.3573		
6.25		0.372	0.3927	0.3827	0.3793		
12.5		0.3793	0.3653	0.398	0.364		
25		0.3693	0.3573	0.386	0.3773		
50		0.3693	0.3713	0.3753	0.386		
100		0.388	0.3647	0.3973	0.3693		
7d Survival R	ate Binomials						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	15/15	15/15	15/15	15/15		
6.25		15/15	15/15	15/15	15/15		
12.5		15/15	15/15	15/15	15/15		
25		15/15	14/15	15/15	15/15		
50		15/15	15/15	15/15	15/15		
100		15/15	15/15	14/15	15/15		

Report Date:

13 Jan-22 10:21 (p 1 of 4)

Test Code/ID:

Fathead Minn	now 7	-d Larvai S	urvival a	nd Growth	Test					Aquat	tic Bioas	say & (Consulting	Labs, Inc		
Analysis ID:	20-9	756-1700	Е	ndpoint:	7d Survival R	ate			CET	IS Versi	ion: C	ETISv1	.9.7			
Analyzed:	13 Ja	an-22 10:20	Α	nalysis:	Nonparametr	c-Contro	l vs T	reatments	Stat	us Leve	el: 1					
Edit Date:	13 Ja	an-22 10:18	М	D5 Hash:	B67EFD73A6	31D4AD	26EC	14790BC2	B3D Edit	Editor ID: 000-189-126-0						
Batch ID:	19-7	569-4089	Te	est Type:	Growth-Survi	val (7d)			Ana	Analyst:						
Start Date:	15 D	ec-21 15:23	B P	rotocol:	EPA/821/R-0	2-013 (20	02)		Dilu	Diluent: Laboratory Water						
Ending Date:	22 D	ec-21 14:10	S	pecies:	Pimephales p	romelas			Brin	e:	Not Appl	icable				
Test Length:	6d 2	23h	Ta	axon:	Actinopterygi				Sou	rce:	Aquatic I	Biosyste	ems, CO	Age: <2		
Sample ID:	17-8	842-5931	С	ode:	VCF1221.12	fml			Proj	ect:	NPDES:	Stormw	ater Wet S	eason		
Sample Date:	: 14 D	ec-21 12:20) M	aterial:	Sample Wate	r			Sou	rce:	Bioassay	, Repor	t			
Receipt Date:	: 14 D	ec-21 15:00) с	AS (PC):					Stat	ion:	ME-CC					
Sample Age:	27h ((6.5 °C)	С	lient:	Ventura Cour	ity Water	shed	Protection	Distri							
Data Transfor	rm		Alt Hyp)				NOEL	LOEL	TOEL	. TU		MSDu	PMSD		
Angular (Corre	ected)		C > T					100	>100		1		0.03723	3.72%		
Steel Many-O	ne Ra	ank Sum Te	st													
Control	vs	Conc-%		Test S	tat Critical	Ties	DF	P-Type	P-Value	Decis	ion(a:5%	6)				
Negative Cont	trol	6.25		18	10	1	6	CDF	0.8333		Significan					
-		12.5		18	10	1	6	CDF	0.8333		Significan					
		25		16	10	1	6	CDF	0.6105	Non-S	Significan	t Effect				
		50		18	10	1	6	CDF	0.8333		Significan					
		100		16	10	1	6	CDF	0.6105		Significan					
Test Acceptal	bility	Criteria	TAC	Limite												
	bility	Criteria Test Stat		Limits Upper	Overlap	Decis	ion									
Test Acceptal Attribute Control Resp	bility (Limits Upper >>	Overlap Yes	Decis		iteria								
Attribute Control Resp		Test Stat	Lower	Upper				iteria								
Attribute Control Resp ANOVA Table		Test Stat	Lower 0.8	Upper >>	Yes	Passe			P.Value	Dacis	ion(a:5º	4)				
Attribute Control Resp ANOVA Table Source		Test Stat 1 Sum Squa	0.8	Upper	Yes_	Passe DF		F Stat	P-Value		sion(α:5%	•				
Attribute Control Resp ANOVA Table Source Between		Test Stat 1 Sum Squa 0.0057813	0.8	Upper >> Mean : 0.0011	Yes Square 563	Passe DF 5			P-Value 0.5640		s ion(α:5 % Significan	•				
Attribute Control Resp ANOVA Table Source Between Error		Test Stat 1 Sum Squa 0.0057813 0.026016	0.8	Upper	Yes Square 563	Passe DF		F Stat				•				
Attribute Control Resp ANOVA Table Source Between Error Total	•	Test Stat 1 Sum Squa 0.0057813 0.026016 0.0317973	0.8	Upper >> Mean : 0.0011	Yes Square 563	DF 5 18		F Stat				•				
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur	•	Test Stat 1 Sum Squa 0.0057813 0.026016 0.0317973 ns Tests	0.8	Upper >> Mean : 0.0011	Yes Square 563	DF 5 18 23	es Cr	F Stat 0.8	0.5640	Non-S	Significan	t Effect				
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Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur	•	Test Stat 1 Sum Squa 0.0057813 0.026016 0.0317973 ns Tests Test Barllett Eq Levene Ec	0.8 ares uality of value ity	Wean: 0.0011 0.0014 Variance To	Yes Square 563 453	DF 5 18 23 Test 5	es Cr	F Stat 0.8 Critical 4.248	0.5640 P-Value 0.0007	Decis Indete	Significan Sion(α:1% erminate ual Varia	t Effect				
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Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance	•	Sum Squa 0.0057813 0.026016 0.0317973 ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino	uality of value Equality Darling A Controls Skewne	Mean : 0.0011 0.0014 Variance To Variance To Variance To Variance To Variance To To State Test Test ss Test	Yes Square 563 453 est est cce Test	DF 5 18 23 Test 5 7.2 0.8 4.32 3.005 3.704	es Cr	F Stat 0.8 Critical 4.248 4.248 3.878 2.576 2.576	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002	Decis Indete Unequ Equal Non-N Non-N	sion(α:1% erminate ual Varian Variance Normal Di Normal Di	(6) nces es istributio istributio	on on on			
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance	•	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino	uality of value Equality of value Equality of Security	Mean 3 0.0011 0.0014 Variance To Variance To ty of Variance To the State Test Test as Test as K2 Omnibus	Yes Square 563 453 est est cce Test	DF 5 18 23 Test 5 7.2 0.8 4.32 3.005 3.704 22.75	es Cr	F Stat 0.8 Critical 4.248 4.248 4.248 2.576 2.576 9.21	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05	Decis Indete Unequ Equal Non-N Non-N Non-N	sion(α:1% erminate ual Varian Variance Normal Di Normal Di Normal Di	6) nces es istributio istributio istributio	on on on on			
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance	•	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro	uality of value Equality of value Equality of Secure Secur	Mean 3 0.0011 0.0014 Variance To Variance To ty of Variance To the State Test Test Test Test Test Test Test Test Test	Yes Square 563 453 est est ce Test	Passe DF 5 18 23 Test 5 7.2 0.8 4.32 3.005 3.704 22.75 0.416	Stat	F Stat 0.8 Critical 4.248 4.248 4.248 2.576 2.576 9.21 0.2056	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05	Decis Indete Unequ Equal Non-N Non-N Non-N Non-N	sion(α:1% erminate ual Varian Variance Normal Di Normal Di Normal Di Normal Di	nces es istributio istributio istributio istributio istributio	on on on on			
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W	uality of value Equality of value Equality of Secure Secur	Mean 3 0.0011 0.0014 Variance To Variance To ty of Variance To the State Test Test Test Test Test Test Test Test Test	Yes Square 563 453 est est ce Test	DF 5 18 23 Test 5 7.2 0.8 4.32 3.005 3.704 22.75	Stat	F Stat 0.8 Critical 4.248 4.248 4.248 2.576 2.576 9.21	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05	Decis Indete Unequ Equal Non-N Non-N Non-N Non-N	sion(α:1% erminate ual Varian Variance Normal Di Normal Di Normal Di	nces es istributio istributio istributio istributio istributio	on on on on			
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino Chagostino Kolmogoro Shapiro-W	uality of value Equality of va	Wean Solution No. 1997 Mean Solution No. 1997 Variance To Variance To Variance To Variance To Variance To Solution No. 1997 Zerest Test Test Ser Test No. 1997 K2 Omnibut On Test Test Test Test Test No. 1997 Test Test No. 1997 Test Test Test No. 1997 Test Test No. 1997 Test Test No. 1997 Test Test No. 1997 Test No.	Yes Square 563 453 est est ce Test bus Test	Passe DF 5 18 23 Test 9 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615	Stat	F Stat 0.8 Critical 4.248 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05	Decis Indete Unequ Equal Non-N Non-N Non-N Non-N Non-N	sion(α:19 erminate ual Varian Variance Normal Di Normal Di Normal Di Normal Di	nces es istributio istributio istributio istributio istributio	on on on on on			
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino C'Agostino Kolmogoro Shapiro-W	uality of value Equality of va	Wean: 0.0011 0.0014 Variance To Variance To Variance To St Test Test SS Test K2 Omnibov D Test rmality Tes Mean	Yes Square 563 453 est est ce Test bus Test t	Passe DF 5 18 23 Test 5 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615	Stat	F Stat 0.8 Critical 4.248 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05 <1.0E-05	Decis Indete Unequ Equal Non-N Non-N Non-N Non-N Non-N Non-N	sion(a:1% erminate ual Varian Variance Normal Di Normal Di Normal Di Normal Di	nces es istributio istributio istributio istributio istributio	on on on on on on			
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution 7d Survival R Conc-%	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino Chagostino Kolmogoro Shapiro-W	uality of valuality of valualit	Variance To Varian	Yes Square 563 453 est est est t 95% LC 1.0000	Passe DF 5 18 23 Test \$ 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615 - 95% U 1.000	SStat 7 4 JCL 0	F Stat 0.8 Critical 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 1.0000	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05 <1.0E-05 Min 1.0000	Decis Indete Unequ Equal Non-N	Significan Sion(a:1% erminate ual Varian Variance Normal Di Normal Di Normal Di Normal Di Stormal Di	nces es istributio istributio istributio istributio istributio istributio	on on on on on on on on	0.00%		
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution 7d Survival R Conc-% 0 6.25	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino C'Agostino Kolmogoro Shapiro-W	uality of value Equality of va	Variance To Varian	Yes Square 563 453 est est est ous Test t 95% LC 1.0000 1.0000	Passe DF 5 18 23 Test \$ 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615	7 4 JCL 0	F Stat 0.8 Critical 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 1.0000 1.0000	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05 <1.0E-05 Min 1.0000 1.0000	Decis Indete Uneque Equal Non-N Non-N Non-N Non-N Non-N Non-N 1.0000	Significan Sion(a:1% Forminate Uariance Normal Di Normal Di Normal Di Normal Di Normal Di Sto 0 0.0	nces es istributio istributio istributio istributio d Err 0000	On O	0.00%		
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution 7d Survival R Conc-% 0 6.25 12.5	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino C'Agostino Kolmogoro Shapiro-W	uality of valuality of valualit	Variance To Varian	Yes Square 563 453 est est est ous Test t 95% LC 1.0000 1.0000 1.0000	Passe DF 5 18 23 Test \$ 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615 - 95% L 1.000 1.000 1.000	7 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	F Stat 0.8 Critical 4.248 4.248 4.248 2.576 2.576 9.21 0.2056 0.884 Median 1.0000 1.0000 1.0000	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05 Min 1.0000 1.0000 1.0000	Decis Indete Uneque Equal Non-N Non-N Non-N Non-N 1.0000 1.0000	Significan Sion(α:1% Forminate Uariance Normal Di Normal Di Normal Di Normal Di O 0.00 0 0.00	nces es istributio istributio istributio istributio istributio istributio	CV% 0.00% 0.00%	0.00% 0.00% 0.00%		
Attribute Control Resp ANOVA Table Source	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino C'Agostino Kolmogoro Shapiro-W	uality of valuality of valualit	Variance To Varian	Yes Square 563 453 est est est ous Test t 95% LC 1.0000 1.0000 1.0000	Passe DF 5 18 23 Test \$ 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615	7 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	F Stat 0.8 Critical 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 1.0000 1.0000	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05 <1.0E-05 Min 1.0000 1.0000	Decis Indete Uneque Equal Non-N Non-N Non-N Non-N Non-N Non-N 1.0000	Significan Sion(α:1% Forminate Uariance Normal Di Normal Di Normal Di Normal Di O 0.00 0 0.00	nces es istributio istributio istributio istributio d Err 0000	On O	0.00% 0.00%		
Attribute Control Resp ANOVA Table Source Between Error Total ANOVA Assur Attribute Variance Distribution 7d Survival R Conc-% 0 6.25 12.5	mptio	Sum Squa 0.0057813 0.026016 0.0317973 Ins Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino C'Agostino Kolmogoro Shapiro-W	uality of value Equality of va	Variance To Varian	Yes Square 563 453 est est est t 95% LC 1.0000 1.0000 1.0000 0.9303	Passe DF 5 18 23 Test \$ 7.2 0.8 4.32 3.005 3.704 22.75 0.416 0.615 - 95% L 1.000 1.000 1.000	7 4 JCL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	F Stat 0.8 Critical 4.248 4.248 4.248 2.576 2.576 9.21 0.2056 0.884 Median 1.0000 1.0000 1.0000	0.5640 P-Value 0.0007 0.5640 <1.0E-05 0.0027 0.0002 1.2E-05 <1.0E-05 Min 1.0000 1.0000 1.0000	Decis Indete Uneque Equal Non-N Non-N Non-N Non-N 1.0000 1.0000	Significan Sion(a:19 erminate ual Varian Variance Normal Di Normal Di Normal Di Normal Di O 0.0	nces es istributio istributio istributio istributio istributio istributio	CV% 0.00% 0.00%	0.00% 0.00% 0.00%		

Report Date:

13 Jan-22 10:21 (p 2 of 4)

Test Code/ID:

Editor ID:

VCF1221.121fml / 13-0545-3821

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 20-9756-1700 Analyzed: 13 Jan-22 10:20

Edit Date:

Endpoint: 7d Survival Rate Analysis:

Nonparametric-Control vs Treatments

CETIS Version: Status Level:

000-189-126-0

CETISv1.9.7

13 Jan-22 10:18 Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
6.25		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
12.5		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
25		4	1.4080	1.3040	1.5130	1.4410	1.3100	1.4410	0.0329	4.68%	2.28%
50		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
100		4	1.4080	1.3040	1.5130	1.4410	1.3100	1.4410	0.0329	4.68%	2.28%

MD5 Hash: B67EFD73A631D4AD26ED14790BC2B3D

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	0.9333	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	0.9333	1.0000

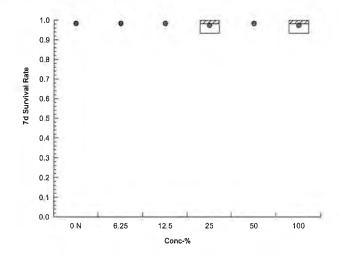
Angular (Corrected) Transformed Detail

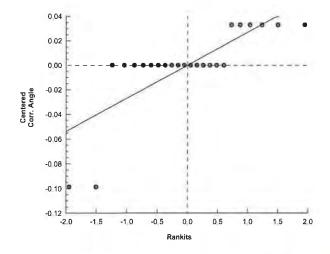
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.4410	1.4410	1.4410	1.4410
6.25		1.4410	1.4410	1.4410	1.4410
12.5		1.4410	1.4410	1.4410	1.4410
25		1.4410	1.3100	1.4410	1.4410
50		1.4410	1.4410	1.4410	1.4410
100		1.4410	1.4410	1.3100	1.4410

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	15/15	15/15	15/15	15/15
6.25		15/15	15/15	15/15	15/15
12.5		15/15	15/15	15/15	15/15
25		15/15	14/15	15/15	15/15
50		15/15	15/15	15/15	15/15
100		15/15	15/15	14/15	15/15

Graphics





Report Date:

13 Jan-22 10:21 (p 3 of 4)

Test Code/ID:

Fathead Mini	now 7	-d Larval S	urvival a	nd Growt	h Te	st					Aqua	tic Bioa	ssay & C	Consulting	Labs, Inc	
Analysis ID:	09-9	249-7531	Е	ndpoint:	Mea	n Dry Biom	ass-mg			CE.	TIS Vers	ion: (CETISv1.	.9.7		
Analyzed:	13 J	an-22 10:20	Α	nalysis:	Para	ametric-Cor	ntrol vs T	reat	ments	Sta	tus Leve	el: '	1			
Edit Date:	13 J	an-22 10:18	M	D5 Hash:	9B6	334E27850	C8D43846	6EC	FD896A47	7D40 Edi	tor ID:	(000-189-	126-0		
Batch ID:	19-7	569-4089	T	est Type:	Gro	wth-Surviva	l (7d)			Ana	Analyst:					
Start Date:	15 D	ec-21 15:23	P	rotocol:	EPA	/821/R-02-	013 (200	2)		Dilu	ient:	Laborat	tory Wate	er		
Ending Date:	: 22 D	ec-21 14:10	S	pecies:	Pim	ephales pro	melas			Bri	ne:		plicable			
Test Length:	6d 2	23h	Ta	axon:	Acti	nopterygii				Sou	ırce:		Biosyste	ems, CO	Age: <2	
Sample ID:	17-8	842-5931	С	ode:	VCF	1221.121fr	nl			Pro	ject:	NPDES	Stormw	ater Wet S	eason	
Sample Date	: 14 D	ec-21 12:20) M	aterial:	San	iple Water				Soi	ırce:	Bioassa	ay Repor	t		
Receipt Date	: 14 D	ec-21 15:00) c	AS (PC):						Sta	tion:	ME-CC	;			
Sample Age:	27h	(6.5 °C)	С	lient:	Ven	tura County	/ Watersh	ned	Protection	Distri						
Data Transfo	rm		Alt Hy)					NOEL	LOEL	TOEL	_ T	U	MSDu	PMSD	
Untransforme	ed		C > T						100	>100	***	1		0.02217	5.95%	
Dunnett Mult	tiple C	omparison	Test													
Control	vs	Conc-%		Test S	Stat	Critical	MSD	DF	P-Type	P-Value	Decis	sion(a:5	5%)			
Negative Con	trol	6.25		-1.014		2.407	0.022	6	CDF	0.9834	Non-S	Significa	ınt Effect			
		12.5		-0.470	6	2.407	0.022	6	CDF	0.9354	Non-S	Significa	int Effect			
		25		-0.018	1	2.407	0.022	6	CDF	0.8386	Non-S	Significa	int Effect			
		50		-0.343	9	2.407	0.022	6	CDF	0.9148	Non-S	Significa	int Effect			
		100		-0.814	5	2.407	0.022	6	CDF	0.9719	Non-S	Significa	ınt Effect			
Test Accepta	bility	Criteria	TAC	Limits										_		
Attribute		Test Stat		Upper		Overlap	Decisio	on								
Control Resp		0.3723	0.25	>>		Yes	Passes	Cr	iteria							
PMSD		0.05953	0.12	0.3		Yes	Below	Crite	eria							
ANOVA Table	е															
Source		Sum Squa	ares	Mean	Squ	are	DF		F Stat	P-Value	Decis	sion(α:5	5%)			
Between		0.0002886	3	5.772	E-05		5		0.3404	0.8817	Non-S	Significa	ınt Effect			
Error		0.0030526	5	0.000	1696		18									
Total		0.0033412	!				23									
ANOVA Assu	ımptio	ns Tests														
Attribute		Test					Test St	at	Critical	P-Value	Decis	sion(α:1	1%)			
Variance		Bartlett Eq	uality of '	Variance T	est		2.563		15.09	0.7669	Equa	l Varian	ces			
		Levene Eq	uality of	Variance T	est		1.561		4.248	0.2213	Equa	l Varian	ces			
		Mod Lever	ne Equali	ty of Varia	nce T	Test	1.292		4.248	0.3108	Equa	l Varian	ces			
Distribution		Anderson-	Darling A	2 Test			0.4564		3.878	0.2707	Norm	al Distri	bution			
		D'Agostino	Kurtosis	Test			1.632		2.576	0.1027	Norm	al Distri	bution			
		D'Agostino	Skewne	ss Test			0.713		2.576	0.4759	Norm	ıal Distri	bution			
		D'Agostino	-Pearsor	n K2 Omnil	bus 1	Test	3.172		9.21	0.2048	Norm	ıal Distri	bution			
		Kolmogoro	ov-Smirno	ov D Test			0.1326		0.2056	0.3328	Norm	al Distri	bution			
		Shapiro-W	ilk W No	rmality Tes	st		0.9397		0.884	0.1609	Norm	al Distri	bution			
		-ma Summ	ary													
Mean Dry Bio	omass	g canni.						~ı	Median	Min	Max		44 =	O1 404		
	omass	Code	Count	Mean		95% LCL	95% U	٦٢	Meulan	IALLILI	IVIAX		td Err	CV%	%Effect	
Conc-%	omass		Count 4	Mean 0.3723	3	95% LCL 0.3471	95% UC 0.3976	J.L.	0.3703	0.3573	0.391		.007937	4.26%	%Effect 0.00%	
Conc-%	omass	Code						J.L.				3 0				
Conc-% 0 6.25	omass	Code	4	0.3723	7	0.3471	0.3976	<u>JL</u>	0.3703	0.3573	0.391	3 0 27 0	.007937	4.26%	0.00%	
Conc-% 0 6.25 12.5	omass	Code	4	0.3723	7 7	0.3471 0.368	0.3976 0.3953	<u>JL</u>	0.3703 0.381	0.3573 0.372	0.391 0.392	3 0 27 0 3 0	.007937 .00429	4.26% 2.25%	0.00% -2.51%	
Mean Dry Bio Conc-% 0 6.25 12.5 25	omass	Code	4 4 4	0.3723 0.3817 0.3767	7 7 5	0.3471 0.368 0.3515	0.3976 0.3953 0.4018	<u>-</u>	0.3703 0.381 0.3723	0.3573 0.372 0.364	0.391 0.392 0.398	3 0 27 0 3 0	.007937 .00429 .007912	4.26% 2.25% 4.20%	0.00% -2.51% -1.16%	

Report Date:

13 Jan-22 10:21 (p 4 of 4)

Test Code/ID:

VCF1221.121fml / 13-0545-3821

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 09-9249-7531 **Analyzed:** 13 Jan-22 10:20

Endpoint: Mean Dry Biomass-mg

CETIS Version: CETISv1.9.7

Analyzed: 13 Jan-22 10:20 **Edit Date:** 13 Jan-22 10:18

Analysis: Parametric-Control vs Treatments
MD5 Hash: 9B6334E2785C8D43846ECFD896A47D40

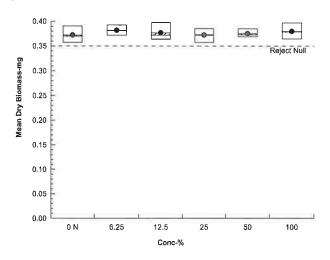
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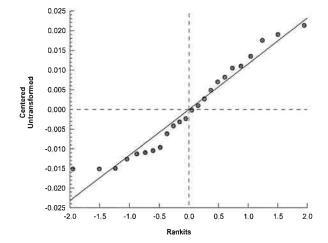
000-189-126-0

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	0.3793	0.3913	0.3613	0.3573
6.25		0.372	0.3927	0.3827	0.3793
12.5		0.3793	0.3653	0.398	0.364
25		0.3693	0.3573	0.386	0.3773
50		0.3693	0.3713	0.3753	0.386
100		0.388	0.3647	0.3973	0.3693

Graphics





Report Date:

13 Jan-22 10:21 (p 1 of 4)

Test Code/ID:

Fathea	d Minn	ow 7-d Larval St	urvival and	l Growt	h Test					Aquatio	Bio	assay &	Consulting	Labs, Inc.
Analys Analyz		04-9756-7619 13 Jan-22 10:20		Ipoint:	7d Survival Rat		۷۱			S Versions S Level:		CETISv 1	1.9.7	
Edit Da		13 Jan-22 10:18		•	B67EFD73A63			0BC2B3D	Edito			000-189	-126-0	
Batch I	ID:	19-7569-4089	Tes	t Type:	Growth-Surviva	ıl (7d)			Analy	/st:				
Start D		15 Dec-21 15:23		tocol:	EPA/821/R-02-	` ')		Dilue			atory Wa	ter	
_	•	22 Dec-21 14:10	•	cies:	Pimephales pro	omelas			Brine			pplicable		
Test Le	ength:	6d 23h	Tax	on:	Actinopterygii				Sourc	ce: A	quat	tic Biosys	tems, CO	Age: <24
Sample		17-8842-5931	Cod		VCF1221.121fr	ml			Proje				water Wet S	eason
		14 Dec-21 12:20		erial:	Sample Water				Sourc			say Repo	ort	
		14 Dec-21 15:00		S (PC):		147 1 1	LD: I	D	Static	on: N	1E-C	C		
Sample	e Age:	27h (6.5 °C)	Clie	nt:	Ventura County	/ Watershe	ed Prote	ection Distri						
Linear	Interpo	olation Options												
X Tran	sform	Y Transform		d	Resamples	Exp 95%	% CL	Method						
Linear		Linear	0		280	Yes		Two-Point	Interpo	lation				
Test A	cceptal	oility Criteria	TAC L	imits.										
Attribu		Test Stat	Lower	Uppe		Decision								
Control	Resp	1	8.0	>>	Yes	Passes (Criteria							
Point E	Stimat	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	L							
EC10	>100			<1										
EC15	>100			<1										
EC20	>100			<1	***	***								
EC25	>100			<1										
EC40 EC50	>100 >100			<1 <1										
		ate Summary				Cala	ulatad	Variate(A/I	٥١				leator	nic Variate
Conc-9		Code	Count	Mean	Median	Min	Max			%Effec		A/B	Mean	%Effect
0	70	N	4	1.000		1.0000	1.00			0.00%		60/60	1.0000	0.00%
6.25			4	1.000		1.0000	1.00			0.00%		60/60	1.0000	0.00%
12.5			4	1.000	0 1.0000	1.0000	1.00	0.0	0%	0.00%		60/60	1.0000	0.00%
25			4	0.983	3 1.0000	0.9333	1.00			1.67%		59/60	0.9917	0.83%
50			4	1.000		1.0000	1.00			0.00%		60/60	0.9917	0.83%
100			4	0.983	3 1.0000	0.9333	1.00	000 3.3	9%	1.67%		59/60	0.9833	1.67%
7d Sur	vival R	ate Detail												
Conc-%	6	Code	Rep 1	Rep 2	Rep 3	Rep 4								
0		N	1.0000	1.000	0 1.0000	1.0000								
6.25			1.0000	1.000		1.0000								
12.5			1.0000	1.000		1.0000								
25			1.0000	0.933		1.0000								
50			1.0000	1.000		1.0000								
100			1.0000	1.000	0 0.9333	1.0000								
7d Sur	vival R	ate Binomials												
Conc-%	6	Code	Rep 1	Rep 2		Rep 4								
0		N	15/15	15/15		15/15								
6.25			15/15	15/15		15/15								
12.5			15/15	15/15		15/15								
25 			15/15	14/15		15/15								
50			15/15	15/15		15/15								
100			15/15	15/15	14/15	15/15								

Report Date:

13 Jan-22 10:21 (p 2 of 4)

Test Code/ID:

VCF1221.121fml / 13-0545-3821

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analyzed:

Analysis ID: 04-9756-7619 13 Jan-22 10:20 13 Jan-22 10:18 Endpoint: 7d Survival Rate

Analysis: Linear Interpolation (ICPIN)

MD5 Hash: B67EFD73A631D4AD26ED14790BC2B3D

CETIS Version:

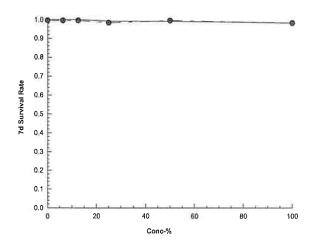
Editor ID:

Status Level:

000-189-126-0

CETISv1.9.7

Edit Date: Graphics



Report Date:

13 Jan-22 10:21 (p 3 of 4)

Test Code/ID:

									rest	ode/ID:	VCF 1221.	. (2 111111 / 1	3-0345-382
Fathea	d Minn	ow 7-d Larval S	urvival and	Growt	h Test					Aquatic Bi	oassay & C	Consulting	Labs, Inc
Analysi	is ID:	16-5003-4299	End	point:	Mean Dry Biom	ass-mg			CETIS	Version:	CETISv1.	9.7	
Analyz	ed:	13 Jan-22 10:20		lysis:	Linear Interpola	•	,			s Level:	1		
Edit Da	ate:	13 Jan-22 10:18	MD	Hash:	9B6334E27850	C8D43846E	CFD8	96A47D40	Edito	r ID:	000-189-	126-0	
Batch I	ID:	19-7569-4089	Test	Type:	Growth-Surviva	ıl (7d)			Analy	st:			
Start D	ate:	15 Dec-21 15:23	Prof	ocol:	EPA/821/R-02-	013 (2002)			Dilue	nt: Labo	ratory Wate	er	
Ending	Date:	22 Dec-21 14:10	Spe	cies:	Pimephales pro	omelas			Brine	: Not A	Applicable		
Test Le	ength:	6d 23h	Taxe	on:	Actinopterygii				Sourc	e: Aqua	itic Biosyste	ems, CO	Age: <2
Sample	e ID:	17-8842-5931	Cod	e:	VCF1221.121fr	ml			Proje	ct: NPD	ES Stormw	ater Wet S	Season
Sample	e Date:	14 Dec-21 12:20	Mate	erial:	Sample Water				Sourc	e: Bioas	ssay Report	t	
Receip	t Date:	14 Dec-21 15:00	CAS	(PC):					Statio	n: ME-C	CC		
Sample	e Age:	27h (6.5 °C)	Clie	nt:	Ventura County	/ Watershe	d Prote	ection Distr	i				
Linear	Interpo	lation Options											
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	6 CL	Method					
Linear		Linear	1549	949	280	Yes		Two-Poin	Interpo	lation			
Test Ac	cceptat	oility Criteria	TAC L	imits									
Attribut	te	Test Stat	Lower	Uppe	r Overlap	Decision							
Control	Resp	0.3723	0.25	>>	Yes	Passes (Criteria						
Point E	stimat	es	_										
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	_						
IC10	>100	***	44	<1		244							
IC15	>100	***		<1		-14							
IC20	>100			<1									
IC25	>100	***		<1									
IC40	>100			<1	***	***							
IC50	>100	J 		<1									
Mean C	Ory Bio	mass-mg Summ	агу			Ca	lculat	ed Variate				Isotor	nic Variate
Conc-%	6	Code	Count	Mean	Median	Min	Max	c CV	%	%Effect		Mean	%Effect
0		N	4	0.372	3 0.3703	0.3573	0.39	13 4.2	6%	0.00%		0.377	0.00%
6.25			4	0.381	7 0.381	0.372	0.39	327 2.2	5%	-2.51%		0.377	0.00%
12.5			4	0.376	7 0.3723	0.364	0.39	8 4.2	0%	-1.16%		0.3767	0.09%
													0.28%
25			4	0.372		0.3573	0.38	3.2	7%	-0.04%		0.3759	0.2076
			4 4		5 0.3733		0.38 0.38		7% 8%	-0.04% -0.85%		0.3759 0.3759	0.28%
50				0.372	5 0.3733 5 0.3733	0.3573		36 1.9					
50 100	Dry Bio	mass-mg Detail	4	0.372 0.375	5 0.3733 5 0.3733	0.3573 0.3693	0.38	36 1.9	8%	-0.85%		0.3759	0.28%
50 100 Mean D Conc-%	-	Code	4 4 Rep 1	0.372 0.375 0.379 Rep 2	5 0.3733 5 0.3733 8 0.3787	0.3573 0.3693 0.3647 Rep 4	0.38	36 1.9	8%	-0.85%		0.3759	0.28%
50 100 Mean D Conc-% 0	-	_	4 4	0.372 0.375 0.379 Rep 2	5 0.3733 5 0.3733 8 0.3787 2 Rep 3 3 0.3613	0.3573 0.3693 0.3647	0.38	36 1.9	8%	-0.85%		0.3759	0.28%
50 100 Mean D Conc-% 0	-	Code	4 4 Rep 1	0.372 0.375 0.379 Rep 2	5 0.3733 5 0.3733 8 0.3787 2 Rep 3 3 0.3613	0.3573 0.3693 0.3647 Rep 4	0.38	36 1.9	8%	-0.85%		0.3759	0.28%
50 100 Mean D Conc-% 0 6.25	-	Code	4 4 Rep 1 0.3793	0.372 0.375 0.379 Rep 2	5 0.3733 5 0.3733 8 0.3787 2 Rep 3 3 0.3613 7 0.3827	0.3573 0.3693 0.3647 Rep 4 0.3573	0.38	36 1.9	8%	-0.85%		0.3759	0.28%
50 100 Mean D Conc-% 0 6.25 12.5	-	Code	Rep 1 0.3793 0.372	0.372 0.375 0.379 Rep 2 0.391 0.392	5 0.3733 5 0.3733 8 0.3787 2 Rep 3 3 0.3613 7 0.3827 3 0.398	0.3573 0.3693 0.3647 Rep 4 0.3573 0.3793	0.38	36 1.9	8%	-0.85%		0.3759	0.28%
25 50 100 Mean D Conc-% 0 6.25 12.5 25	-	Code	Rep 1 0.3793 0.372 0.3793	0.372 0.375 0.379 Rep 2 0.391 0.392 0.365	5 0.3733 5 0.3733 8 0.3787 2 Rep 3 3 0.3613 7 0.3827 3 0.398 3 0.386	0.3573 0.3693 0.3647 Rep 4 0.3573 0.3793 0.364	0.38	36 1.9	8%	-0.85%		0.3759	0.28%



Report Date:

13 Jan-22 10:21 (p 4 of 4)

Test Code/ID:

CETIS Version:

VCF1221.121fml / 13-0545-3821

Fathead Minnow 7-d Larval Survival and Growth Test

13 Jan-22 10:18

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 16-5003-4299 **Analyzed:** 13 Jan-22 10:20

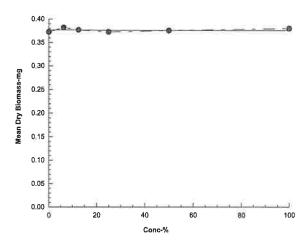
Endpoint: Mean Dry Biomass-mg
Analysis: Linear Interpolation (ICI

Analysis: Linear Interpolation (ICPIN)
MD5 Hash: 9B6334E2785C8D43846ECFD896A47D40

Status Level: 47D40 Editor ID:

CETISv1.9.7 1 000-189-126-0

Edit Date: Graphics



Report Date:

13 Jan-22 10:21 (p 1 of 8)

Test Code/ID:

Fathead Minn	ow 7-d Larval	Surviva	I and Growt	h Test				Aqua	tic Bioassay &	Consulting	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:	19-7569-4089 15 Dec-21 15: 22 Dec-21 14: 6d 23h		Test Type: Protocol: Species: Taxon:	Growth-Surviv EPA/821/R-02 Pimephales pr Actinopterygii	-013 (2002)			Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age : <24
Sample ID:	17-8842-5931		Code:	VCF1221.121	ml			Project:	NPDES Storm	water Wet S	Season
	14 Dec-21 12:		Material:	Sample Water				Source:	Bioassay Repo	ort	
	14 Dec-21 15:	00	CAS (PC):					Station:	ME-CC		
Sample Age:	27h (6.5 °C)		Client:	Ventura Count	y Watershe	d Protect	ion Distri				
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	62.62	61.74	63.51	60	63	0.1326	1.061	1.69%	0
100		8	98	98	98	98	98	0	0	0.00%	0
Overall		16	80.31	70.57	90.05	60	98	4.57	18.28	22.76%	0 (0%)
Conductivity-	μmhos										
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	364.1	361.3	367	360	370	0.4249	3.399	0.93%	0
6.25		8	362	359.3	364.7	359	369	0.4009	3.207	0.89%	0
12.5		8	356.5	353.9	359.1	352	360	0.3838	3.071	0.86%	0
25		8	354.5	351.1	357.9	350	360	0.5089	4.071	1.15%	0
50		8	349.4	345	353.8	342	359	0.6544	5.236	1.50%	0
100		8	346.2	342.9	349.6	340	352	0.4944	3.955	1.14%	0
Overall		48	355.5	353.3	357.6	340	370	1.067	7.395	2.08%	0 (0%)
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Count	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	8	7.613	7.396	7.829	7.1	7.9	0.0323	0.2588	3.40%	0
6.25		8	7.562	7.363	7.762	7.1	7.9	0.0298	33 0.2387	3.16%	0
12.5		8	7.525	7.303	7.747	7	7.8	0.0332	24 0.2659	3.53%	0
25		8	7.488	7.271	7.704	7	7.8	0.0323	35 0.2588	3.46%	0
50		8	7.463	7.239	7.686	7	7.8	0.0333		3.58%	0
100		8	7.462	7.226	7.699	7	7.8	0.0353		3.79%	0
Overall		48	7.519	7.445	7.593	7	7.9	0.0366	0.254	3.38%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count		95% LCL	95% UCL		Max	Std Er		CV%	QA Count
0	N	8	73	73	73	73	73	0	0	0.00%	0
100		8	121	121	121	121	121	0 0 107	0	0.00%	0 (00()
Overall		16	97	83.79	110.2	73	121	6.197	24.79	25.55%	0 (0%)
pH-Units											
Conc-%	Code	Count	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	8.075	8.001	8.149	8	8.2	0.0110		1.10%	0
6.25		8	8.05	7.95	8.15	7.9	8.2	0.0149		1.48%	0
12.5		8	8.013	7.93	8.095	7.9	8.2	0.0123		1.24%	0
25		8	8	7.923	8.077	7.9	8.2	0.0115		1.16%	0
50		8	8	7.923	8.077	7.9	8.2	0.0115		1.16%	0
			7.888								
0verall		48	7.888 8.004	7.573 7.952	8.202 8.056	7	8.2	0.0469 0.0257		4.76% 2.23%	0 (

CETIS Measurement Report

Report Date:

13 Jan-22 10:21 (p 2 of 8)

Test Code/ID:

Fathead Minn	ow 7-d Larval	Survival ar	Aquatic Bioassay & Consulting Labs, Inc.								
Temperature-	,c										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.03	23.99	24.06	24	24.1	0.005778	0.04623	0.19%	0
12.5		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
25		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
50		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
100		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
Overall		48	24.03	24.02	24.04	24	24.1	0.00663	0.04593	0.19%	0 (0%)

CETIS Measurement Report

Report Date:

13 Jan-22 10:21 (p 3 of 8)

Test Code/ID:

VCF1221.121fml / 13-0545-3821

Aquatic Bioassay & Consulting Labs, Inc.

Alkalinity (Ca	CO3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		60					
100				98					
0	N	2		63					
100				98					
0	N	3		63					
100				98					
0	N	4		63					
100				98					
0	N	5		63					
100				98					
0	N	6		63					
100				98					
0	N	7		63					
100				98					
0	N	8		63					
100				98					

Report Date:

13 Jan-22 10:21 (p 4 of 8)

Test Code/ID:

Fathead Minn	Fathead Minnow 7-d Larval Survival and Growth Test Aquatic Bioassay & Consulting Labs, Conductivity-µmhos												
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes				
	N	1		362									
6.25				359									
12.5				354									
25				352									
50				350									
100				349									
0	N	2		360									
6.25				360									
12.5				352									
25				350									
50				349									
100				347									
0	N	3		362									
6.25				360									
12.5				354									
25				350									
50				342									
100				342 340									
0	N	4		364									
6.25	IN	4		361									
12.5				359									
25				352									
50				344									
100				342									
0	N	5		362									
6.25				361									
12.5				359									
25				355									
50				348									
100				344									
0	N	6		365									
6.25				362									
12.5				359									
25				358									
50				350									
100				348									
)	N	7		368									
6.25	14	-		364									
				360									
12.5													
25				359									
50,				353									
100				348									
0	N	8		370									
6.25				369									
12.5				355									
25				360									
50				359									
100				352									

Fathead Minnow 7-d Larval Survival and Growth Test

Report Date:

13 Jan-22 10:21 (p 5 of 8)

Test Code/ID:

VCF1221.121fml / 13-0545-3821

Aquatic Bioassay & Consulting Labs, Inc.

Dissolved Oxy	gen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
6.25				7.4					
12.5				7.4					
25				7.3					
50				7.3					
100				7.2					
0	N	2		7.6					
6.25	.,	_		7.5					
12.5				7.4					
25				7.4					
50				7.3					
100				7.3					
0	N	3		7.4					
6.25	IN	3							
				7.6					
12.5				7.6					
25				7.5					
50				7.4					
100				7.4					
0	N	4		7.8					
6.25				7.7					
12.5				7.8					
25				7.7					
50				7.7					
100				7.7					
0	N	5		7.9					
6.25				7.9					
12.5				7.8					
25				7.8					
50				7.8					
100				7.8					
0	N	6		7.8					
6.25		•		7.7					
12.5				7.7					
25				7.7					
50				7.7					
100				7.7					
0	N	7		7.7					
6.25	14	,		7.6					
12.5				7.5 7.5					
				7.5					
25				7.5					
50				7.5					
100				7.6					
0	N	8		7.1					
6.25				7.1					
12.5				7					
25				7					
50				7					
100				7					

CETIS Measurement Report

Report Date:

13 Jan-22 10:21 (p 6 of 8)

Test Code/ID:

Fathead Minn	ow 7-d Larva	Aquatic Bioassay & Consulting Labs, Inc						
Hardness (Ca	CO3)-mg/L							
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		73				
100				121				
0	N	2		73				
100				121				
0	N	3		73				
100				121				
0	N	4		73				
100				121				
0	N	5		73				
100				121				
0	N	6		73				
100				121				
0	N	7		73				
100				121				
0	N	8		73				
100				121				

Report Date:

13 Jan-22 10:21 (p 7 of 8)

Test Code/ID:

Fathead Minno	W 7-U Laiva	Julylvai	Aquatic Bioassay & Consulting Labs, Inc.						
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8					
6.25				8.2					
12.5				8.2					
25				8.2					
50				8.2					
100				8.2					
0	N	2		8					
6.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7					
0	N	3		8.2					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
0	N	4		8					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
0	N	5		8.1					
6.25				8.2					
12.5				8					
25				8					
50				8					
100				8.1					
0	N	6		8.2					
6.25		Ü		8.1					
12.5				8.1					
25				8					
50				8					
100				8					
	M	7							
0	N	7		8.1					
6.25				8.1					
12.5				8					
25				8					
50				8					
100				8					
0	N	8		8					
6.25				7.9					
12,5				7.9					
25				7.9					
50				7.9					
100				7.8					

Report Date:

13 Jan-22 10:21 (p 8 of 8)

Test Code/ID:

Fathead Minnow	7-d Larva	I Survival	and Grow	th Test				Aquatic Bioassay & Consulting Labs, Inc.				
Temperature-°C												
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes				
0	N	1		24								
6.25				24								
12.5				24								
25				24								
50				24								
100				24								
0	N	2		24								
6.25		_		24.1								
12.5				24.1								
25				24.1								
50				24.1								
100				24.1								
0	N	3		24								
6.25				24								
12.5				24								
25				24								
50				24								
100				24								
0	N	4		24								
6.25				24								
12.5				24								
25				24								
50				24								
100				24								
0	N	5		24								
6.25				24.1								
12.5				24.1								
25				24.1								
50				24.1								
100				24.1								
0	N	6		24								
6.25		Ü		24								
12.5				24.1								
25				24.1								
50				24.1								
100				24.1								
0	N	7		24								
6.25				24								
12.5				24								
25				24								
50				24								
100				24								
0	N	8		24								
6.25	• •	-		24								
12.5				24								
25				24								
25												
50				24								
100				24								





January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.:

ME-CC

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.121

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL

NOEC = 100.00 %

TUc = 1.00

EC25 = >100.00 %

EC50 = >100.00 %

REPRODUCTION

NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 %

IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 09:54 (p 1 of 2)

Test Code/ID: VCF1221.121cer / 03-5507-4027

Ceriodaphnia	7-d Survival and	d Reproduction T	est				Aquat	tic Bioassay &	Consulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	12-6111-7595 15 Dec-21 15:23 22 Dec-21 14:10 6d 23h	Protocol:	Reproduction-S EPA/821/R-02- Ceriodaphnia d Branchiopoda	013 (2002)			Brine:	Laboratory Wat Not Applicable Aquatic Biosyst		Age:	<24
Receipt Date:	11-3248-8075 14 Dec-21 12:20 14 Dec-21 15:00	CAS (PC):	VCF1221.121c Sample Water					NPDES Stormv Bioassay Repo ME-CC		eason	
Sample Age:		Client:	Ventura County	/ Watershed	Protection	Distri					
	parison Summaı		- 1 - N. (1 - 1			Non		T051	B110B		
Analysis ID	Endpoint		parison Method			NOE			PMSD	TU	
	7d Survival Rate		r Exact/Bonferro			100	>100	-		1	
06-5523-4278	Reproduction	Dunn	ett Multiple Com	parison Test	<u> </u>	100	>100		15.6%	1	
Point Estimat	e Summary										
Analysis ID	Endpoint		Estimate Meth		✓	Leve	el %	95% LCL	95% UCL	TU	
08-8987-0197	7d Survival Rate	Linea	r Interpolation (I	CPIN)	√	EC1) >100	200	***	<1	
					✓	EC1	5 >100			<1	
					✓	EC2	>100			<1	
					✓	EC2	5 >100	-		<1	
						EC4				<1	
						EC5		-		<1	
01-0455-0348	Reproduction	Linea	r Interpolation (I	CPIN)	√	IC10		***		<1	
					✓				***	<1	
					✓					<1	
					✓				***	<1	
					✓					<1	
						IC50	>100			<1	_
Test Acceptat	oility				TAC L	imits					
Analysis ID	Endpoint	Attrik		Test Stat		Upp		•			
	7d Survival Rate		ol Resp	1	8.0	>>	Yes	Passes C			
	7d Survival Rate		ol Resp	1	8.0	>>	Yes	Passes C			
01-0455-0348	•		ol Resp	22.1	15	>>	Yes	Passes C			
06-5523-4278	•		ol Resp	22.1	15	>>	Yes	Passes C			
06-5523-4278	Reproduction	PMSI)	0.1557	0.13	0.47	Yes	Passes C	riteria		
7d Survival R	ate Summary										
Conc-%	Code	Count Mean				Max	Std E		CV%	%Ef	
0	N	10 1.000		1.0000	1.0000	1.00				0.00	
6.25		10 1.000		1.0000	1.0000	1.000			***	0.00	
12.5		10 1.000		1.0000	1.0000	1.00			***	0.00	
25 50		10 1.000		1.0000	1.0000	1.00				0.00	
50 100		10 1.000 10 1.000		1.0000 1.0000	1.0000 1.0000	1.00				0.00	
	C	.5 7.500	1.0000	1.0000	1.0000		0.000				
Reproduction	•	Count Man	95% LCL	059/ 1101	Min	B#	614 L	rr Ctd Dav	CV%	0/ E#	foc4
Conc-%	Code N	10 Mean 22.1	19.54	95% UCL 24.66	Min 16	Max 27	Std E 1.13	77 Std Dev 3.573	16.17%	%Ef	
6.25	IN	10 25.3	23.14	24.66 27.46	20	29	0.955		11.94%	-14.4	
o.∠5 12.5		10 25.3	23.14	28.26	20	31	0.955 1	3.162	12.16%	-14.4	
12.5 25		10 26.3	23.74	28.8	22	31	1.106		13.30%	-17.0	
50		10 26.7	23.6 24.09	29.31	22	33	1.155		13.68%	-20.8	
100		10 26.7	22.21	26.79	21	30	1.155		13.09%	-10.8	
100		10 24.5	22.21	20.19	41	30	1.014	3.200	13.0976	-10.0	JU 70

Report Date:

12 Jan-22 09:54 (p 2 of 2)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Ceriodaphnia	7-d Survival a	ınd Reprodu	iction Test					Aquatic I	Bioassay &	Consulting	Labs, Inc.
7d Survival R	ate Detail						MD	5: 6DFFCF	255519977	902535414	=38EA216
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Reproduction	n Detail						IM	05: C7C2D	F3AFF67A0	98C04DA73	3A07122323
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	26	24	19	18	24	22	16	27	21	24
6.25		26	21	28	20	27	29	25	27	27	23
12.5		31	29	31	24	25	22	24	25	24	25
25		29	28	27	31	29	23	24	22	21	29
50		24	33	25	29	24	24	32	27	27	22
100		23	29	25	25	21	24	21	26	21	30

7d Survival R	ate Binomials										
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Report Date:

12 Jan-22 09:54 (p 1 of 2)

Test Code/ID: VCF1221.121cer / 03-5507-4027

	O	Reprodu	ction Test						Aquat	tic Bioass	av & C	onsultin	g Labs, Ind
Ceriodaphnia 7-d	Survival and								, .4		-,		
Analysis ID: 06-	5523-4278	End	dpoint: Re	production				CET	IS Vers	ion: CE	TISv1.	9.7	
Analyzed: 12	Jan-22 9:53	Ana	alysis: Pa	rametric-Cor	ntrol vs ⁻	Γreat	ments	State	us Leve	el: 1			
Edit Date: 12	Jan-22 9:49	MD	5 Hash: DE	6CE03A159	4CE45E	3062	B14875EA	52DD Edit	or ID:	000	0-189-1	26-0	
Batch ID: 12-6	6111-7595	Tes	t Type; Re	production-8	Survival	(7d)		Anal	yst:				
Start Date: 15 [Dec-21 15:23	Pro	tocol: EP	A/821/R-02-	013 (20	02)			Diluent: Laboratory Water				
Ending Date: 22 [Dec-21 14:10	Spe	ecies: Ce	riodaphnia d	lubia	,		Brin	Brine: Not Applicable				
Test Length: 6d	23h	Tax		Branchiopoda						Aquatic B		ms, CO	Age: <
Sample ID: 11-3	3248-8075	Cod	de: VC	F1221.121c	cer			Proj	ect:	NPDES S	tormwa	ater Wet S	Season
Sample Date: 14 [Dec-21 12:20	Mat		mple Water				Sou		Bioassay			
Receipt Date: 14 [S (PC):	pio Tratoi				Stati		ME-CC	Порол		
Sample Age: 27h		Clie		ntura County	, Waters	hed	Protection		011.	WE 00			
	(0.0 0)		iii. VO	mara count	vvatore	onica						_	
Data Transform Untransformed		Alt Hyp					NOEL 100	>100EL	TOEL	_ TU	_	MSDu 3.44	PMSD 15.57%
						-	100	- 100		,		0.44	10.07 /6
Dunnett Multiple (•	lest	T 04	0.44				D.V. :		. ,			
Control vs	Conc-%		Test Stat		MSD		P-Type	P-Value 0.9997		sion(α:5%) Significant			
Negative Control	6.25		-2.129	2.289	3.44		CDF	1.0000		_			
	12.5		-2.595	2.289	3.44		CDF			Significant			
	25		-2.795	2.289	3.44	18	CDF	1.0000	Non-S	Significant	Effect		
	25 50		-2.795 -3.061	2.289 2.289	3.44 3.44	18 18	CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect		
	25		-2.795	2.289	3.44	18 18	CDF	1.0000	Non-S	Significant	Effect Effect		
Test Acceptability	25 50 100	TAC L	-2.795 -3.061 -1.597	2.289 2.289	3.44 3.44	18 18	CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect		
Test Acceptability Attribute	25 50 100	TAC L Lower	-2.795 -3.061 -1.597	2.289 2.289	3.44 3.44	18 18 18	CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect		
	25 50 100 * Criteria		-2.795 -3.061 -1.597	2.289 2.289 2.289	3.44 3.44 3.44	18 18 18	CDF CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect		
Attribute	25 50 100 Criteria Test Stat	Lower	-2.795 -3.061 -1.597 -imits Upper	2.289 2.289 2.289 Overlap	3.44 3.44 3.44 Decis	18 18 18 ion	CDF CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect		
Attribute Control Resp	25 50 100 Criteria Test Stat 22.1	Lower 15	-2.795 -3.061 -1.597 	2.289 2.289 2.289 Overlap	3.44 3.44 3.44 Decis	18 18 18 ion	CDF CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect		
Attribute Control Resp PMSD ANOVA Table	25 50 100 Criteria Test Stat 22.1	15 0.13	-2.795 -3.061 -1.597 	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 3.44 Decis	18 18 18 ion	CDF CDF CDF	1.0000 1.0000	Non-S	Significant Significant	Effect Effect Effect		
Attribute Control Resp PMSD	25 50 100 Criteria Test Stat 22.1 0.1557	15 0.13	-2.795 -3.061 -1.597 -imits Upper >> 0.47	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 3.44 Decis Passe	18 18 18 ion	CDF CDF CDF	1.0000 1.0000 0.9977	Non-S Non-S Non-S	Significant Significant Significant	Effect Effect Effect		
Attribute Control Resp PMSD ANOVA Table Source Between	25 50 100 Criteria Test Stat 22.1 0.1557	15 0.13	-2.795 -3.061 -1.597 Limits Upper >> 0.47	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 Decis Passe Passe	18 18 18 ion	CDF CDF CDF	1.0000 1.0000 0.9977	Non-S Non-S Non-S	Significant Significant Significant	Effect Effect Effect		
Attribute Control Resp PMSD ANOVA Table Source	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95	15 0.13	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 3.44 Decis Passe Passe	18 18 18 ion	CDF CDF CDF	1.0000 1.0000 0.9977	Non-S Non-S Non-S	Significant Significant Significant	Effect Effect Effect		
Attribute Control Resp PMSD ANOVA Table Source Between Error	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65	15 0.13	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 3.44 Decis Passe Passe DF 5	18 18 18 ion	CDF CDF CDF	1.0000 1.0000 0.9977	Non-S Non-S Non-S	Significant Significant Significant	Effect Effect Effect		
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65	15 0.13	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59	18 18 18 ion es Cr	CDF CDF CDF	1.0000 1.0000 0.9977	Non-S Non-S Non-S	Significant Significant Significant	Effect Effect ()		
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 cons Tests	15 0.13 ares	-2.795 -3.061 -1.597 	2.289 2.289 2.289 Overlap Yes Yes	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59	18 18 18 ion es Cr	CDF CDF cdf cdf iteria iteria F Stat 2.514	1.0000 1.0000 0.9977 P-Value 0.0406	Non-S Non-S Non-S Decis Signif	Significant Significant Significant Significant	Effect Effect) otherwise the content of the cont		
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq	Lower 15 0.13 nres	-2.795 -3.061 -1.597 -imits Upper >> 0.47 Mean Sq 28.39 11.2907	2.289 2.289 Overlap Yes Yes uare	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59	18 18 18 ion es Cr ss Cr	CDF CDF iteria iteria F Stat 2.514 Critical	1.0000 1.0000 0.9977 P-Value 0.0406	Non-S Non-S Non-S Decis Signif	Significant Significant Significant Significant Significant Significant Significant	Effect Effect) ct		
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq Levene Eq	Lower 15 0.13 ares uality of Va	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39 11.2907	2.289 2.289 Overlap Yes Yes uare	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59	18 18 ion es Cr ss Cr	CDF CDF CDF iteria iteria F Stat 2.514 Critical 15.09	1.0000 1.0000 0.9977 P-Value 0.0406	Non-S Non-S Non-S Decis Signif	Significant	Effect Effect) ott		
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpting Attribute Variance	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq Levene Eq	Lower 15 0.13 ares uality of Valuality of Value Equality	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39 11.2907 Ariance Test ariance Test of Variance	2.289 2.289 Overlap Yes Yes uare	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59 Test \$ 0.5048 0.2088	18 18 18 ion es Cr stat 3 5 5	CDF CDF CDF iteria iteria F Stat 2.514 Critical 15.09 3.377	1.0000 1.0000 0.9977 P-Value 0.0406 P-Value 0.9919 0.9575	Decis Signif Decis Equa Equa Equa	Significant Signif	Effect Effect)) ott) s s s s		
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti Attribute Variance	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq Levene Eq Mod Lever	Lower 15 0.13 ares uality of Valuality of Value Equality Darling A2	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39 11.2907 Ariance Test of Variance Test Test	2.289 2.289 Overlap Yes Yes uare	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59 Test \$ 0.5048 0.2088 0.2328	18 18 18 ion es Cr stat 3 5 5	CDF CDF CDF iteria iteria F Stat 2.514 Critical 15.09 3.377 3.377	P-Value 0.0406 P-Value 0.9919 0.9575 0.9466	Decis Signit Decis Equa Equa Norm	Significant Signif	Effect Effect)) ott) s s s tion	n	
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti Attribute Variance	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq Levene Eq Mod Lever Anderson-	Lower 15 0.13 ares uality of Valuality of Valuality of Value Equality Darling A2 Kurtosis T	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39 11.2907 Ariance Test Griance Test Griance Test Griance Test Griance Test Griance Test Griance Test	2.289 2.289 Overlap Yes Yes uare	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59 Test \$ 0.2088 0.2328 0.5118	18 18 18 ion es Cr es Cr	CDF CDF CDF iteria iteria F Stat 2.514 Critical 15.09 3.377 3.377 3.878	P-Value 0.0406 P-Value 0.9919 0.9575 0.9466 0.1993	Decis Signif Decis Equa Equa Norm Non-f	Significant Signif	Effect Effect)) ot s s s tion stributio	n	
Attribute Control Resp PMSD ANOVA Table Source Between Error Total	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq Levene Eq Mod Lever Anderson-D'Agostino D'Agostino	Lower 15 0.13 ares uality of Valuality of Value Equality Darling A2 k Kurtosis To Skewness	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39 11.2907 Ariance Test Griance Test Griance Test Griance Test Griance Test Griance Test Griance Test	2.289 2.289 Overlap Yes Yes Test	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59 Test \$ 0.5048 0.2088 0.2328 0.5118 2.585	18 18 18 ion es Cr es Cr	CDF CDF CDF iteria iteria F Stat 2.514 Critical 15.09 3.377 3.377 3.878 2.576	P-Value 0.9919 0.9575 0.9466 0.1993 0.0097	Decis Signif	Significant Signif	effect Effect)) ot ss ss stion stribution	ın	
Attribute Control Resp PMSD ANOVA Table Source Between Error Total ANOVA Assumpti Attribute Variance	25 50 100 Criteria Test Stat 22.1 0.1557 Sum Squa 141.95 609.7 751.65 ons Tests Test Bartlett Eq Levene Eq Mod Lever Anderson-D'Agostino D'Agostino	uality of Va uality of Va uality of Va ne Equality Darling A2 Kurtosis T o Skewness	-2.795 -3.061 -1.597 Limits Upper >> 0.47 Mean Sq 28.39 11.2907 Ariance Test of Variance Test of Variance Test of Test (2 Omnibus)	2.289 2.289 Overlap Yes Yes Test	3.44 3.44 3.44 Decis Passe Passe DF 5 54 59 Test \$ 0.5048 0.2088 0.2328 0.5118 2.585 0.2954	18 18 18 ion es Cr es Cr	CDF CDF CDF iteria iteria F Stat 2.514 Critical 15.09 3.377 3.377 3.878 2.576 2.576	P-Value 0.0406 P-Value 0.9919 0.9575 0.9466 0.1993 0.0097 0.7677	Decis Signif	Significant Signif	effect Effect)) ot s s s tion etribution tion	n	



CV%

16.17%

11.94%

12.16%

13.30%

13.68%

13.09%

%Effect

-14.48%

-17.65%

-19.00%

-20.81%

-10.86%

0.00%

95% UCL Median

23

25

26

26.5

27.5

24.5

24.66

27.46

28.26

28.8

29.31

26.79

Min

16

20

22

21

22

21

Max

27

29

31

31

33

30

Std Err

0.9551

1.106

1.155

1.014

1.13

1

Code

Count

10

10

10

10

10

10

Mean

22.1

25.3

26.3

26.7

24.5

26

95% LCL

19.54

23.14

23.74

23.8

24.09

22.21

Conc-%

0

6.25

12.5

25

50

100

Report Date:

12 Jan-22 09:54 (p 2 of 2)

Test Code/ID: VCF1221.121cer / 03-5507-4027

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 06-5523-4278 Analyzed:

12 Jan-22 9:53 12 Jan-22 9:49 Endpoint: Reproduction

Analysis: Parametric-Control vs Treatments

CETIS Version:

Status Level:

000-189-126-0

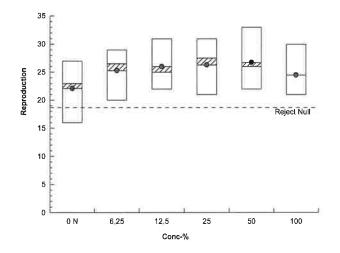
CETISv1.9.7

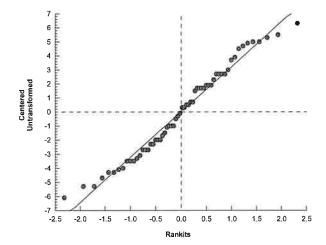
Reproduction Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	26	24	19	18	24	22	16	27	21	24
6.25		26	21	28	20	27	29	25	27	27	23
12.5		31	29	31	24	25	22	24	25	24	25
25		29	28	27	31	29	23	24	22	21	29
50		24	33	25	29	24	24	32	27	27	22
100		23	29	25	25	21	24	21	26	21	30

Graphics





Report Date:

12 Jan-22 09:54 (p 1 of 4)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Ceriod	aphnia		Aquatic Bioassay & Consulting Labs, Inc.												
Analys	is ID:	08-8987-0197	End	point:	7d Survival Rat	te			CETIS Vers	sion:	CETISV	1.9.7			
Analyz	ed:	12 Jan-22 9:54	Ana	lysis:	Linear Interpola	ation (ICPIN	۷)		Status Lev	el:	1				
Edit Da	ate:	12 Jan-22 9:49	MD:	5 Hash:	6DFFCF25551	997790253	5414E38E.	A216	Editor ID:		000-189	-126-0			
Batch I	ID:	12-6111-7595	Tes	t Type:	Reproduction-S	Survival (7d)		Analyst:						
Start D	ate:	15 Dec-21 15:23	Pro	tocol:	EPA/821/R-02-	013 (2002))		Diluent:	Labo	ratory Wa	ter			
Ending	Date:	22 Dec-21 14:10	Spe	cies:	Ceriodaphnia d	ubia			Brine: Not Applicable						
Test Le	ength:	6d 23h	Tax	on:	Branchiopoda				Source:		atic Biosys		Age: <2		
Sample	e ID:	11-3248-8075	Cod	le:	VCF1221.121c	er			Project:	NPD	ES Storm	water Wet S	eason		
Sample	e Date:	14 Dec-21 12:20	Mat	erial:	Sample Water				Source:	Bioa	ssay Repo	ort			
Receip	t Date:	14 Dec-21 15:00	CAS	6 (PC):					Station:	ME-0	CC				
Sample	e Age:	27h (6.5 °C)	Clie	nt:	Ventura County	/ Watershe	d Protectio	n Distri							
Linear	Interpo	lation Options													
X Tran	sform	Y Transform	See	d	Resamples	Exp 95%	6CL Me	thod							
Linear		Linear	0		280	Yes	Tw	o-Point I	nterpolation						
Test A	cceptal	oility Criteria	TAC L	imits											
Attribu	ite	Test Stat	Lower	Upper	Overlap	Decision	1								
Control	Resp	1	0.8	>>	Yes	Passes (Criteria								
Point E	Estimat	es													
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	_								
EC10	>100			<1											
EC15	>100			<1											
EC20	>100	***	***	<1		***									
EC25	>100			<1	***	***									
EC40	>100			<1											
EC50	>100		***	<1	94	***									
7d Sur	vival R	ate Summary				Calc	ulated Var	iate(A/B)				Isotor	nic Variate		
Conc-%	%	Code	Count	Mean	Median	Min	Max	CV%	%Eff	ect	A/B	Mean	%Effec		
0		N	10	1.0000	1.0000	1.0000	1.0000	0.009	% 0.00	%	10/10	1.0000	0.00%		
6.25			10	1.0000	1.0000	1.0000	1.0000	0.009	% 0.00°	%	10/10	1.0000	0.00%		
12.5			10	1.0000	1.0000	1.0000	1.0000	0.009	% 0.009	%	10/10	1.0000	0.00%		
25			10	1.0000	1.0000	1.0000	1.0000	0.009	% 0.00°	%	10/10	1.0000	0.00%		
50			10	1.0000	1.0000	1.0000	1.0000	0.009	% 0.00	%	10/10	1.0000	0.00%		
100			10	1.0000	1.0000	1.0000	1.0000	0.00	% 0.00	%	10/10	1.0000	0.00%		
7d Sur	vival R	ate Detail													
Conc-%	%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep			Rep 8	Rep 9	Rep 10		
0		N	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	00 1.000	00	1.0000	1.0000	1.0000		
6.25			1.0000	1.0000	1.0000	1.0000	1.0000	1.000	00 1.000	00	1.0000	1.0000	1.0000		
12.5			1.0000	1.0000	1.0000	1.0000	1.0000	1.000	00 1.000	00	1.0000	1.0000	1.0000		
25			1.0000	1.0000	1.0000	1.0000	1.0000	1.000	00 1.000	00	1.0000	1.0000	1.0000		
50			1.0000	1.0000	1.0000	1.0000	1.0000	1.000	00 1.000	00	1.0000	1.0000	1.0000		
100			1.0000	1.0000	1.0000	1.0000	1.0000	1.000	00 1.000	00	1.0000	1.0000	1.0000		
7d Sur	vival R	ate Binomials													
Conc-%	%	Code	Rep 1	Rep 2		Rep 4	Rep 5	Rep		7	Rep 8	Rep 9	Rep 10		
0		N	1/1	1/1	1/1	1/1	1/1	1/1	1/1		1/1	1/1	1/1		
6.25			1/1	1/1	1/1	1/1	1/1	1/1	1/1		1/1	1/1	1/1		
12.5			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		
_															



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Report Date:

12 Jan-22 09:54 (p 2 of 4)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Ceriodaphnia 7-d Survival and Reproduction Test

12 Jan-22 9:49

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	08-8987-0197
Analyzed:	12 Jan-22 9:54

Endpoint: 7d Survival Rate Analysis:

Linear Interpolation (ICPIN)

MD5 Hash: 6DFFCF255519977902535414E38EA216

CETIS Version:

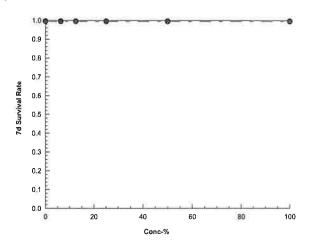
Editor ID:

Status Level:

000-189-126-0

CETISv1.9.7

Edit Date: Graphics



Report Date:

12 Jan-22 09:54 (p 3 of 4)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep	5 Rep	6 F	Rep 7	Rep 8	Rep 9	Rep 10
Reproduction		_	_			_					ъ	D. 44
100		10	24.5	24.5	21	30	13.0	19% -	10.86%		24.5	3.09%
50		10	26.7	26	22	33	13.6		20.81%		25.28	0.00%
25		10	26.3	27.5	21	31	13.3		19.00%		25.28	0.00%
12.5		10	26	25	22	31	12.1		17.65%		25.28	0.00%
6.25		10	25.3	26.5	20	29	11.9		14.48%		25.28	0.00%
0	N	10	22.1	23	16	27	16.1	7%	0.00%		25.28	0.00%
Conc-%	Code	Count	Mean	Median	Min	Max	CV%	6 9	&Effect		Mean	%Effec
Reproduction	on Summary				C	alculate	d Variate				Isoto	nic Variate
IC50 >10	00	***	<1	-	***							
IC40 >10	00		<1	-								
IC25 >10	00	100	<1	-								
IC20 >10	00		<1									
IC15 >10	00 —		<1	(111)								
IC10 >10		***	<1	***	***							
Level %	95% LCL	95% UCL	TU	95% LCL	95% UC	L						
Point Estima	ates											
Control Resp	22.1	15	>>	Yes	Passes (Criteria						
Attribute	Test Stat		Uppe	r Overlap	Decision	n						
Test Accept	ability Criteria	TAC L	mits									
Linear	Linear	6866	91	280	Yes		Two-Point	Interpola	tion			
X Transform	Y Transform	n See	Ŀ	Resamples	Exp 959	% CL	Method					
Linear Inter	polation Options											
Sample Age	: 27h (6.5 °C)	Clie	nt:	Ventura County	Watershe	ed Prote	ction Distri					
Receipt Date	e: 14 Dec-21 15:0	O CAS	(PC):					Station	: ME-	-CC		
Sample Date	e: 14 Dec-21 12:2	0 Mate	erial:	Sample Water				Source	: Bioa	assay Repo	ort	
Sample ID:	11-3248-8075	Cod	e:	VCF1221.121ce	er			Project	: NP	DES Storm	water Wet S	Season
Test Length	: 6d 23h	Taxo	on:	Branchiopoda				Source	: Aqu	atic Biosys	tems, CO	Age: <2
Ending Date	: 22 Dec-21 14:10	O Spe	cies:	Ceriodaphnia dubia				Brine:		Applicable		
Start Date:	15 Dec-21 15:2	3 Prot	ocol:	EPA/821/R-02-0	013 (2002))		Diluent	: Lab	oratory Wa	ter	
Batch ID:	12-6111-7595	Test	Type:	Reproduction-S	urvival (7d	d)		Analyst	t:			
Edit Date:	12 Jan-22 9:49	MD5	Hash:	DE6CE03A159	4CE45B06	52B1487	75EA52DD	Editor I	D:	000-189	-126-0	
Analyzed:	12 Jan-22 9:54		ysis:	Linear Interpola	tion (ICPII	N)		Status		1	11011	
Analysis ID:	01-0455-0348	End	point:	Reproduction				CETIS	Version:	CETISV	1.9.7	
Seriodaphn	ia 7-d Survival an	d Reproduc	tion Te	est				Δ	quatic B	lioassay &	Consulting	g Labs, Inc



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Report Date:

12 Jan-22 09:54 (p 4 of 4)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Ceriodaphnia 7-d Survival and Reproduction Test

12 Jan-22 9:49

Aquatic Bioassay & Consulting Labs, Inc.

01-0455-0348 Analysis ID: Analyzed: 12 Jan-22 9:54 Endpoint: Reproduction Analysis:

Linear Interpolation (ICPIN)

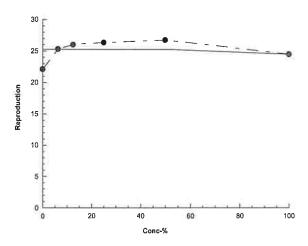
CETIS Version:

CETISv1.9.7

Status Level:

000-189-126-0

Edit Date: Graphics



12 Jan-22 09:54 (p 1 of 2)

Test Code/ID: VCF1221.121cer / 03-5507-4027

Ceriodaphnia	7-d Survival and	d Repr	oduction Te	st						Aqua	tic Bio	assay &	Consulting	g Labs, Inc.
Analysis ID:	03-4950-7414		Endpoint:	7d Surviva		_			CETI	S Vers	ion:	CETISv	1.9.7	
Analyzed:	12 Jan-22 9:53		Analysis:	STP 2xK (Contin	gency Tabl	es		Statu	s Leve	el:	1		
Edit Date:	12 Jan-22 9:49		MD5 Hash:	6DFFCF2	55519	977902535	414E38EA	216	Edito	r ID:		000-189	-126-0	
Batch ID:	12-6111-7595		Test Type:	Reproduct	ion-Sı	urvival (7d)			Analy	yst:				
Start Date:	15 Dec-21 15:23	1	Protocol:	EPA/821/F	R-02-0	13 (2002)			Dilue	nt:	Labora	itory Wa	ter	
Ending Date:	22 Dec-21 14:10		Species:	Ceriodaph	nia du	ubia			Brine	:	Not Ap	plicable		
Test Length:	6d 23h		Taxon:	Branchiop	oda				Sour	ce:	Aquati	c Biosys	tems, CO	Age: <24
Sample ID:	11-3248-8075		Code:	VCF1221.	121ce	er			Proje	ct:	NPDE	S Storm	water Wet S	
Sample Date:	14 Dec-21 12:20)	Material:	Sample W	ater				Sour	ce:	Bioass	ay Repo	ort	
Receipt Date:	14 Dec-21 15:00)	CAS (PC):						Statio	on:	ME-C			
Sample Age:	27h (6.5 °C)		Client:	Ventura C	ounty	Watershed	Protection	Distri						
Data Transfor	m	Alt H	lyp				NOEL	LOE	L	TOEL	. 1	ΓU		
Untransformed		C > T					100	>100						
isher Exact/l	Bonferroni-Holm	Test											_	
Control	vs Conc-%		Test 5	Stat P-Ty	pe	P-Value	Decision	ı(α:5%)						
Vegative Cont		_	1.000			1.0000	Non-Sign		Effect					
	12.5		1.000			1.0000	Non-Sign							
	25		1.000			1.0000	Non-Sign							
	50		1.000) Exac	t	1.0000	Non-Sign							
	100		1.000) Exac	t	1.0000	Non-Sign	ificant l	Effect					
Test Acceptat	bility Criteria	TA	AC Limits											
Attribute	Test Stat	Lowe		r Over	lap	Decision								
Control Resp	1	0.8	>>	Yes		Passes Cr	iteria							
7d Survival R	ate Frequencies													
Conc-%	Code	NR	R	NR +	R	Prop NR	Prop R	%Ef	ect					
0	N	10	0	10		1.0000	0.0000	0.00	%					
6.25		10	0	10		1.0000	0.0000	0.00	%					
12.5		10	0	10		1.0000	0.0000	0.00	%					
25		10	0	10		1.0000	0.0000	0.00	%					
50		10	0	10		1.0000	0.0000	0.00	%					
100		10	0	10		1.0000	0.0000	0.00	%					
7d Survival R	ate Summary													
Conc-%	Code	Coun	t Mean	95%	LCL	95% UCL	Median	Min		Max	5	Std Err	CV%	%Effect
0	N	10	1.000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 0	0.0000	0.00%	0.00%
6.25		10	1.000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 0	0.000	0.00%	0.00%
12.5		10	1.000	1.000	0	1.0000	1.0000	1.00	00	1.000	0 0	0.000	0.00%	0.00%
25		10	1.000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 0	0.000	0.00%	0.00%
50		10	1.000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 0	0.000	0.00%	0.00%
100		10	1.000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 0	0.0000	0.00%	0.00%
7d Survival R	ate Detail													
Conc-%	Code	Rep 1	Rep 2	Rep	3	Rep 4	Rep 5	Rep	6	Rep 7	7 F	Rep 8	Rep 9	Rep 10
)	N	1.000	0 1.000	1.000	00	1.0000	1.0000	1.00		1.000		.0000	1.0000	1.0000
5.25		1.000	0 1.0000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 1	.0000	1.0000	1.0000
12.5		1.000	0 1.000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 1	.0000	1.0000	1.0000
25		1.000	0 1.0000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 1	.0000	1.0000	1.0000
50		1.000	0 1.0000	1.000	00	1.0000	1.0000	1.00	00	1.000	0 1	.0000	1.0000	1.0000

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Report Date:

12 Jan-22 09:54 (p 2 of 2)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Ceriodaphnia 7-d Survival and Reproduction Test

12 Jan-22 9:49

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 03-4950-7414 **Analyzed:** 12 Jan-22 9:53

12 Jan-22 9:53 **Analysis:**

Endpoint: 7d Survival Rate

Analysis: STP 2xK Contingency Tables
MD5 Hash: 6DFFCF255519977902535414E38EA216

CETIS Version:

Status Level:

Editor ID:

000-189-126-0

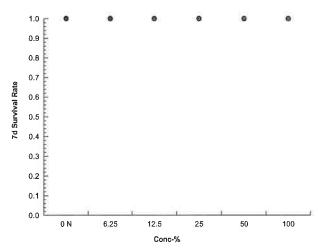
CETISv1.9.7

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics

Edit Date:



12 Jan-22 09:54 (p 1 of 8)

Test Code/ID:

O N 8 62.62 61.74 63.51 60 63 0.1326 1.061 100 8 98 98 98 98 98 0 0 Overall 16 80.31 70.57 90.05 60 98 4.57 18.28 Conductivity-μmhυσυσιστος Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944		
Sample Date: 14 Dec-21 12:20		Age: <24
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 62.62 61.74 63.51 60 63 0.1326 1.061 100 8 98 98 98 98 98 0 0 Overall 16 80.31 70.57 90.05 60 98 4.57 18.28 Conductivity-µmhos Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 349.4 345 353.8 342 359		ason
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 62.62 61.74 63.51 60 63 0.1326 1.061 100 8 98 98 98 98 98 0 0 Overall 16 80.31 70.57 90.05 60 98 4.57 18.28 Conductivity-µmhos Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 349.4 345 353.8 342 359		
100 8 98 98 98 98 98 98 4.57 18.28 Conductivity-µmhos Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean	CV%	QA Cour
Overall 16 80.31 70.57 90.05 60 98 4.57 18.28 Conductivity-µmhos Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395	1.69%	0
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max<	0.00%	0
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max </td <td>22.76%</td> <td>0 (0%)</td>	22.76%	0 (0%)
0 N 8 364.1 361.3 367 360 370 0.4249 3.399 6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 <td< td=""><td></td><td></td></td<>		
6.25 8 362 359.3 364.7 359 369 0.4009 3.207 12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	CV%	QA Cou
12.5 8 356.5 353.9 359.1 352 360 0.3838 3.071 25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	0.93%	0
25 8 354.5 351.1 357.9 350 360 0.5089 4.071 50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	0.89%	0
50 8 349.4 345 353.8 342 359 0.6544 5.236 100 8 346.2 342.9 349.6 340 352 0.4944 3.955 Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	0.86%	0
100 8 346.2 342.9 349.6 340 352 0.4944 3.955	1.15%	0
Overall 48 355.5 353.3 357.6 340 370 1.067 7.395 Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	1.50%	0
Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	1.14%	0
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588	2.08%	0 (0%)
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev 0 N 8 7.613 7.396 7.829 7.1 7.9 0.03235 0.2588		
	CV%	QA Cou
0.05 7.00 7.00 7.700 7.4 7.0 0.00000 0.0007	3.40%	0
6.25 8 7.562 7.363 7.762 7.1 7.9 0.02983 0.2387	3.16%	0
12.5 8 7.525 7.303 7.747 7 7.8 0.03324 0.2659	3.53%	0
25 8 7.488 7.271 7.704 7 7.8 0.03235 0.2588	3.46%	0
50 8 7.463 7.239 7.686 7 7.8 0.03337 0.2669	3.58%	0
100 8 7.462 7.226 7.699 7 7.8 0.03532 0.2825	3.79%	0
Overall 48 7.519 7.445 7.593 7 7.9 0.03667 0.254	3.38%	0 (0%)
Hardness (CaCO3)-mg/L		
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev	CV%	QA Cou
0 N 8 73 73 73 73 73 0 0	0.00%	0
100 8 121 121 121 121 121 0 0	0.00%	0
Overall 16 97 83.79 110.2 73 121 6.197 24.79	25.55%	0 (0%)
pH-Units		
Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev	CV%	QA Cou
	1.10%	0
6.25 8 8.05 7.95 8.15 7.9 8.2 0.01494 0.1195	1.48%	0
12.5 8 8.013 7.93 8.095 7.9 8.2 0.01239 0.0991	1.24%	0
25 8 8 7.923 8.077 7.9 8.2 0.01157 0.09258	1.16%	0
50 8 8 7.923 8.077 7.9 8.2 0.01157 0.09258	1.16%	0
100 8 7.888 7.573 8.202 7 8.2 0.04698 0.3758	4.76%	0
Overall 48 8.004 7.952 8.056 7 8.2 0.02578 0.1786		0 (0%)

CETIS Measurement Report

Report Date:

12 Jan-22 09:54 (p 2 of 8)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Aquatic Bioassay & Consulting Labs, Inc.

eriodaphnia 7	d Survival and Repr	oduction Test	
eriodaphnia 7-	d Survival and Repro	oduction Test	

Temperature-°C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.03	23.99	24.06	24	24.1	0.005778	0.04623	0.19%	0
12.5		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
25		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
50		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
100		8	24.04	23.99	24.08	24	24.1	0.006459	0.05167	0.21%	0
Overall		48	24.03	24.02	24.04	24	24.1	0.00663	0.04593	0.19%	0 (0%)

12 Jan-22 09:54 (p 3 of 8)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Ceriodaphnia 7-d Survival and Reproduction Test	
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Aquatic Bioassay & Consulting Labs, Inc.

Alkalinity (Ca	CO3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		60					
100				98					
0	N	2		63					
100				98					
0	N	3		63					
100				98					
0	N	4		63					
100				98					
0	N	5		63					
100				98					
0	N	6		63					
100				98					
0	N	7		63					
100				98					
0	N	8		63					
100				98					

Ceriodaphnia 7-d Survival and Reproduction Test

Report Date:

12 Jan-22 09:54 (p 4 of 8)

Test Code/ID:

VCF1221.121cer / 03-5507-4027

Aquatic Bioassay & Consulting Labs, Inc.

Conductivity-	ımhos								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		362					
6.25				359					
12.5				354					
25				352					
50				350					
100				349					
0	N	2		360	-				
6.25		-		360					
12.5				352					
25				350					
50				349					
100				347					
0	N	3		362					
	IN	3							
6.25				360					
12.5				354					
25				350					
50				342					
100				340					
0	N	4		364					
6.25				361					
12.5				359					
25				352					
50				344					
100				342					
0	N	5		362					
6.25				361					
12.5				359					
25				355					
50				348					
100				344					
0	N	6		365					
6.25				362					
12.5				359					
25				358					
50				350					
100				348					
0	N	7		368					
6.25	14	'		364					
12.5				360					
25				359					
50				353					
100				348					
0	N	8		370					
6.25				369					
12.5				355					
25				360					
50				359					
100				352					

12 Jan-22 09:54 (p 5 of 8)

Test Code/ID:

Ceriodaphnia 7	-a Survivai	and Kepre	oduction i	est					Aquatic Bioassay & Consulting Labs, In
Dissolved Oxyg	jen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
6.25				7.4					
12.5				7.4					
25				7.3					
50				7.3					
100				7.2					
0	N	2		7.6					
6.25	.,	_		7.5					
12.5				7.4					
25				7.4					
50				7.3					
100				7.3 7.3					
0	N	3		7.4					
6.25				7.6					
12.5				7.6					
25				7.5					
50				7.4					
100				7.4					
0	N	4		7.8					
6.25				7.7					
12.5				7.8					
25				7.7					
50				7.7					
100				7.7					
0	N	5		7.9					
6.25	IN	J		7.9					
12.5				7. 9 7.8					
				7.8 7.8					
25									
50				7.8					
100				7.8					
0	N	6		7.8					
6.25				7.7					
12.5				7.7					
25				7.7					
50				7.7					
100				7.7					
0	N	7		7.7					
6.25				7.6					
12.5				7.5					
25				7.5					
50				7.5					
100				7.6					
0	N	8		7.1					
6.25	IA	O		7.1					
12.5				7					
25				7					
50				7					
100				7					

12 Jan-22 09:54 (p 6 of 8)

Test Code/ID:

Ceriodaphnia	7-d Survival	and Repr	oduction T	est				Aquatic Bioassay & Consulting Labs, Inc.
Hardness (Ca	CO3)-mg/L							
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		73				
100				121				
0	N	2		73				
100				121				
0	N	3		73				
100				121				
0	N	4		73				
100				121				
0	N	5		73				
100				121				
0	N	6		73				
100				121				
0	N	7		73				
100				121				
0	N	8		73				
100				121				

12 Jan-22 09:54 (p 7 of 8)

Test Code/ID:

Ceriodaphnia 7	-a Survivai	and Repro	duction I	est					Aquatic Bioassay & Consulting Labs, I
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
)	N	1		8					
3.25				8.2					
12.5				8.2					
25				8.2					
50				8.2					
100				8.2					
)	N	2		8					
5.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7					
0	N	3		8.2					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
)	N	4		8					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
0	N	5		8.1					
6.25				8.2					
12.5				8					
25				8					
50				8					
100				8.1					
	N.I.	-		8.2					
)	N	6							
3.25				8.1					
12.5				8.1					
25				8					
50				8					
100				8					
)	N	7		8.1					
3.25				8.1					
12.5				8					
25				8					
50				8					
100				8					
)	N	8		8					
3.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7.8					

12 Jan-22 09:54 (p 8 of 8)

Test Code/ID:

Ceriodaphnia 7-d	Survival	and Repr	oduction T	Aquatic Bioassay & Consulting Labs, Inc				
Temperature-°C								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		24				
6.25				24				
12.5				24				
25				24				
50				24				
100				24				
0	N	2		24				
6.25				24.1				
12.5				24.1				
25				24.1				
50				24.1				
100				24.1				
0	N	3		24				
6.25				24				
12.5				24				
25				24				
50				24				
100				24				
0	N	4		24				
6.25				24				
12.5				24				
25				24				
50				24				
100				24				
0	N	5		24				
6.25				24.1				
12.5				24.1				
25				24.1				
50				24.1				
				24.1				
100								
0	N	6		24				
6.25				24				
12.5				24.1				
25				24.1				
50				24.1				
100				24.1				
0	N	7		24				
6.25	.,	·		24				
12.5				24				
25				24				
50				24				
100				24				
0	N	8		24				
6.25				24				
12.5				24				
25				24				
50				24				
100				24				



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012.* "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Flood Control

SAMPLE I.D.: ME-CC
DATE RECEIVED: 12/14/2021
ABC LAB. NO.: VCF1221.121

ACUTE HYALELLA SURVIVAL BIOASSAY

% Survival = 90 % Survival in 100% Sample

EC25 = >100.00 % EC50 = >100.00 %

*TU(a) = 0.59

* TU(a) Is calculated by: log (% Mortality)/1.7

Yours very truly

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 13:13 (p 1 of 1)

								ıe	st Code/	יטו:	VCF1221.1	∠⊺anya / 16	-0252-8	8029
Hyalella 96-h	Acute Survival 1	est							Aqua	tic E	Bioassay & C	Consulting	Labs, I	lnc.
Batch ID: Start Date: Ending Date: Test Length:	04-4233-5600 15 Dec-21 15:25 19 Dec-21 11:00 92h	Pr Sp	st Type: otocol: ecies: xon:	Survival (96h) EPA/821/R-02- Hyalella azteca Malacostraca	, ,			Dil Br	alyst: uent: ine: urce:	Not	oratory Wate Applicable uatic Biosyste		Age:	
Sample ID:	02-2233-7221	Co	de:	VCF1221.121a	ıhva			Pr	oject:	NPI	DES Stormw	ater Wet Se	eason	
	14 Dec-21 12:20		aterial:	Sample Water					urce:		assay Report			
Receipt Date:	14 Dec-21 15:00	CA	S (PC):	·				Sta	ation:		-cc			
Sample Age:	27h (6.5 °C)	Cli	ient:	Ventura Count	y Watershed	Protectio	n [Distri						
Multiple Com	parison Summa	ry												
Analysis ID	Endpoint		Com	oarison Method			√	NOEL	LOE	L	TOEL	PMSD	TU	
04-6405-0936	96h Survival Rat	e	Steel	Many-One Rank	Sum Test			100	>100)	***	13.5%	1	
Point Estimat	e Summary													
Analysis ID	Endpoint		Point	Estimate Meth	od		✓	Level	%		95% LCL	95% UCL	TU	;
02-8944-8727	96h Survival Rat	e	Linea	r Interpolation (I	CPIN)			EC10	100		***	***	1	
								EC15	>100	1			<1	
								EC20	>100	}	***		<1	
								EC25	>100)	***		<1	
								EC40	>100	}			<1	
								EC50	>100	}	***	***	<1	
96h Survival f	Rate Summary													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std I	Err	Std Dev	CV%	%Eff	ect
0	N	4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.009	%
6.25		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.00%	%
12.5		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.00%	%
25		4	0.950	0 0.7909	1.1090	0.8000		1.0000	0.050	00	0.1000	10.53%	5.00%	%
50		4	0.950		1.1090	0.8000		1.0000	0.050		0.1000	10.53%	5.00%	
100		4	0.900	0 0.7163	1.0840	0.8000		1.0000	0.05	77	0.1155	12.83%	10.00)%
96h Survival F	Rate Detail							M	D5: 10F	599E	656B2C111	457CB3A5F	B1D80	C95
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	1.0000	1.000	0 1.0000	1.0000									
6.25		1.0000	1.000	0 1.0000	1.0000									
12.5		1.0000	1.000	0 1.0000	1.0000									
25		1.0000	0.800	0 1.0000	1.0000									
50		1.0000	1.000		1.0000									
100		1.0000	0.800		1.0000									
96h Survival F	Rate Binomials													
	Rate Binomials Code	Rep 1	Rep 2	Rep 3	Rep 4									
Conc-%		Rep 1 5/5	Rep 2	Rep 3	Rep 4 5/5									
Conc-%	Code													
Conc-% 0 6.25	Code	5/5	5/5	5/5	5/5									
Conc-% 0 6.25 12,5	Code	5/5 5/5 5/5	5/5 5/5 5/5	5/5 5/5 5/5	5/5 5/5 5/5									
96h Survival F Conc-% 0 6.25 12.5 25 50	Code	5/5 5/5	5/5 5/5	5/5 5/5	5/5 5/5									

Report Date:

12 Jan-22 13:13 (p 1 of 2)

											Test	Code/ID:	VCF1221.1	21ahya / 1	6-8252-80
Hyalella 96-h	Acute	Survival To	est									Aquatic	Bioassay &	Consulting	J Labs, Ind
Analysis ID:	04-64	405-0936	Endp	oint:	96h S	Survival R	ate				CETI	S Version	: CETISv1	.9.7	
Analyzed:	12 Ja	an-22 13:12	Analy	sis:	Nonp	arametric	-Control	vs T	reatments		Statu	ıs Level:	1		
Edit Date:	12 Ja	an-22 13:10	MD5	Hash:	10F5	99D656B	2C1114	57CB	3A5FB1D	8C95	Edito	or ID:	000-189-	126-0	
Batch ID:	04-42	233-5600	Test	Гуре:	Survi	val (96h)					Anal	yst:			
Start Date:	15 D	ec-21 15:25	Proto	col:	EPA/	821/R-02	-012 (20	02)			Dilue	ent: Lal	boratory Wat	er	
Ending Date:	19 D	ec-21 11:00	Speci	es:	Hyale	ella azteca	1				Brine	: No	t Applicable		
Test Length:	92h		Taxor	ո:	Mala	costraca					Sour	ce: Aq	uatic Biosyst	ems, CO	Age:
Sample ID:	02-22	233-7221	Code	:	VCF1	 221.121a	hya				Proje	ect: NF	DES Stormy	ater Wet S	Season
Sample Date:	14 D	ec-21 12:20	Mater	ial:	Samp	ole Water					Sour	ce: Bio	assay Repo	t	
Receipt Date:	14 D	ec-21 15:00	CAS (PC):							Stati	on: ME	-CC		
Sample Age:	27h ((6.5 °C)	Clien		Ventu	ıra Count	y Water:	shed	Protection	Distri					
Data Transfor	m		Alt Hyp						NOEL	LOE	L	TOEL	TU	MSDu	PMSD
Angular (Corre	ected)		C > T						100	>10	0	date	1	0.1352	13.52%
Steel Many-O	ne Ra	ınk Sum Te:	st												
Control	vs	Conc-%		Test S	tat	Critical	Ties	DF	P-Type	P-V	alue	Decision	n(a:5%)		
Negative Cont	rol	6.25		18		10	1	6	CDF	0.83	333	Non-Sigr	nificant Effec	t	
		12.5		18		10	1	6	CDF	0.83	333	Non-Sigr	nificant Effec	t	
		25		16		10	1	6	CDF	0.61	05	Non-Sigr	nificant Effec	t	
		50		16		10	1	6	CDF	0.61	05	Non-Sigr	nificant Effec	t	
		100		14		10	1	6	CDF	0.34	151	Non-Sigr	nificant Effec		
ANOVA Table															
Source		Sum Squa	res	Mean S	Squa	re	DF		F Stat	P-V	alue	Decision	η(α:5%)		
Between		0.0472566		0.0094	513		5		1.2	0.34	85	Non-Sigr	nificant Effec		
_															

ANOVA Assumptions Tests

0.14177

0.189026

0.0078761

Error

Total

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test				Indeterminate
	Levene Equality of Variance Test	10.4	4.248	8.2E-05	Unequal Variances
	Mod Levene Equality of Variance Test	2	4.248	0.1274	Equal Variances
Distribution	Anderson-Darling A2 Test	2.123	3.878	<1.0E-05	Non-Normal Distribution
	D'Agostino Kurtosis Test	1.094	2.576	0.2738	Normal Distribution
	D'Agostino Skewness Test	2.056	2.576	0.0398	Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	5.426	9.21	0.0663	Normal Distribution
	Kolmogorov-Smirnov D Test	0.3333	0.2056	<1.0E-05	Non-Normal Distribution
	Shapiro-Wilk W Normality Test	0.8314	0.884	0.0010	Non-Normal Distribution

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96h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
6.25		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
12.5		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
25		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%
50		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%
100		4	0.9000	0.7163	1.0000	0.9000	0.8000	1.0000	0.0577	12.83%	10.00%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
6.25		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
12.5		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
25		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%
50		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%
100		4	1.2260	1.0070	1.4450	1.2260	1.1070	1.3450	0.0687	11.21%	8.85%

Report Date:

12 Jan-22 13:13 (p 2 of 2)

Test Code/ID: VCF1221.121ahya / 16-8252-8029

Hyalella 96-h Acute Survival Test

12 Jan-22 13:10

Aquatic Bioassay & Consulting Labs, Inc.

04-6405-0936 Analysis ID: Analyzed: 12 Jan-22 13:12

Endpoint:

96h Survival Rate Analysis: Nonparametric-Control vs Treatments

MD5 Hash: 10F599D656B2C111457CB3A5FB1D8C95

CETIS Version:

Editor ID:

Status Level:

000-189-126-0

CETISv1.9.7

96h Survival Rate Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	0.8000	1.0000	1.0000
50		1.0000	1.0000	0.8000	1.0000
100		1.0000	0.8000	0.8000	1.0000

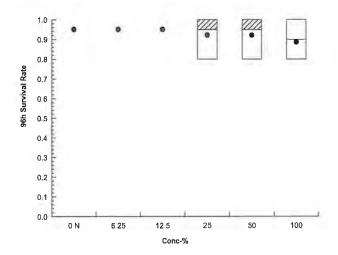
Angular (Corrected) Transformed Detail

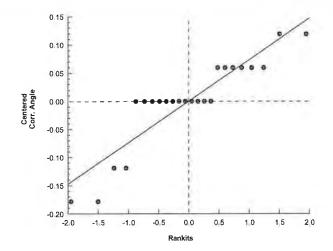
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.3450	1.3450	1.3450	1.3450	
6.25		1.3450	1.3450	1.3450	1.3450	
12.5		1.3450	1.3450	1.3450	1.3450	
25		1.3450	1.1070	1.3450	1.3450	
50		1.3450	1.3450	1.1070	1.3450	
100		1.3450	1.1070	1.1070	1.3450	

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	5/5	5/5	5/5	5/5	
6.25		5/5	5/5	5/5	5/5	
12.5		5/5	5/5	5/5	5/5	
25		5/5	4/5	5/5	5/5	
50		5/5	5/5	4/5	5/5	
100		5/5	4/5	4/5	5/5	

Graphics





Report Date:

12 Jan-22 13:13 (p 1 of 2)

Test Code/ID: VCF1221.121ahya / 16-8252-8029

0		N	5/5	5/5	5/5	5/5								
Conc-%	6	Code	Rep 1	Rep 2		Rep 4								
96h Su	rvival í	Rate Binomials												
100			1.0000	0.800	0.8000	1.0000								
50			1.0000	1.000		1.0000								
25			1.0000	0.800		1.0000								
12.5			1.0000	1.000		1.0000								
6.25			1.0000	1.000		1.0000								
0		N	1.0000	1.000	0 1.0000	1.0000								
Conc-%	6	Code	Rep 1	Rep 2		Rep 4								
96h Su	rvival l	Rate Detail												
100			4	0.900	0.9000	0.8000	1.0000	12.8	3%	10.00%) 1	8/20	0.9000	10.00%
50			4	0.950		0.8000	1.0000			5.00%		9/20	0.9500	5.00%
25			4	0.950		0.8000	1.0000			5.00%		9/20	0.9500	5.00%
12.5			4	1.000		1.0000	1.0000			0.00%		0/20	1.0000	0.00%
6.25			4	1.000		1.0000	1.0000			0.00%		0/20	1.0000	0.00%
0		N	4	1.000		1.0000	1.0000			0.00%		0/20	1.0000	0.00%
Conc-%	6	Code	Count	Mean	Median	Min	Max	CV	6	%Effec	t A	/B	Mean	%Effec
96h Su	rvival l	Rate Summary		_		Calcu	lated Va	ariate(A/E	3)				Isotor	nic Variate
EC50	>100	**	***	<1										
EC40	>100			<1										
EC25	>100		-	<1	-									
EC20	>100	-		<1	-									
EC15	>100	-		<1										
EC10	100	_		1	-									
evel	%	95% LCL	95% UCL	TU	95% LCL	95% UCL								
oint E	stimat	es												
Linear		Linear	0		280	Yes	- 11	wo-Point	Interpo	lation				
K Trans	sform	Y Transform		d	Resamples	Exp 95%		ethod						
	•	lation Options												
			Cile	п.	v entura County	y vvalersnec	riolecii	וטוז טואנוו						
•		14 Dec-21 15:00 27h (6.5 °C)	CAS	(PC):	Ventura County	, Watershaa	l Drotocti	ion Dietri	Statio	on: IV	1E-CC			
•		14 Dec-21 12:20		erial:	Sample Water				Source			ay Repor	t	
Sample		02-2233-7221	Cod		VCF1221.121a	hya			Proje				ater Wet S	eason
			_										ems, CO	Age:
Enaing Test Le			Spe Tax	cies:	Hyalella azteca Malacostraca				Source			olicable	oma CO	A
Start D		15 Dec-21 15:25 19 Dec-21 11:00		tocol:	EPA/821/R-02-	, ,			Dilue: Brine			tory Wat	er	
Batch I		04-4233-5600			Survival (96h)	040 (0000)			Analy		ahe'	om, 181-1		
						2011140701	50,101 5	10000	_			700 100	120-0	
Analyze Edit Da		12 Jan-22 13:12 12 Jan-22 13:10		lysis: : Hach:	Linear Interpola 10F599D656B2	•	•	108095	Edito	s Level:		ı 000-189-	126-0	
Analysi		02-8944-8727		point:	96h Survival Ra					S Versio		CETISv1	.9.7	
											_			
lyalella	a 96-h	Acute Survival T	est							Aquatio	Bioa	ssay &	Consulting	Labs, Inc
									1631	soue/ib.		1 122 1.1	Zianyaii	0-0232-00.



6.25

12.5

25

50

100

5/5

5/5

4/5

5/5

4/5

5/5

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Report Date:

12 Jan-22 13:13 (p 2 of 2)

Test Code/ID:

VCF1221.121ahya / 16-8252-8029

Hyalella 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: **Edit Date:**

02-8944-8727 12 Jan-22 13:12 12 Jan-22 13:10

Analysis:

Endpoint: 96h Survival Rate

Linear Interpolation (ICPIN)

MD5 Hash: 10F599D656B2C111457CB3A5FB1D8C95

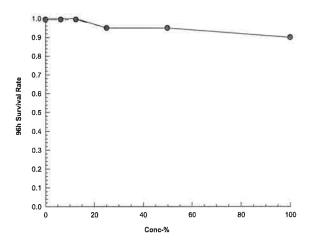
CETIS Version: Status Level:

Editor ID:

000-189-126-0

CETISv1.9.7

Graphics



12 Jan-22 13:13 (p 1 of 4)

Tryalcila 50-11	Acute Survival	rest						Aqua	tic Bioassay &	Consulting	g Labs, Inc.
Batch ID:	04-4233-5600		• -	Survival (96h)				Analyst:			
Start Date:	15 Dec-21 15:25		Protocol:	EPA/821/R-02	` ,			Diluent:	Laboratory Wa		
_	19 Dec-21 11:00		Species:	Hyalella azteca	3			Brine:	Not Applicable		
Test Length:	92h		Taxon:	Malacostraca				Source:	Aquatic Biosys	stems, CO	Age:
Sample ID:	02-2233-7221		Code:	VCF1221.121a	-			Project:	NPDES Storm		Season
•	: 14 Dec-21 12:20		Material:	Sample Water				Source:	Bioassay Repo	ort	
	: 14 Dec-21 15:00		CAS (PC):					Station:	ME-CC		
Sample Age:	27h (6.5 °C)		Client:	Ventura Count	y Watershe	d Protect	ion Distri				
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Cour
0	N	3	62	57.7	66.3	60	63	0.577	4 1.732	2.79%	0
100		3	73	73	73	73	73	0	0	0.00%	0
Overall		6	67.5	61.07	73.93	60	73	2.5	6.124	9.07%	0 (0%)
Conductivity-	-µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	3	363.3	353	373.7	360	368	1.388	4.163	1.15%	0
6.25		3	362	351.2	372.8	359	367	1.453		1.20%	0
12.5		3	354.7	347.1	362.3	352	358	1.018		0.86%	0
25		3	352.3	346.1	358.6	350	355	0.838		0.71%	0
50		3	350.3	346.5	354.1	349	352	0.509		0.44%	0
100		3	348.7	344.9	352.5	347	350	0.509		0.44%	0
Overall		18	355.2	352.1	358.4	347	368	1.485	6.302	1.77%	0 (0%)
Dissolved Ox	kygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	3	7.433	6.716	8.15	7.1	7.6	0.096	23 0.2887	3.88%	0
6.25		3	7.333	6.816	7.85	7.1	7.5	0.069	39 0.2082	2.84%	0
12.5		3	7.3	6.87	7.73	7.1	7.4	0.057	74 0.1732	2.37%	0
25		3	7.233	6.716	7.75	7	7.4	0.069	39 0.2082	2.88%	0
50		3	7.2	6.77	7.63	7	7.3	0.057		2.41%	0
100		3	7.167	6.787	7.546	7	7.3	0.050		2.13%	0
Overall		18	7.278	7.18	7.375	7	7.6	0.046	13 0.1957	2.69%	0 (0%)
Hardness (Ca	aCO3)-mg/L										
Conc-%	Code	Count			95% UCL		Max			CV%	QA Cour
0	N	3	98	98	98	98	98	0	0	0.00%	0
100 Overall		6	121 109.5	121 96.28	121 122.7	121 98	121 121	0 5.143	0 12.6	0.00%	0 (0%)
pH-Units			103.0	55.25	1		121	5.140	12.0	, 1.0070	0 (0 /0/
Conc-%	Code	Count	Mean	95% C	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	3	8.033	7.89	8.177	8	8.1	0.019		0.72%	0
6.25	14	3	8.033	7.654	8.413	7.9	8.2	0.050		1.90%	0
12.5		3	8.033	7.654	8.413	7.9	8.2	0.050		1.90%	0
25		3	8.033	7.654	8.413	7.9	8.2	0.050		1.90%	0
50		3	8.033	7.654	8.413	7.9	8.2	0.050		1.90%	0
100		3	8.033	7.654	8.413	7.9	8.2	0.050		1.90%	0
		18	3.000	7.974	· · · · · •	7.9		2.230			0 (0%)

CETIS Measurement Report

Report Date:

12 Jan-22 13:13 (p 2 of 4)

Hyalella 96-h Acute Survival Test									Aquatic Bioassay & Consulting Labs, Inc				
Temperature-°	С												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	N	3	22	22	22	22	22	0	0	0.00%	0		
6.25		3	22	22	22	22	22	0	0	0.00%	0		
12.5		3	22	22	22	22	22	0	0	0.00%	0		
25		3	22	22	22	22	22	0	0	0.00%	0		
50		3	22	22	22	22	22	0	0	0.00%	0		
100		3	22	22	22	22	22	0	0	0.00%	0		
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)		

12 Jan-22 13:13 (p 3 of 4)

,	Acute Surviva	al Test							Aquatic Bioassay & Consulting Labs, In
Alkalinity (CaC	O3)-mg/L			_					
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		60					
100				73					
0	N	2		63					
100				73					
0	N	3		63					
100				73					
Conductivity-µ	ımhos								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		362					
6.25				359					
12.5				354					
25				352					
50				350					
100				349					
	N1								
0	N	2		360					
6.25				360					
12,5				352					
25				350					
50				349					
100				347					
0	N	3		368					
6.25				367					
12.5				358					
25				355					
50				352					
100				350					
Dissolved Oxy	aen-ma/l								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
6.25				7.4					
				7.4					
12.5				7.4					
12.5 25				7.4 7.3					
12.5 25 50				7.4 7.3 7.3					
12.5 25 50 100				7.4 7.3 7.3 7.2					
12.5 25 50 100	N	2		7.4 7.3 7.3 7.2 7.6					
12.5 25 50 100 0 6.25	N	2		7.4 7.3 7.3 7.2 7.6 7.5					
12.5 25 50 100 0 6.25 12.5	N	2		7.4 7.3 7.3 7.2 7.6 7.5 7.4					
12.5 25 50 100 0 6.25 12.5 25	N	2		7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4					
12.5 25 50 100 0 6.25 12.5 25	N	2		7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4 7.3					
12.5 25 50 100 0 6.25 12.5 25	N	2		7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4					
12.5 25 50 100 0 6.25 12.5 25 50				7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4 7.3 7.3					
12.5 25 50 100 0 6.25 12.5 25 50 100	N N	2		7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4 7.3 7.3					
12.5 25 50 100 0 6.25 12.5 25 50 100 0 6.25				7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4 7.3 7.3 7.1					
12.5 25 50 100 0 6.25 12.5 25 50 100 0 6.25 12.5				7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4 7.3 7.3 7.1 7.1					
12.5 25 50 100 0 6.25 12.5 25 50 100 0 6.25 12.5 25 50				7.4 7.3 7.3 7.2 7.6 7.5 7.4 7.4 7.3 7.3 7.1					

12 Jan-22 13:13 (p 4 of 4)

Hyalella 96-h Acu	te Surviva	al Test							Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaCO	3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		98					
100				121					
0	N	2		98					
100				121					
0	N	3		98					
100		Ŭ		121					
pH-Units									
Conc-%	Code	Read	Time	Measure	ΟΔ	Diff-%	Inst ID	Analyst	Notes
0	N	1	Tille	8	G/A	DIII-70	IIISt ID	Allalyst	Notes
6.25	IN			8.2					
12.5				8.2					
25				8.2					
50				8.2					
100				8.2					
0	N	2		8					
6.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7.9					
0	N	3		8.1					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22	-				
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	3		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.:

ME-CC

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.121

ACUTE CHIRONOMUS SURVIVAL BIOASSAY

% Survival = 95 % Survival in 100% Sample

EC25 = >100.00 %

EC50 = >100.00 %

*TU(a) = 0.41

* TU(a) Is calculated by: log (% Mortality)/1.7

Yours Very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 13:25 (p 1 of 1)

Test Code/ID:

VCF1221.121achi / 00-0679-1024

Chironomus 9	6-Hour Acute S	urvival Bi	oassay								Aqua	tic B	ioassay & C	onsulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	17-9542-5388 15 Dec-21 15:30 19 Dec-21 15:10 96h	c-21 15:30 Prot		S: Chironomus dilutus						Anal Dilue Brine Sour	ent: e:	Laboratory Water Not Applicable Aquatic Biosystems, CO NPDES Stormwater Wet So Bioassay Report ME-CC			Age:	
	18-0734-5757 14 Dec-21 12:20 14 Dec-21 15:00 27h (6.5°C)	Ma CA	de: iterial: S (PC): ent:	Sam	VCF1221.121achi Sample Water Ventura County Watershed R			on [Dietri	Project: Source: Station:					ason	
			C11t.	VCIII	dra County	Watershed	TOCOLIC	JII L	213111							_
	parison Summai	ry	0		- 40 - 4b d			,	NO	-,			TOFI	DMCD	T 11	
Analysis ID 06-6703-0987	Endpoint 96h Survival Rat	:e			on Method -One Rank	Sum Test	<u> </u>	_	100		>10C		TOEL	9.2%	TU 1	<u>S</u>
Doint Estimat	o Cummon.									-						- 0
Point Estimate Analysis ID	Endpoint		Point	t Estir	nate Metho	ad		√	Leve	10	%		95% LCL	95% UCL	TU	s
<u> </u>	96h Survival Rat	- Α	_		rpolation (IC			_	EC1		>100)	95% LCL	95% UCL	<1	
00-3110-3330	John Gulvival Ital	.6	Lillea	ii iiitei	ipolation (ic) IIV)			EC1		>100		***	***	<1	,
									EC2		>100		****		<1	
									EC2		>100		****	***	<1	
									EC4	0	>100)	***	***	<1	
									EC5	0	>100)	***		<1	
96h Survival F	Rate Summary															
Conc-%	Code	Count	Mear	1	95% LCL	95% UCL	Min		Max		Std	Err	Std Dev	CV%	%Eff	ect
0	N	4	1.000	00	1.0000	1.0000	1.0000		1.00	00	0.00	00	0.0000		0.00	%
6.25		4	1.000	00	1.0000	1.0000	1.0000		1.00	00	0.00	00	0.0000	***	0.00	%
12.5		4	1.000	00	1.0000	1.0000	1.0000		1.00	00	0.00	00	0.0000	***	0.009	%
25		4	1.000		1.0000	1.0000	1.0000		1.00		0.00		0.0000		0.00	
50		4	1.000		1.0000	1.0000	1.0000		1.00		0.00		0.0000	***	0.00	
100		4	0.950	00	0.7909	1.1090	0.8000		1.00	00	0.05	00	0.1000	10.53%	5.009	%
96h Survival F	Rate Detail									MD!	5: 865	9F4C	7B77919541	1373AF2F8	50E084	42
Conc-%	Code	Rep 1	Rep 2	2	Rep 3	Rep 4										
0	N	1.0000	1.000	00	1.0000	1.0000										
6.25		1.0000	1.000	00	1.0000	1.0000										
12.5		1.0000	1.000	00	1.0000	1.0000										
25		1.0000	1.000	00	1.0000	1.0000										
50		1.0000	1.000	00	1.0000	1.0000										
100		0.8000	1.000	00	1.0000	1.0000										
96h Survival F	Rate Binomials															
Conc-%	Code	Rep 1	Rep 2	2	Rep 3	Rep 4										
0	N	5/5	5/5		5/5	5/5										
6.25		5/5	5/5		5/5	5/5										
12.5		5/5	5/5		5/5	5/5										
25		5/5	5/5		5/5	5/5										
50		5/5	5/5		5/5	5/5										
100		4/5	5/5		5/5	5/5										

12 Jan-22 13:25 (p 1 of 2)

									Test	Code/I	D : V	CF1221.1	21achi / 00	0-0679-1024
96-Ho	ur Acute Sı	ırvival Bioassay								Aqua	tic Bioa	ssay & C	onsulting	Labs, Inc.
12 Ja	n-22 13:24	Analysis:	Nonpa	arametric-	Control				Statu	s Leve	el: ´	1		
15 De	ec-21 15:30	Protocol:	EPA/8 Chiror	21/R-02- nomus dil	`	02)			Dilue Brine	ent: e:	Not App	olicable		Age:
: 14 De : 14 De	ec-21 12:20 ec-21 15:00		Samp	le Water		hed	Protection	Distri	Sour	ce:	Bioassa	ay Report		eason
rm		Alt Hyp					NOEL	LOE	L	TOEL	. т	U	MSDu	PMSD
ected)		C > T					100	>10	0		1		0.09205	9.20%
			04-4	\	T '	55	D. T	D. V	-1			24.		
vs trol	6.25 12.5 25 50	18 18 18 18 18 18	1 1 1	0 0 0 0	1 1 1 1 1 1 1	6 6 6 6 6	CDF CDF CDF CDF CDF	0.83 0.83 0.83	33 33 33 33	Non-S Non-S Non-S	Significa Significa Significa Significa	nt Effect nt Effect nt Effect nt Effect		
	06-67 12 Ja 12 Ja 17-95 15 De 19 De 96h 18-07 14 De 27h (6 rm ected)	06-6703-0987 12 Jan-22 13:24 12 Jan-22 13:24 17-9542-5388 15 Dec-21 15:30 19 Dec-21 15:10 96h 18-0734-5757 14 Dec-21 12:20 27h (6.5 °C) rm ected) one Rank Sum Text trol 6.25 12.5 25 50	06-6703-0987 Endpoint: 12 Jan-22 13:24 Analysis: 12 Jan-22 13:24 MD5 Hash 17-9542-5388 Test Type: 15 Dec-21 15:30 Protocol: 19 Dec-21 15:10 Species: 18-0734-5757 Code: 14 Dec-21 12:20 Material: 14 Dec-21 15:00 CAS (PC): 27h (6.5 °C) Client: rm Alt Hypected) C > T the Rank Sum Test vs Conc-% Test trol 6.25 18 12.5 18 25 18 50 18	12 Jan-22 13:24	Dec-21 15:10 Species: Chironomus dilustrate: Nample Water at 14 Dec-21 15:00 CAS (PC): 27h (6.5 °C) Client: Ventura County Test Stat Critical at 12.5 18 10 10 18 10 10	12 Jan-22 13:24	12 Jan-22 13:24	12 Jan-22 13:24	12 Jan-22 13:24	12 13 14 14 15 15 16 16 17 17 18 18 10 18 18 10 18 18	17-9542-5388 Test Type: Survival (96h) Survival (12 13 13 14 14 15 16 16 17 17 18 18 10 18 16 19 18 18 10 18 18 10 18 18	10-6-6703-0987	96-Hour Acute Survival Bioassay Survival Rate CETIS Version: CETISV1.9.7

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(a:5%)
Between	0.0118141	0.0023628	5	1	0.4457	Non-Significant Effect
Error	0.0425309	0.0023628	18			
Total	0.0543451		23			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(a:1%)
Variance	Bartlett Equality of Variance Test				Indeterminate
	Levene Equality of Variance Test	9	4.248	0.0002	Unequal Variances
	Mod Levene Equality of Variance Test	1	4.248	0.4457	Equal Variances
Distribution	Anderson-Darling A2 Test	6.297	3.878	<1.0E-05	Non-Normal Distribution
	D'Agostino Kurtosis Test	4.325	2.576	1.5E-05	Non-Normal Distribution
	D'Agostino Skewness Test	4.595	2.576	<1.0E-05	Non-Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	39.82	9.21	<1.0E-05	Non-Normal Distribution
	Kolmogorov-Smirnov D Test	0.4583	0.2056	<1.0E-05	Non-Normal Distribution
	Shapiro-Wilk W Normality Test	0.4634	0.884	<1.0E-05	Non-Normal Distribution

96h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
6.25		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
12.5		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
25		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
50		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
100		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
6.25		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
12.5		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
25		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
50		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
100		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%

Report Date:

12 Jan-22 13:25 (p 2 of 2)

Test Code/ID: VCF1221.121achi / 00-0679-1024

Chironomus 96-Hour Acute Survival Bioassay

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 06-6703-0987

Endpoint: 96h Survival Rate **CETIS Version:** CETISv1.9.7

Analyzed: 12 Jan-22 13:24 Edit Date: 12 Jan-22 13:24 Analysis: Nonparametric-Control vs Treatments MD5 Hash: 8659F4C7B77919541373AF2F850E0842 Status Level:

Editor ID: 000-189-126-0

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		0.8000	1.0000	1.0000	1.0000

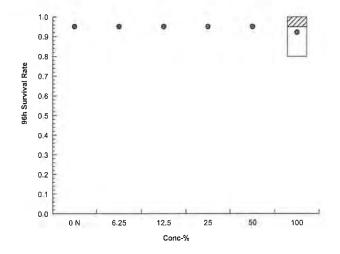
Angular (Corrected) Transformed Detail

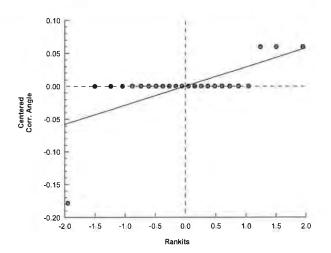
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.3450	1.3450	1.3450	1.3450
6.25		1.3450	1.3450	1.3450	1.3450
12.5		1.3450	1.3450	1.3450	1.3450
25		1.3450	1.3450	1.3450	1.3450
50		1.3450	1.3450	1.3450	1.3450
100		1.1070	1.3450	1.3450	1.3450

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	5/5	5/5	5/5	5/5
6.25		5/5	5/5	5/5	5/5
12.5		5/5	5/5	5/5	5/5
25		5/5	5/5	5/5	5/5
50		5/5	5/5	5/5	5/5
100		4/5	5/5	5/5	5/5

Graphics





Report Date:

12 Jan-22 13:25 (p 1 of 2)

Test Code/ID:

VCF1221.121achi / 00-0679-1024

									Test Code/	ID:	VCF1221	1.121achi / 0	0-0679-102		
Chiron	omus 9	96-Hour Acute S	urvival Bi	ioassay					Aqua	atic Bi	ioassay &	Consulting	Labs, Inc		
Analysi Analyzo Edit Da	ed:	06-3116-5390 12 Jan-22 13:24 12 Jan-22 13:24	An	dpoint: alysis: D5 Hash:						CETIS Version: CETISv1.9.7 Status Level: 1 Editor ID: 000-189-126-0					
Batch I	ID:	17-9542-5388	Te	st Type:	Survival (96h)		Analyst:								
Start D		15 Dec-21 15:30		otocol:	EPA/821/R-02-	-012 (2002)			Diluent:	Labo	oratory Wa	ater			
Ending	Date:	19 Dec-21 15:10		ecies:	Chironomus di	lutus			Brine:		Applicable				
Test Le	ength:	96h	Ta	xon:	Insecta				Source:			stems, CO	Age:		
Sample ID: 18-0734-5757 Cod					VCF1221.121a	ıchi			Project:	NPD	ES Storm	water Wet S	eason		
-		14 Dec-21 12:20		aterial:	Sample Water				Source:		ssay Rep				
•				AS (PC):	Campio mate.				Station:	ME-					
	Sample Age: 27h (6.5 °C)				Ventura County	y Watershed	d Protect	ion Distri							
Linear	Interpo	olation Options													
X Trans	-	Y Transform	. Se	ed	Resamples	Exp 95%	CL M	lethod							
Linear Linear 0					280		wo-Point I	nterpolation							
Point E	stimat	es													
Level	%	95% LCL	95% UC	L TU	95% LCL	95% UCL									
EC10	>100	-	5000	<1	230	V.5905									
EC15	>100			<1	200	1. 1.11.									
EC20	>100			<1	200	100									
EC25	>100	***		<1	200	(
EC40	>100	-	-	<1		(111									
EC50	>100	222	<u> </u>	<1	222	V <u>2715</u>									
96h Su	rvival f	Rate Summary				Calcu	ulated Va	ariate(A/B)		<u> </u>	Isotor	nic Variate		
Conc-%	6	Code	Count	Mean	Median	Min	Max	CV%	%Ef	fect	A/B	Mean	%Effect		
0		N	4	1.000	0 1.0000	1.0000	1.0000	0.00	% 0.00	%	20/20	1.0000	0.00%		
6.25			4	1.000	0 1.0000	1.0000	1.0000	0.00	% 0.00	%	20/20	1.0000	0.00%		
12.5			4	1.000	0 1.0000	1.0000	1.0000	0.00	% 0.00	%	20/20	1.0000	0.00%		
25			4	1.000	0 1.0000	1.0000	1.0000	0.00	% 0.00	%	20/20	1.0000	0.00%		
50			4	1.000	0 1.0000	1.0000	1.0000	0.00	% 0.00	%	20/20	1.0000	0.00%		
100			4	0.950	0 1.0000	0.8000	1.0000	10.5	3% 5.00	%	19/20	0.9500	5.00%		
96h Su	rvival f	Rate Detail													
Conc-%	6	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0		N	1.0000	1.000	0 1.0000	1.0000									
6.25			1.0000	1.000	0 1.0000	1.0000									
12.5			1.0000	1.000	0 1.0000	1.0000									
0.5			4 0000	4.000		4 0000									

96h Survival	Rate B	inomials
--------------	--------	----------

25

50

100

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	5/5	5/5	5/5	5/5
6.25		5/5	5/5	5/5	5/5
12.5		5/5	5/5	5/5	5/5
25		5/5	5/5	5/5	5/5
50		5/5	5/5	5/5	5/5
100		4/5	5/5	5/5	5/5

1.0000

1.0000

0.8000

1.0000

1.0000

1.0000

1.0000

1.0000

1.0000



1.0000

1.0000

1.0000

Report Date:

12 Jan-22 13:25 (p 2 of 2)

Test Code/ID:

VCF1221.121achi / 00-0679-1024

Chironomus 96-Hour	Acute Survival	Bioassay
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Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 06-3116-5390 Analyzed: 12 Jan-22 13:24

Endpoint: 96h Survival Rate Analysis: Linear Interpolation (ICPIN) **CETIS Version:** Status Level:

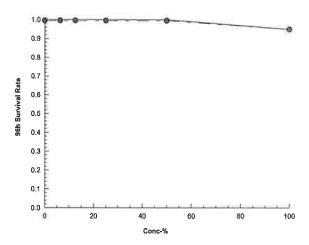
CETISv1.9.7

Edit Date: 12 Jan-22 13:24 MD5 Hash: 8659F4C7B77919541373AF2F850E0842

Editor ID:

000-189-126-0

Graphics



Report Date: 12 Jan-22 13:25 (p 1 of 4)
Test Code/ID: VCF1221.121achi / 00-0679-1024

Chironomus	96-Hour Acute	Survival	Bioassay					Aqua	tic Bioassay &	Consultin	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:	17-9542-5388 15 Dec-21 15:3 19 Dec-21 15:1 96h	30 10	Test Type: Protocol: Species: Taxon:	Survival (96h) EPA/821/R-02 Chironomus di Insecta				Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age:
•	18-0734-5757 14 Dec-21 12:2 14 Dec-21 15:0	20	Code: Material: CAS (PC):	VCF1221.121a Sample Water				Project: Source: Station:	NPDES Stormy Bioassay Repo ME-CC		Season
Sample Age:	27h (6.5 °C)		Client:	Ventura Count	y Watershe	Protect	ion Distri				
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Count		95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Count
0	N	3	62	57.7	66.3	60	63	0.5774	1.732	2.79%	0
100		3	73	73	73	73	73	0	0	0.00%	0
Overall		6	67.5	61.07	73.93	60	73	2.5	6.124	9.07%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Count
0	N	3	363	358.7	367.3	362	365	0.5774	1.732	0.48%	0
6.25		3	362	351.2	372.8	359	367	1.453	4.359	1.20%	0
12.5		3	355.3	349.6	361.1	354	358	0.7698	3 2.309	0.65%	0
25		3	352.3	346.1	358.6	350	355	0.8389	2.517	0.71%	0
50		3	348	334.9	361.1	342	352	1.764	5.292	1.52%	0
100		3	346.3	332.7	360	340	350	1.836	5.508	1.59%	0
Overall		18	354.5	350.9	358.1	340	367	1.727	7.326	2.07%	0 (0%)
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Count
0	N	3	7.433	6.716	8.15	7.1	7.6	0.0962	23 0.2887	3.88%	0
6.25		3	7.367	6.742	7.992	7.1	7.6	0.0838	39 0.2517	3.42%	0
12.5		3	7.367	6.742	7.992	7.1	7.6	0.0838	39 0.2517	3.42%	0
25		3	7.267	6.642	7.892	7	7.5	0.0838	39 0.2517	3.46%	0
50		3	7.267	6.642	7.892	7	7.5	0.0838	39 0.2517	3.46%	0
100		3	7.233	6.608	7.858	7	7.5	0.0838	9 0.2517	3.48%	0
Overall		18	7.322	7.208	7.436	7	7.6	0.0539	0.229	3.13%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	3	98	98	98	98	98	0	0	0.00%	0
100		3	121	121	121	121	121	0	0	0.00%	0
Overall		6	109.5	96.28	122.7	98	121	5.143	12.6	11.50%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Count
0	N	3	8.033	7.89	8.177	8	8.1	0.0192	25 0.05774	0.72%	0
6.25		3	8.067	7.78	8.354	8	8.2	0.0384		1.43%	0
12.5		3	8.067	7.78	8.354	8	8.2	0.0384		1.43%	0
25		3	8.067	7.78	8.354	8	8.2	0.0384		1.43%	0
50		3	8.067	7.78	8.354	8	8.2	0.0384		1.43%	0
100		3	8.067	7.78	8.354	8	8.2	0.0384		1.43%	0
Overall		18	8.061	8.016	8.107	8	8.2	0.0216	0.09164	1.14%	0 (0%)

CETIS Measurement Report

Report Date:

12 Jan-22 13:25 (p 2 of 4)

Test Code/ID:

VCF1221.121achi / 00-0679-1024

Chironomus 9	6-Hour Acute	Survival B	ioassay					Aquatic	Bioassay &	Consultin	g Labs, Inc.
Temperature-°	С										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	22	22	22	22	22	0	0	0.00%	0
6.25		3	22	22	22	22	22	0	0	0.00%	0
12.5		3	22	22	22	22	22	0	0	0.00%	0
25		3	22	22	22	22	22	0	0	0.00%	0
50		3	22	22	22	22	22	0	0	0.00%	0
100		3	22	22	22	22	22	0	0	0.00%	0
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)

12 Jan-22 13:25 (p 3 of 4)

Test Code/ID: VCF1221.121achi / 00-0679-1024

Chironomus 9	6-Hour Acute	Survival	Bioassay						Aquatic Bioassay & Consulting Labs, In
Alkalinity (CaC	O3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		60					
100				73					
0	N	2		63					
100				73					
0	N	3		63					
100				73					
Conductivity-	ımhos								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		362					
6.25				359					
12.5				354					
25				352					
50				350					
100				349					
0	N	2		362					
6.25	.,	_		360					
12.5				354					
25				350					
50				342					
100				342					
0	N	3		365					
6.25				367					
12.5				358					
25				355					
50				352					
100				350					
Dissolved Oxy	gen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
6.25				7.4					
12.5				7.4					
25				7.3					
50				7.3					
100				7.2					
0	N	2		7.6					
6.25				7.6					
12.5				7.6					
25				7.5					
50				7.5					
100				7.5					
0	N	3		7.1					
	IN	3							
6.25				7.1					
12.5				7.1					
25				7					
50				7					
100				7					

12 Jan-22 13:25 (p 4 of 4)

Test Code/ID:

VCF1221.121achi / 00-0679-1024

Chironomus 96	-Hour Acute	Survival	Bioassay						Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaC	03)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		98					
100				121					
0	N	2		98					
100				121					
0	N	3		98					
100				121					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8		J 70		rinarjot	TO CO.
6.25	.,	•		8.2					
12.5				8.2					
25				8.2					
50				8.2					
100				8.2					
0	N	2		8					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
0	N	3		8.1					
	14	3							
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25		_		22					
12.5				22					
25				22					
50				22					
100				22					
0	N	3		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					





January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.:

MO-VR2

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.122

CHRONIC FATHEAD MINNOW SURVIVAL & GROWTH BIOASSAY

SURVIVAL

NOEC = 100.00 %

TUc = 1.00

EC25 = >100.00 %

EC50 = >100.00 %

BIOMASS

NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 %

IC50 = >100.00 %

Yours very truly

Scott Johnson

Laboratory Director

13 Jan-22 10:26 (p 1 of 2)

Test Code/ID:

Fathead Minn	ow 7-d Larval	Survival	and Growt	h Test					Aquatic	Bioassay & 0	Consulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	02-9505-1200 15 Dec-21 15:2 22 Dec-21 14: 6d 23h	24 F 16 S	Test Type: Protocol: Species: Taxon:	Growth-Surviva EPA/821/R-02- Pimephales pro Actinopterygii	-013 (2002)			Dilu Brii	ne: No	aboratory Wate ot Applicable quatic Biosyst		Age:	<24
	08-2750-3867 14 Dec-21 09: 14 Dec-21 15:0 30h (2 °C)	15 r 00 c	Code: Material: CAS (PC): Client:	VCF1221.122fi Sample Water Ventura Count		l Protectio	n [Soı Sta	rce: Bi	PDES Stormw oassay Repor E-VR2		ason	
Multiple Com	parison Summ	ary											
Analysis ID	Endpoint		Comp	arison Method			✓	NOEL	LOEL	TOEL	PMSD	TU	S
08-5787-0671	7d Survival Ra	te		Many-One Rank				100	>100		3.29%	1	1
07-1138-4549	Mean Dry Bion	nass-mg		ett Multiple Com		t		100	>100		6.15%	1	1
Point Estimat	e Summary												
Analysis ID	Endpoint		Point	Estimate Meth	od		✓	Level	%	95% LCL	95% UCL	TU	5
19-8849-2173	7d Survival Ra	te	Linea	Interpolation (I	CPIN)		√	EC10	>100			<1	7
							\checkmark		>100			<1	
							\checkmark		>100			<1	
							\checkmark		>100	***		<1	
							✓		>100		***	<1	
								EC50	>100	***		<1	
16-1313-3839	Mean Dry Bion	nass-mg	Linea	Interpolation (I	CPIN)			IC10	>100		***	<1	- 1
								IC15	>100			<1	
								IC20	>100			<1	
							√,		>100			<1	
							√ √	IC40 IC50	>100 >100			<1 <1	
Test Acceptab	oility					TAC		mits					
Analysis ID	Endpoint		Attrib	ute	Test Stat			Upper	Overlap	Decision			
	7d Survival Ra	te	Contro	ol Resp	1	0.8		>>	Yes	Passes C	riteria		
19-8849-2173	7d Survival Ra	te		ol Resp	1	8.0		>>	Yes	Passes C	riteria		
07-1138-4549	Mean Dry Bion	nass-mg	Contro	ol Resp	0.3723	0.25		>>	Yes	Passes C	riteria		
16-1313-3839	Mean Dry Bion	nass-mg	Contro	ol Resp	0.3723	0.25		>>	Yes	Passes C	riteria		
07-1138-4549	Mean Dry Bion	nass-mg	PMSD)	0.0615	0.12		0.3	Yes	Below Crit	teria		
7d Survival R	ate Summary												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std Err	Std Dev	CV%	%Eff	ect
0	N	4	1.000	1.0000	1.0000	1.0000		1.0000	0.0000	0.0000		0.00	%
6.25		4	1.000		1.0000	1.0000		1.0000	0.0000	0.0000		0.009	
12.5		4	1.000		1.0000	1.0000		1.0000	0.0000	0.0000		0.009	
25		4	1.000		1.0000	1.0000		1.0000	0.0000	0.0000		0.009	
50		4	1.000		1.0000	1.0000		1.0000	0.0000	0.0000		0.009	
100		4	0.966	7 0.9054	1.0280	0.9333		1.0000	0.0193	0.0385	3.98%	3.339	%
Mean Dry Bio	mass-mg Sum	mary											
Conc-%	Code	Count		95% LCL			_	Max	Std Err	Std Dev	CV%	%Eff	
0	N	4	0.372		0.3976	0.3573		0.3913	0.00793		4.26%	0.009	
6.25		4	0.381		0.3974	0.3693		0.3927	0.00493		2.58%	-2.51	
12.5		4	0.367		0.3897	0.3473		0.378	0.00696		3.79%	1.309	
25 50		4	0.364	0.3595	0.3685	0.36		0.3667	0.00141 0.01026		0.78% 5.57%	2.249	
50 100		4	0.368		0.4012	0.3507		0.398				1.039	
100		4	0.355	0.3381	0.3719	0.342		0.3647	0.00532	3 0.01065	3.00%	4.669	/0



13 Jan-22 10:26 (p 2 of 2)

Test Code/ID:

						Test Code/ID:	VCF1221.122fml / 13-7874-6809
Fathead Minn	ow 7-d Larval	Survival an	d Growth T	est		Aquatic B	ioassay & Consulting Labs, Inc.
7d Survival R	ate Detail					MD5: CF130D1	10FD55FBC020EE091BAA3F78BA
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	1.0000	1.0000	1.0000	1.0000		
6.25		1.0000	1.0000	1.0000	1.0000		
12.5		1.0000	1.0000	1.0000	1.0000		
25		1.0000	1.0000	1.0000	1.0000		
50		1.0000	1.0000	1.0000	1.0000		
100		1.0000	0.9333	1.0000	0.9333		
Mean Dry Bio	mass-mg Deta	nil				MD5: 978811D	FE92544C74DD665241B9F6756
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	0.3793	0.3913	0.3613	0.3573		
6.25		0.3793	0.3853	0.3927	0.3693		
12.5		0.3753	0.3473	0.3693	0.378		
25		0.3647	0.3667	0.3647	0.36		
50		0.3607	0.3507	0.398	0.3647		
100		0.3627	0.342	0.3647	0.3507		
7d Survival R	ate Binomials						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	15/15	15/15	15/15	15/15		
6.25		15/15	15/15	15/15	15/15		
12.5		15/15	15/15	15/15	15/15		
25		15/15	15/15	15/15	15/15		
50		15/15	15/15	15/15	15/15		
100		15/15	14/15	15/15	14/15		

Report Date:

13 Jan-22 10:26 (p 1 of 4)

Test Code/ID:

Fathead Minn	ow 7-d Lar	val Surviva	al and Growt	th Test					Aquati	c Bioassay &	Consulting	Labs, Inc.
Analysis ID: Analyzed: Edit Date:	08-5787-06 13 Jan-22 13 Jan-22	10:25	Analysis:	7d Survival F Nonparamet CF130D10FI	ric-Contro			State	IS Versions Us Level: Or ID:			
Batch ID:	02-9505-12	200	Test Type:	Growth-Surv	ival (7d)			Anal	yst:			
Start Date:	15 Dec-21	15:24	Protocol:	EPA/821/R-0	02-013 (20	002)		Dilu	ent: L	aboratory Wa	ter	
Ending Date:	22 Dec-21	14:16	Species:	Pimephales	promelas	•		Brin		lot Applicable		
Test Length:	6d 23h		Taxon:	Actinopteryg				Soul		quatic Biosys		Age: <24
Sample ID:	08-2750-38	367	Code:	VCF1221.12	2fml			Proj	ect: N	IPDES Storm	water Wet S	eason
Sample Date:	14 Dec-21	09:15	Material:	Sample Wat	er			Soul	rce: E	Bioassay Repo	ort	
Receipt Date:	14 Dec-21	15:00	CAS (PC):					Stati	on: N	/IE-VR2		
Sample Age:	30h (2 °C)		Client:	Ventura Cou	nty Wate	shed	Protection	Distri				
Data Transfor	m	Alt	Нур				NOEL	LOEL	TOEL	TU	MSDu	PMSD
Angular (Corre	cted)	C >	T				100	>100		1	0.03287	3.29%
Steel Many-Or	ne Rank Su	ım Test										
Control	vs Con		Test			DF	P-Type	P-Value	Decisi	on(a:5%)		
Negative Contr	ol 6.25		18	10	1	6	CDF	0.8333	Non-Si	gnificant Effec	ot	
	12.5		18	10	1	6	CDF	0.8333	Non-Si	gnificant Effec	et	
	25		18	10	1	6	CDF	0.8333	Non-Si	gnificant Effec	ot	
	50		18	10	1	6	CDF	0.8333		gnificant Effec		
	100		14	10	1	6	CDF	0.3451	Non-Si	gnificant Effec	ot	
Test Acceptab	ility Criteri	ia 1	TAC Limits									
Attribute	Test	Stat Low	er Uppe	r Overla	Deci:	sion						
Control Resp	1	0.8	>>	Yes	Pass	es Cı	riteria					
ANOVA Table												
Source	Sum	Squares	Mean	Square	DF		F Stat	P-Value	Decision	on(α:5%)		
Between	0.014	14533	0.002	8907	5		3	0.0384	Signific	ant Effect		
Error	0.017	7344	0.000	9636	18							
Total	0.031	17973			23							
ANOVA Assun	nptions Te	sts										
Attribute	Test				Test	Stat	Critical	P-Value	Decisi	on(α:1%)		
Variance			of Variance	Test					Indeter			
Distribution		rson-Darlin			6.053		3.878	<1.0E-05		ormal Distribut		
	_	ostino Kurto			2.647		2.576	0.0081		ormai Distribut	tion	
	•		wness Test		2.98E		2.576	1.0000		Distribution		
	_		rson K2 Omni	ibus Test	7.009		9.21	0.0301		Distribution		
		_	irnov D Test		0.416		0.2056	<1.0E-05		ormal Distribut		
	Shap	iro-VVIIK VV	Normality Te	st	0.578	34	0.884	<1.0E-05	Non-No	ormal Distribut	tion	
7d Survival Ra		•										
Conc-%	Code						Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.000		1.000		1.0000	1.0000	1.0000		0.00%	0.00%
6.25		4	1.000		1.000		1.0000	1.0000	1.0000		0.00%	0.00%
12.5		4	1.000		1.000		1.0000	1.0000	1.0000		0.00%	0.00%
25		4	1.000		1.000		1.0000	1.0000	1.0000		0.00%	0.00%
50		4	1.000		1.000		1.0000	1.0000	1.0000		0.00%	0.00%
100		4	0.966	7 0.9054	1.000	U	0.9667	0.9333	1.0000	0.0192	3.98%	3.33%



13 Jan-22 10:26 (p 2 of 4)

Test Code/ID: VCF1221.122fml / 13-7874-6809

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 08-5787-0671 Analyzed:

13 Jan-22 10:25 13 Jan-22 10:23

7d Survival Rate Endpoint: Analysis:

Nonparametric-Control vs Treatments

MD5 Hash: CF130D10FD55FBC020EE091BAA3F78BA Editor ID:

CETIS Version:

Status Level:

000-189-126-0

CETISv1.9.7

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
6.25		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
12.5		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
25		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
50		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
100		4	1.3750	1.2540	1.4960	1.3750	1.3100	1.4410	0.0380	5.53%	4.57%

7d Survival Rate Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		1.0000	0.9333	1.0000	0.9333

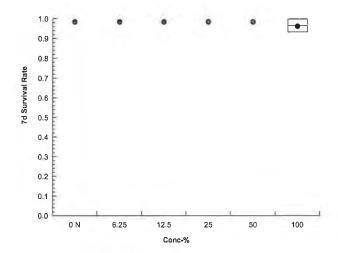
Angular (Corrected) Transformed Detail

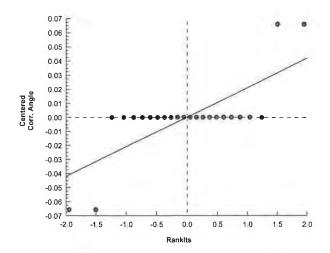
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.4410	1.4410	1.4410	1.4410	
6.25		1.4410	1.4410	1.4410	1.4410	
12.5		1.4410	1.4410	1.4410	1.4410	
25		1.4410	1.4410	1.4410	1.4410	
50		1.4410	1.4410	1.4410	1.4410	
100		1.4410	1.3100	1.4410	1.3100	

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	15/15	15/15	15/15	15/15
6.25		15/15	15/15	15/15	15/15
12.5		15/15	15/15	15/15	15/15
25		15/15	15/15	15/15	15/15
50		15/15	15/15	15/15	15/15
100		15/15	14/15	15/15	14/15

Graphics







Report Date:

13 Jan-22 10:26 (p 3 of 4)

Test Code/ID:

Fathead Minr	1ow 7	-d Larval S	urvival	and Growt	h Te	st						Aquati	ic Bio	assay & (Consultin	g Labs, Inc	
Analysis ID; Analyzed:	13 J	138-4549 an-22 10:25	5 /	Endpoint: Mean Dry Biomass-mg Analysis: Parametric-Control vs Treatments							CETIS Version: Status Level:			CETISv1	.9.7		
Edit Date:	13 J	Jan-22 10:23 MD5 Hash: 978811DFE92544C74						D66	55241B9F6	3756	Edito	r ID:		000-189-126-0			
Batch ID:	02-9	505-1200	1	Test Type:	Gro	wth-Surviva	I (7d)				Analy	/st:					
Start Date:	15 D	ec-21 15:24		Protocol:		A/821/R-02-	' '	2)			Dilue		Labor	atory Wate	er		
Ending Date:	22 D	ec-21 14:16	5 5	Species:		ephales pro	•				Brine			pplicable			
Fest Length: 6d 23h			1	Taxon: Actinopterygii							Source: Aquatic Biosystems, CO				Age: <2		
Sample ID:	nple ID: 08-2750-3867 Code:			Code:	VCF1221.122fml						Project: NPDES Stormwater Wet Season						
Sample Date:	: 14 D	ec-21 09:15	5 r	Material:	San	nple Water					Sour			say Repor			
Receipt Date:	: 14 D	ec-21 15:00) (CAS (PC):							Statio		ME-VI				
Sample Age:	30h	(2 °C)	(Client:	Ven	itura County	Waters	hed	Protection	Distri							
Data Transfo	rm		Alt Hy	γp					NOEL	LOE	L	TOEL		TŲ	MSDu	PMSD	
Untransforme	d		C > T						100	>100		***		1	0.0229	6.15%	
Dunnett Mult	iple C	omparison	Test														
Control	vs	Conc-%		Test S	Stat	Critical	MSD	DF	P-Type	P-Va	lue	Decisi	ion(α:	5%)			
Negative Cont	trol	6.25		-0.981	1	2.407	0.023	6	CDF	0.981	18			ant Effect			
		12.5		0.508	1	2.407	0.023	6	CDF	0.644	10	Non-S	ignific	ant Effect			
		25		0.876		2.407	0.023	6	CDF	0.477	75	Non-S	ignific	ant Effect			
		50		0.403		2.407	0.023	6	CDF	0.688	38			ant Effect			
		100		1.822		2.407	0.023	6	CDF	0.140)1	Non-S	ignific	ant Effect			
Test Accepta	bility	Criteria	TA	C Limits													
Attribute		Test Stat			r	Overlap	Decisi	on									
Control Resp		0.3723	0.25	>>		Yes	Passes	s Cr	iteria								
PMSD		0.0615	0.12	0.3		Yes	Below	Crit	eria								
ANOVA Table																	
Source		Sum Squa	ares	Mean	Squ	are	DF		F Stat	P-Va	lue	Decisi	ion(α:	5%)			
Between		0.0015636	3	0.0003	3127		5		1.728	0.179	93	Non-S	ignific	ant Effect			
Error		0.003258		0.000	181		18										
Total		0.0048216	3				23										
ANOVA Assu	mptio	ns Tests															
Attribute		Test					Test S	tat	Critical	P-Va	lue	Decisi	ion(α:	1%)			
Variance		Bartlett Eq	uality of	Variance T	est		7.868		15.09	0.163	37	Equal '	Varia	nces			
		Levene Equality of Variance Test					1.891		4.248	0.146	60	Equal '	Varia	nces			
		Mod Levene Equality of Variance Test					0.9496		4.248	0.473	35	Equal Variances					
Distribution		Anderson-Darling A2 Test						13 3.878 0.8			53	Normal Distribution					
		D'Agostino Kurtosis Test						0.5459 2.576 0		0.585	51	Normal Distribution					
		D'Agostino Skewness Test						0.8688 2.576 0.3		0.385	50	Normal Distribution					
		D'Agostino-Pearson K2 Omnibus Test						9.21 0.5		0.590)7	Normal Distribution					
		Kolmogorov-Smirnov D Test						5	0.2056 0.93		97	Normal Distribution					
		Shapiro-Wilk W Normality Test					0.9754		0.884	0.7982 Norn			I Disti	ribution			
Mean Dry Bio	mass	-mg Summ	ary														
Conc-%		Code	Count	Mean		95% LCL	95% U	CL	Median	Min		Max		Std Err	CV%	%Effect	
)		N	4	0.3723	3	0.3471	0.3976		0.3703	0.357	'3	0.3913	3 (0.007937	4.26%	0.00%	
6.25			4	0.381	7	0.366	0.3974		0.3823	0.369	3	0.3927	7 (0.004933	2.58%	-2.51%	
12.5			4	0.3675	5	0.3453	0.3897		0.3723	0.347	'3	0.378	(0.006962	3.79%	1.30%	
25			4	0.364		0.3595	0.3685		0.3647	0.36		0.3667	7 (0.001414	0.78%	2.24%	
50			4	0.3688	5	0.3358	0.4012		0.3627	0.350	7	0.398	(0.01026	5.57%	1.03%	



Report Date:

13 Jan-22 10:26 (p 4 of 4)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 07-1138-4549
Analyzed: 13 Jan-22 10:29

Endpoint: Mean Dry Biomass-mg

CETIS Version: CETISv1.9.7

Analyzed: 13 Jan-22 10:25 Edit Date: 13 Jan-22 10:23

Analysis: Parametric-Control vs Treatments
MD5 Hash: 978811DFE92544C74DD665241B9F6756

Status Level:

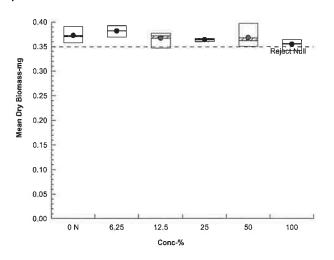
Editor ID:

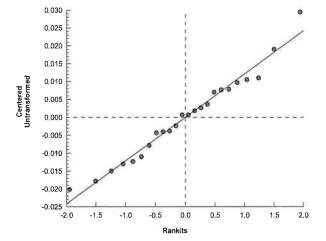
000-189-126-0

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	0.3793	0.3913	0.3613	0.3573
6.25		0.3793	0.3853	0.3927	0.3693
12.5		0.3753	0.3473	0.3693	0.378
25		0.3647	0.3667	0.3647	0.36
50		0.3607	0.3507	0.398	0.3647
100		0.3627	0.342	0.3647	0.3507

Graphics





Report Date:

13 Jan-22 10:26 (p 1 of 4)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

									1631.00	de/ID.		/ 1441.	12211111 / 1	3-7674-060
Fathea	d Minn	ow 7-d Larval Sι	urvival and	l Growt	h Test				Α	quatic	Bioass	say & C	onsulting	g Labs, Inc
Analys	is ID:	19-8849-2173	End	point:	7d Survival Ra	te			CETIS	Version	: CE	ETISv1.	9.7	
Analyz	ed:	13 Jan-22 10:25	Ana	lysis:	Linear Interpola	ation (ICPII	N)		Status	Level:	1			
Edit Da	ate:	13 Jan-22 10:23	MD	5 Hash:	CF130D10FD5	5FBC020E	E091BAA3	F78BA	Editor I	D:	00	0-189-1	126-0	
Batch	ID:	02-9505-1200	Tes	t Type:	Growth-Surviva	al (7d)			Analyst	:				
Start D	ate:	15 Dec-21 15:24	Pro	tocol:	EPA/821/R-02-	-013 (2002))		Diluent	: Lal	orator	ry Wate	er	
Ending	Date:	22 Dec-21 14:16	Spe	cies:	Pimephales pro	omelas			Brine:		t Appli	•		
Test Le	ength:	6d 23h	Tax	on:	Actinopterygii				Source				ms, CO	Age: <2
Sample	e ID:	08-2750-3867	Cod	le:	VCF1221.122fi	m!			Project	: NP	DES S	Stormwa	ater Wet S	eason
Sample	e Date:	14 Dec-21 09:15	Mat	erial:	Sample Water				Source			Report		
Receip	t Date:	14 Dec-21 15:00	CAS	(PC):	,				Station		-VR2	Порон		
•		30h (2 °C)	Clie		Ventura County	y Watershe	d Protection	n Distri	o tution					
Linear	Interpo	lation Options												
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	% CL Met	thod						
Linear		Linear	0		280	Yes	Two	-Point	Interpola	tion				
Test A	cceptat	oility Criteria	TAC L	imits										
Attribu	te	Test Stat	Lower	Uppe	r Overlap	Decision	1							
Control		1	0.8	>>	Yes	Passes (
Point F	Stimat	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI								
EC10	>100			<1	95 / LCL									
EC15	>100	2000		<1										
EC20	>100		***	<1	244									
EC25	>100			<1										
EC40	>100			<1		***								
EC50	>100	***		<1	***									
7d Sur	vival R	ate Summary				Calc	ulated Vari	ate(A/E	1)				Isoton	nic Variate
Conc-%		Code	Count	Mean	Median	Min	Max	CV%		6Effect	A/B		Mean	%Effect
0		N	4	1.0000	0 1.0000	1.0000	1.0000	0.00	% 0	.00%	60/6	60	1.0000	0.00%
6.25			4	1.0000	0 1.0000	1.0000	1.0000	0.00		.00%	60/6		1.0000	0.00%
12.5			4	1.0000		1.0000	1.0000	0.00		.00%	60/6		1.0000	0.00%
25			4	1.0000		1.0000	1.0000	0.00		.00%	60/6		1.0000	0.00%
50			4	1.0000		1.0000	1.0000	0.00		.00%	60/6		1.0000	0.00%
100			4	0.966		0.9333	1.0000	3.98		.33%	58/6		0.9667	3.33%
7d Sur	vival Ra	ate Detail												
Conc-%	6	Code	Rep 1	Rep 2	Rep 3	Rep 4								
0		N	1.0000	1.0000	1.0000	1.0000								
6.25			1.0000	1.0000	1.0000	1.0000								
12.5			1.0000	1.0000	1.0000	1.0000								
25			1.0000	1.0000	1.0000	1.0000								
50			1.0000	1.0000		1.0000								
100			1.0000	0.9333		0.9333								
7d Surv	vival Ra	ate Binomials												
Conc-%	6	Code	Rep 1	Rep 2	Rep 3	Rep 4								
0		N	15/15	15/15	15/15	15/15								
6.25			15/15	15/15	15/15	15/15								
12.5			15/15	15/15	15/15	15/15								
25			15/15	15/15	15/15	15/15								
50			15/15	15/15	15/15	15/15								
100			15/15	14/15	15/15	14/15								



Report Date:

13 Jan-22 10:26 (p 2 of 4)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: 13 Jan-22 10:25

19-8849-2173

Endpoint: 7d Survival Rate

Linear Interpolation (ICPIN)

CETIS Version:

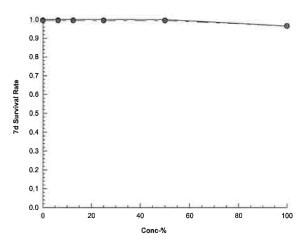
Status Level:

CETISv1.9.7

Edit Date: 13 Jan-22 10:23 Analysis: MD5 Hash: CF130D10FD55FBC020EE091BAA3F78BA Editor ID:

000-189-126-0

Graphics



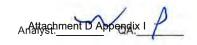
Report Date:

13 Jan-22 10:26 (p 3 of 4)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

									rest Code	IID:	VCF 1221	. 12211111 / 1	3-18/4-68
Fathea	d Minn	ow 7-d Larval Si	urvival and	Growt	h Test				Aqu	atic Bi	ioassay & 0	Consulting	g Labs, Ind
Analys Analyz		16-1313-3839 13 Jan-22 10:25	Ana	lysis:	Mean Dry Biom Linear Interpola	ation (ICPII			CETIS Ver		CETISv1	.9.7	
Edit Da	ate:	13 Jan-22 10:23	MDS	Hash:	978811DFE928	544C74DD	665241B9F	6756	Editor ID:		000 - 189-	126-0	
Batch	ID:	02-9505-1200	Test	Type:	Growth-Surviva	ıl (7d)			Analyst:				
Start D	ate:	15 Dec-21 15:24	Prot	ocol:	EPA/821/R-02-	013 (2002))		Diluent:	Labo	ratory Wate	er	
_	-	22 Dec-21 14:16	Spe	cies:	Pimephales pro	omelas			Brine:	Not A	Applicable		
Test Le	ength:	6d 23h	Taxe	on:	Actinopterygii				Source:	Aqua	atic Biosyste	ems, CO	Age: <2
Sampl	e ID:	08-2750-3867	Cod	e:	VCF1221.122fr	ml			Project:	NPD	ES Stormw	ater Wet S	Season
Sample	e Date:	14 Dec-21 09:15	Mate	erial:	Sample Water				Source:	Bioa	ssay Repor	t	
-		14 Dec-21 15:00	CAS	(PC):					Station:	ME-\	√R2		
Sample	e Age:	30h (2 °C)	Clie	nt:	Ventura County	/ Watershe	d Protectio	n Distri					
Linear	Interpo	lation Options											
X Tran	sform	Y Transform	See	d	Resamples	Exp 95%	6CL Me	thod					
Linear		Linear	8227	767	280	Yes	Twe	o-Point I	nterpolation	1			
Test A	cceptal	oility Criteria	TAC L	imits									
Attribu	te	Test Stat		Uppe	r Overlap	Decision	1						
Control	Resp	0.3723	0.25	>>	Yes	Passes (Criteria						
Point E	Estimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	_						
IC10	>100			<1	***								
IC15	>100			<1									
IC20	>100		***	<1		***							
IC25 IC40	>100 >100		***	<1 -1									
IC50	>100			<1 <1	277								
						•							
		mass-mg Summ		-			Iculated V			_			nic Variate
Conc-9	/o	Code N	Count 4	Mean	Median	Min	Max	CV%		fect		Mean	%Effec
6.25		IN	4	0.372		0.3573 0.3693	0.3913 0.3927	4.26° 2.58°				0.377 0.377	0.00% 0.00%
12.5			4	0.367		0.3473	0.3927	3.79				0.3675	2.52%
25			4	0.364	0.3647	0.36	0.3667	0.78				0.3662	2.85%
50			4	0.368	5 0.3627	0.3507	0.398	5.57				0.3662	2.85%
100			4	0.355	0.3567	0.342	0.3647	3.00	% 4.66	%		0.355	5.84%
Mean [ory Bio	mass-mg Detail											
Conc-%	/a	Code	Rep 1	Rep 2	Rep 3	Rep 4							
0		N	0.3793	0.3913	3 0.3613	0.3573							
6.25			0.3793	0.385	3 0.3927	0.3693							
12.5			0.3753	0.3473		0.378							
25			0.3647	0.366		0.36							
50			0.3607	0.350	7 0.398	0.3647							



0.3507

0.3627

0.342

0.3647

100

Report Date:

13 Jan-22 10:26 (p 4 of 4)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 16-1313 Analyzed: 13 Jan-

16-1313-3839 13 Jan-22 10:25 **Endpoint:** Mean Dry Biomass-mg **Analysis:** Linear Interpolation (ICPIN)

CETIS Version: Status Level: CETISv1.9.7

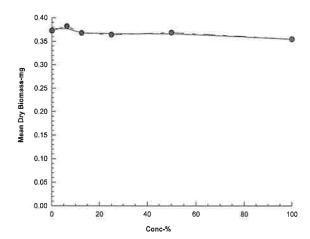
Edit Date: 13 Jan-22 10:23

MD5 Hash: 978811DFE92544C74DD665241B9F6756

Editor ID:

000-189-126-0

Graphics



13 Jan-22 10:26 (p 1 of 8)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

Fathead Minn	ow 7-d Larval	Surviva	and Growt	h Test				Aquat	ic Bioassay &	Consulting	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:			Test Type: Protocol: Species: Taxon:	Growth-Surviv EPA/821/R-02 Pimephales pr Actinopterygii	-013 (2002)			Brine:	Laboratory Wa Not Applicable Aquatic Biosys		Age : <24
	14 Dec-21 15:		Code: Material: CAS (PC):	VCF1221.122f Sample Water				Source:	NPDES Storm Bioassay Repo ME-VR2		Season
Sample Age:			Client:	Ventura Count	y vvatersne	a Protec	tion Distri				
Alkalinity (Cat		0		050/ 1 01	05% 1101			0.15	0115	01/0/	
Conc-%	Code	Count		95% LCL		Min	Max	Std Er		CV%	QA Coun
0	N	8	62.62	61.74	63.51	60	63	0.1326		1.69%	0
100 Overall		8 16	98	98	98	98	98	0	0	0.00%	0 (00()
Overall		10	80.31	70.57	90.05	60	98	4.57	18.28	22.76%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Count	. Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	364.1	361.3	367	360	370	0.4249	3.399	0.93%	0
6.25		8	358.6	357.3	360	357	362	0.1997	1.598	0.45%	0
12.5		8	360.6	358.2	363.1	356	365	0.3656	2.925	0.81%	0
25		8	371.5	367.1	375.9	363	380	0.6547	5.237	1.41%	0
50		8	381.5	379	384	377	386	0.378	3.024	0.79%	0
100		8	416	413.2	418.8	410	420	0.4226	3.381	0.81%	0
Overall		48	375.4	369.5	381.3	356	420	2.911	20.17	5.37%	0 (0%)
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	7.613	7.396	7.829	7.1	7.9	0.0323	5 0.2588	3.40%	0
6.25		8	7.5	7.268	7.732	7	7.8	0.0347	2 0.2777	3.70%	0
12.5		8	7.475	7.292	7.658	7.1	7.7	0.0273	5 0.2188	2.93%	0
25		8	7.425	7.217	7.633	7	7.7	0.0311	6 0.2493	3.36%	0
50		8	7.4	7.221	7.579	7	7.6	0.0267	3 0.2138	2.89%	0
100		8	7.4	7.2	7.6	7	7.7	0.0298	8 0.239	3.23%	0
Overall		48	7.469	7.398	7.539	7	7.9	0.035	0.2425	3.25%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	73	73	73	73	73	0	0	0.00%	0
100		8	157	157	157	157	157	0	0	0.00%	0
Overall		16	115	91.89	138.1	73	157	10.84	43.38	37.72%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	8.113	8.043	8.182	8	8.2	0.0104	3 0.08346	1.03%	0
6.25		8	7.963	7.886	8.039	7.8	8.1	0.0114	5 0.09161	1.15%	0
12.5		8	7.938	7.849	8.026	7.7	8	0.0132	6 0.1061	1.34%	0
25		8	7.888	7.75	8.025	7.5	8	0.0205	3 0.1642	2.08%	0
50		8	7.85	7.695	8.005	7.4	8	0.0231	5 0.1852	2.36%	0
100		8	7.85	7.695	8.005	7.4	8	0.0231	5 0.1852	2.36%	0
Overall		48	7.933	7.886	7.981	7.4	8.2	0.0235	1 0.1629	2.05%	0 (0%)

CETIS Measurement Report

Report Date:

13 Jan-22 10:26 (p 2 of 8)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

Fathead Minn	ow 7-d Larval	Survival ar	Aquatic Bioassay & Consulting Labs, Inc.								
Temperature-	°C										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.03	23.99	24.06	24	24.1	0.005778	0.04623	0.19%	0
12.5		8	24.04	23.98	24.1	24	24.2	0.009295	0.07436	0.31%	0
25		8	24.04	23.98	24.1	24	24.2	0.009295	0.07436	0.31%	0
50		8	24.03	23.99	24.06	24	24.1	0.005778	0.04623	0.19%	0
100		8	24.04	23.98	24.1	24	24.2	0.009295	0.07436	0.31%	0
Overall		48	24.03	24.01	24.04	24	24.2	0.008283	0.05739	0.24%	0 (0%)



CETIS Measurement Report

Report Date:

13 Jan-22 10:26 (p 3 of 8)

Test Code/ID: VCF1221.122fml / 13-7874-6809

Fathead Minn	ow 7-d Larva	l Survival	and Grow	th Test				Aquatic	Bioassay & Consulting Labs, Inc.
Alkalinity (Ca	CO3)-mg/L								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		60					
100				98					
0	N	2		63					
100				98					
0	N	3		63					
100				98					
0	N	4		63					
100				98					
0	N	5		63					
100				98					
0	N	6		63					
100				98					
0	N	7		63					
100				98					
0	N	8		63					
100				98					

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Test Code/ID:

VCF1221.122fml / 13-7874-6809

Conductivity-µm									
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		362					
6.25				358					
12.5				364					
25				372					
50				386					
100				413					
0	N	2		360					
6.25				357					
12.5				356					
25				370					
50				382					
100				410					
0	N	3		362					
6.25				357					
12.5				362					
25				377					
50				383					
100				416					
0	N	4		364					
6.25				358					
12.5				360					
25				372					
50				384					
100				415					
0	N	5		362					
6.25	.,	Ü		359					
12.5				359					
25				370					
50				382					
100				420					
0	N	6		365					
6.25	11	O		359					
12.5				359					
25				368					
50				378					
100				417					
0	N	7		368					
6.25	IN	1		359					
o.∠5 12.5									
				360					
25 50				363					
50 100				377					
100				417					
0	N	8		370					
6.25				362					
12.5				365					
25				380					
50				380					
100				420					

Report Date:

13 Jan-22 10:26 (p 5 of 8)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

1 attlead Million	ow 7-d Larva	ii Survivai	and Grow	n rest					Aquatic Bioassay & Consulting Labs, In
Dissolved Oxy									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
6.25				7.3					
12.5				7.3					
25				7.2					
50				7.2					
100				7.2					
0	N	2		7.6					
6.25				7.4					
12.5				7.4					
25				7.3					
50				7.3					
100				7.2					
0	N	3		7.4	-				
6.25		•		7.4					
12.5				7.4					
25				7.5					
50				7.5					
100				7.6					
0	N	4		7.8					
6.25				7.8					
12.5				7.7					
25				7.6					
50				7.5					
100				7.5					
0	N	5		7.9					
6.25				7.8					
12.5				7.7					
25				7.7					
50				7.6					
100				7.5					
0	N	6		7.8			_		
6.25	14	U		7.7					
12.5				7.7					
12.5									
25 50				7.7					
				7.6					
100				7.7					
0	N	7		7.7					
6.25				7.6					
12.5				7.5					
25				7.4					
50				7.5					
100				7.5					
)	N	8		7.1					
6.25	. •	-		7					
12.5				7.1					
25				7					
50									
				7					
100				7					

13 Jan-22 10:26 (p 6 of 8)

Test Code/ID: VCF1221.122fml / 13-7874-6809

Fathead Minn	ow 7-d Larva	l Survival	and Grow	th Test				Aquatic Bioassay & Consul	ting Labs, In
Hardness (Ca	CO3)-mg/L								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		73					
100				157					
0	N	2		73					
100				157					
0	N	3		73					
100				157					
0	N	4		73					
100				157					
0	N	5		73					
100				157					
0	N	6		73					
100				157					
0	N	7		73					
100				157					
0	N	8		73					
100				157					

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Test Code/ID:

VCF1221.122fml / 13-7874-6809

Fathead Minno			unu 01011					Aquatic Bioassay & Consulting Labs, Ir
pH-Units								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2				
6.25				7.9				
12.5				7.9				
25				7.9				
50				7.9				
100				7.9				
0	N	2		8				
6.25				7.9				
12.5				7.9				
25				7.9				
50				7.9				
100				7.9				
0	N	3		8.2				
6.25				8				
12.5				8				
25				8				
50				8				
100				8				
0	N	4		8.1				
6.25				8				
12.5				8				
25				7.9				
50				7.9				
100				7.9				
	- 11							
0	N	5		8.1				
6.25				8				
12.5				8				
25				8				
50				7.9				
100				7.9				
0	N	6		8.2				
6.25				8.1				
12.5				8				
25				8				
50				7.9				
100				7.9				
0	N	7		8.1				
6.25				8				
12.5				8				
25				7.9				
50				7.9				
100				7.9				
0	N	8		8				
6.25				7.8				
12.5				7.7				
25				7.5				
50				7.4				
100				7.4				

13 Jan-22 10:26 (p 8 of 8)

Test Code/ID:

VCF1221.122fml / 13-7874-6809

Fathead Minnow	7-d Larva	l Survival	and Grow	th Test				Aquatic I	Bioassay & Consulting Labs, Inc
Temperature-°C									
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	2		24					
6.25	.,	_		24.1					
12.5				24.1					
25				24.1					
50				24.1					
100				24.1					
0	N	3		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	4		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	5		24					
6.25				24.1					
12.5				24.2					
25				24.2					
50				24.1					
100				24.2					
0	N	6		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	7		24					
6.25	14	,		24					
12.5				24					
25				24					
50				24					
100				24					
0	N	8		24					
6.25	IN	0		24 24					
12.5				24 24					
				24					
25				24					
50				24					
100				24					



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.:

ME-VR2

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.122

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL

NOEC = 100.00 %

TUc = 1.00

EC25 = >100.00 %

EC50 = >100.00 %

REPRODUCTION

NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 %

IC50 = >100.00 %

Yours very truly

Scott Johnson

Laboratory Director

12 Jan-22 10:11 (p 1 of 2)

Test Code/ID: VCF1221.122cer / 13-8352-3108

Ceriodaphnia	a 7-d Survival and	d Reproduction	est				Α	quati	c Bioassay & C	onsulting	Labs,	Inc.
Batch ID:	21-1414-4784	• •	: Reproduction-	` '			Analyst					
Start Date:	15 Dec-21 15:24		EPA/821/R-02	, ,			Diluent		aboratory Wate	er		
_	: 22 Dec-21 14:16	•	Ceriodaphnia d	lubia			Brine:		lot Applicable			
Test Length:	6d 23h	Taxon:	Branchiopoda				Source	: A	quatic Biosyste	ms, CO	Age:	<24
Sample ID:	08-8458-1689	Code:	VCF1221.122	er			Project	: N	IPDES Stormwa	ater Wet Se	ason	
	: 14 Dec-21 09:15		Sample Water				Source	: E	Bioassay Report			
•	: 14 Dec-21 15:00	, ,					Station	: 1	/IE-VR2			
Sample Age:	30h (2 °C)	Client:	Ventura Count	y Watershed	Protection	Dist	i —————					
All and the	nparison Summa	•										
Analysis ID	Endpoint		parison Method			/ NC		OEL	TOEL	PMSD	TU	5
	7d Survival Rate		er Exact/Bonferro			10		100		40.00	1	
15-7530-6732	Reproduction	Duni	nett Multiple Com	parison Test		10) >	100	***	13.7%	1	
Point Estima	te Summary											
Analysis ID	Endpoint		t Estimate Meth			/ Le			95% LCL	95% UCL	TU	
19-4173-4291	7d Survival Rate	Line	ar Interpolation (I	CPIN)	•	/ EC		100	***		<1	•
						/ EC		100			<1	
					`	/ EC		100	-161		<1	
					`	/ EC		100			<1	
						/ EC		100	370		<1	
						/ EC		100			<1	
14-8957-7552	Reproduction	Line	ar Interpolation (I	CPIN)		/ IC		100	***		<1	
					`	/ IC		100	***		<1	
						/ IC:		100			<1	
						/ IC:		100			<1	
						/ IC		100			<1	
						/ IC	>0 >	100	**	22	<1	
Test Accepta	bility				TAC							
Analysis ID	Endpoint		bute	Test Stat				Overla				
	7d Survival Rate		rol Resp	1	8.0	>>	•	'es	Passes Cr			
	7d Survival Rate		rol Resp	1	8.0	>>		'es	Passes Cr			
	Reproduction	Cont	rol Resp	24.6	15	>>	Y	'es	Passes Cr	itaria		
15-7530-6732	Reproduction											
	•		rol Resp	24.6	15	>>		'es	Passes Cr	iteria		
_	? Reproduction	Cont PMS	•	24.6 0.1365				'es 'es		iteria		
7d Survival F	Rate Summary	PMS	D	0.1365	15 0.13	>> 0.4	7 Y	'es	Passes Cr Passes Cr	iteria iteria		
7d Survival F Conc-%	Reproduction Rate Summary Code	PMS Count Mea	n 95% LCL	0.1365 95% UC L	15 0.13 Min	>> 0.4 M a	7 Y	es Std Er	Passes Cr Passes Cr r Std Dev	iteria iteria CV%	%Eff	
7d Survival F Conc-%	Rate Summary	Count Mea 10 1.00	n 95% LCL	0.1365 95% UCL 1.0000	15 0.13 Min 1.0000	>> 0.4 Ma	7 Y	'es Std Er	Passes Cr Passes Cr r Std Dev 0.0000	iteria iteria CV%	0.00	%
7d Survival F Conc-% 0 6.25	Reproduction Rate Summary Code	Count Mea 10 1.00 10 1.00	95% LCL 00 1.0000 00 1.0000	0.1365 95% UCL 1.0000 1.0000	15 0.13 Min 1.0000 1.0000	>> 0.4 Ma 1.0	7 Y	es Std Er 0.0000	Passes Cr Passes Cr r Std Dev 0.0000 0.0000	iteria iteria CV%	0.00	% %
7d Survival F Conc-% 0 6.25 12.5	Reproduction Rate Summary Code	Count Mea 10 1.00 10 1.00 10 1.00	n 95% LCL 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000	0.4 0.4 Ma 1.0 1.0	7 Y X S 1000 0 0 1000 0 0 0 0 0 0 0 0 0 0 0 0	es Std Er 0.0000 0.0000	Passes Cr Passes Cr	cv%	0.00	% % %
7d Survival F Conc-% 0 6.25 12.5 25	Reproduction Rate Summary Code	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000 1.0000	0.4 Ma 1.0 1.0 1.0 1.0	x S 0000 0 0000 0 0000 0 0000 0	/es Std Err 0.0000 0.0000 0.0000	Passes Cr Passes Cr	CV%	0.00° 0.00° 0.00°	% % % %
7d Survival F Conc-% 0 6.25 12.5 25	Reproduction Rate Summary Code	Count Mea 10 1.00 10 1.00 10 1.00	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000	0.4 0.4 1.0 1.0 1.0 1.0	7 Y 8x S 9000 0 9000 0 9000 0 9000 0 9000 0	es Std Er 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000	cv%	0.00	% % % %
7d Survival F Conc-% 0 6.25 12.5 25 50 100	Rate Summary Code N	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000	0.4 0.4 1.0 1.0 1.0 1.0	7 Y 8x S 9000 0 9000 0 9000 0 9000 0 9000 0	/es 0.0000 0.0000 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000	CV%	0.00° 0.00° 0.00° 0.00°	% % % %
7d Survival F Conc-% 0 6.25 12.5 25 50 100 Reproduction	Rate Summary Code N	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000	0.4 0.4 1.0 1.0 1.0 1.0	x S 0000 0 0000 0 0000 0 0000 0	/es 0.0000 0.0000 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	CV%	0.00° 0.00° 0.00° 0.00°	% % % % %
7d Survival R Conc-% 0 6.25 12.5 25 50 100 Reproduction	Rate Summary Code N Summary	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000	7.0 1.0 1.0 1.0 1.0	x S 0000 0 0000 0 0000 0 0000 0 0000 0	Std Err 0.0000 0.0000 0.0000 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000	CV%	0.00° 0.00° 0.00° 0.00° 0.00°	% % % % %
7d Survival F Conc-% 0 6.25 12.5 25 50 100 Reproduction Conc-% 0	Rate Summary Code N Summary Code	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 Count Mea	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min	Ma 1.0 1.0 1.0 1.0 1.0	x S 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0	/es 0.0000 0.0000 0.0000 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	CV% CV%	0.00° 0.00° 0.00° 0.00° 0.00°	% % % % % fect
7d Survival F Conc-% 0 6.25 12.5 25 50 100 Reproduction Conc-% 0 6.25	Rate Summary Code N Summary Code	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 Count Mea 10 24.6	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 25% UCL 26.54	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 21	Ma 1.C 1.C 1.C 1.C 1.C 29	x S 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0	/es 0.0000 0.0000 0.0000 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	CV% CV% 11.04%	0.00° 0.00° 0.00° 0.00° 0.00° %Eff	% % % % % % fect %
_	Rate Summary Code N Summary Code	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 Count Mea 10 24.6 10 26.2	95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 20.000 00 1.0000 00 20.000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 26.54 27.95	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 21 23	Ma 1.C 1.C 1.C 1.C 29 31	x S 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0	res 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	Passes Cr Passes Cr T Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.716 2.716 2.44	CV%	0.00° 0.00° 0.00° 0.00° 0.00° %Eff 0.00° -6.50°	% % % % % % fect % 0% 2%
7d Survival F Conc-% 0 6.25 12.5 25 50 100 Reproduction Conc-% 0 6.25 12.5	Rate Summary Code N Summary Code	Count Mea 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 Count Mea 10 24.6 10 26.2 10 26.4	n 95% LCL 00 1.0000 00 1.0000 00 1.0000 00 1.0000 00 1.0000 n 95% LCL 22.66 24.45 23.89	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 26.54 27.95 28.91	15 0.13 Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 21 23 21	Maa 1.CC 1.CC 1.CC 1.CC 1.CC 1.CC 1.CC 1.	x S 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0 0000 0	6td Erro 0.0000 0.0000 0.0000 0.0000 0.0000 0.8589 0.7717 108	Passes Cr Passes Cr r Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 r Std Dev 2.716 2.44 3.502 4.191	CV%	0.00° 0.00° 0.00° 0.00° 0.00° %Eff 0.00° -6.50° -7.32°	% % % % % % fect % 0% 2% 60%

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Report Date:

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12 Jan-22 10:11 (p 2 of 2)

Test Code/ID: V

VCF1221.122cer / 13-8352-3108

Ceriodaphnia 7-d Survival and Reproduction Test Aquatic Bioassay & Consulting												
7d Survival Ra	ite Detail						MC	5: 6DFFCF	255519977	902535414	E38EA216	
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10	
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
6.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
50		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Reproduction	Detail						MC	5: 62444D	8B8B492C7	018AC0076	E0C41472	
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10	
0	N	27	25	29	22	21	24	26	21	27	24	
6.25		31	27	26	25	26	29	24	24	27	23	
12.5		28	28	25	31	30	22	21	24	30	25	
25		22	34	26	24	22	30	32	31	29	27	
50		28	30	26	27	28	23	22	31	31	27	
100		34	33	26	33	32	29	28	26	24	29	
7d Survival Ra	ite Binomials											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10	
0	Ν	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
12.5		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	

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Report Date:

12 Jan-22 10:11 (p 1 of 2)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia	7-d Survival ar	nd Repr	oduction Te	st				Aquati	ic Bioassay &	Consulting	Labs, Inc.
Analysis ID:	15-7530-6732		Endpoint:	Reproduction			CET	IS Versi	on: CETISV	1.9.7	
Analyzed:	12 Jan-22 10:1	1	Analysis:	Parametric-Coi	ntrol vs Tre	atments	Stat	us Level	l: 1		
Edit Date:	12 Jan-22 10:0		•	D95CCC51D69	A819136A	45F9CFDC	9F641 Edit	or ID:	000-189	-126-0	
Batch ID:	21-1414-4784		Test Type:	Reproduction-9	Survival (7d)	Ana	lyst:			
Start Date:	15 Dec-21 15:2	4	Protocol:	EPA/821/R-02-	013 (2002)	,	Dilu	ent: l	Laboratory Wa	ter	
Ending Date:	22 Dec-21 14:1	6	Species:	Ceriodaphnia d	lubia		Brin		Not Applicable		
Test Length:			Taxon:	Branchiopoda			Sou		Aquatic Biosys	tems, CO	Age: <24
Sample ID:	08-8458-1689		Code:	VCF1221.122c	er		Proj	ect:	NPDES Storm	water Wet S	Season
-	14 Dec-21 09:1	5	Material:	Sample Water			-		Bioassay Repo	ort	
Receipt Date:	14 Dec-21 15:0	0	CAS (PC):	•			Stat		ME-VR2		
Sample Age:			Client:	Ventura County	y Watershe	d Protection					
Data Transfori	m	Alt H	vn			NOEL	LOEL	TOEL	TU	MSDu	PMSD
Untransformed		C > T				100	>100		1	3.358	13.65%
Ounnett Multin	ple Compariso	n Tost									
•	vs Conc-%		Test S	Stat Critical	MSD D	F P-Type	P-Value	Docisi	ion(α:5%)		
Negative Contr			-1.091		3.358 18		0.9880		ignificant Effec	et e	
vogativo conti	12.5		-1.227		3.358 18		0.9922		ignificant Effec		
	25		-2.113		3.358 18		0.9997		ignificant Effec		
	50		-1.841		3.358 18		0.9991		ignificant Effec		
	100		-3.272			B CDF	1.0000		ignificant Effec		
Test Acceptab	ility Criteria										
Attribute	Test Stat		AC Limits r Upper	Overlap	Decision	1					
Control Resp	24.6	15	·	Yes	Passes C		= = =				
PMSD	0.1365	0.13	0.47	Yes	Passes C						
ANOVA Table											
Source	Sum Squ	lares	Mean	Square	DF	F Stat	P-Value	Decisi	ion(α:5%)		
Between	130.733	iuico	26.146		5	2.43	0.0465		cant Effect		
Error	581		10.759		54	2.40	0.0400	Olgiliii	cant Encot		
Total	711.733		10.70	70	59	-					
ANOVA Assun	nptions Tests										
Attribute	Test				Test Stat	Critical	P-Value	Decisi	ion(α:1%)		
/ariance		guality o	f Variance T	est	3.24	15.09	0.6631		Variances		
. arrarro			of Variance T		1.345	3.377	0.2595	•	Variances		
			ality of Varia		1.283	3.377	0.2847	-	Variances		
Distribution	Anderson		-	100 1000	0.5069	3.878	0.2045		al Distribution		
Distribution	D'Agostin	_			2.376	2.576	0.0175		al Distribution		
	D'Agostin				0.3209	2.576	0.7483		al Distribution		
	•		on K2 Omnil	oue Teet	5.747	9.21	0.0565		al Distribution		
	_		nov D Test	ous rest	0.08487	0.1331	0.3248		al Distribution		
	_		lormality Tes	st	0.9686	0.1331	0.3248		al Distribution		
Reproduction											
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	. Median	Min	Max	Std Err	CV%	%Effect
)	N	10	24.6	22.66	26.54	24.5	21	29	0.8589	11.04%	0.00%
6.25		10	26.2	24.45	27.95	26	23	31	0.7717	9.31%	-6.50%
12.5		10	26.4	23.89	28.91	26.5	21	31	1.108	13.27%	-7.32%
25		10	27.7	24.7	30.7	28	22	34	1.325	15.13%	-12.60%
					00				0.000	11.000	40.0001



11.20%

11.80%

-10.98%

-19.51%

0.9667

1.097

29.49

31.88

29

27.5

22

24

31

34

10

10

27.3

29.4

25.11

26.92

50

100

Report Date: Test Code/ID: 12 Jan-22 10:11 (p 2 of 2)

VCF1221.122cer / 13-8352-3108

Ceriodaphnia 7-d Survival and Reproduction Test

12 Jan-22 10:00

Aquatic Bioassay & Consulting Labs, Inc.

CETISv1.9.7

Analysis ID: 15-7530-6732 Analyzed:

Endpoint: Reproduction 12 Jan-22 10:11

Analysis: Parametric-Control vs Treatments

CETIS Version: Status Level:

000-189-126-0

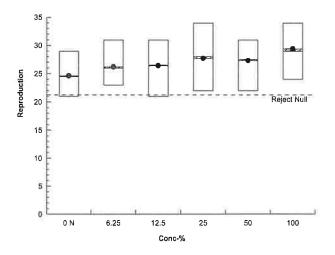
Reproduction Detail

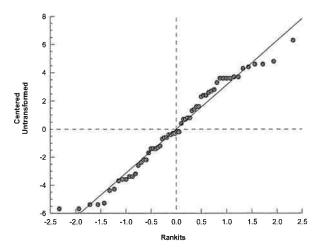
Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	27	25	29	22	21	24	26	21	27	24
6.25		31	27	26	25	26	29	24	24	27	23
12.5		28	28	25	31	30	22	21	24	30	25
25		22	34	26	24	22	30	32	31	29	27
50		28	30	26	27	28	23	22	31	31	27
100		34	33	26	33	32	29	28	26	24	29

MD5 Hash: D95CCC51D69A819136A45F9CFDC9F641 Editor ID:

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Report Date:

12 Jan-22 10:11 (p 1 of 4)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

									CSC OOGC/ID.	VOITEE	1.1220017 1	D 0002 0 10
Cerioda	aphnia	7-d Survival and	d Reproduc	ction Te	est				Aquatio	: Bioassay &	Consulting	Labs, Inc
Analysi	is ID:	19-4173-4291	End	point:	7d Survival Rat	e		С	ETIS Versio	n: CETISv	1.9.7	
Analyze	ed:	12 Jan-22 10:11	Ana	lysis:	Linear Interpola	ition (ICPIN	1)	S	tatus Level:	1		
Edit Da	ate:	12 Jan-22 10:00	MD	Hash:	6DFFCF255519	997790253	5414E38EA	A216 E	ditor ID:	000-189	9-126-0	
Batch I	ID:	21-1414-4784	Test	Type:	Reproduction-S	Survival (7d)	Α	nalyst:			
Start D	ate:	15 Dec-21 15:24	Prof	ocol:	EPA/821/R-02-	013 (2002)		D	iluent: L	aboratory Wa	iter	
Ending	Date:	22 Dec-21 14:16	Spe	cies:	Ceriodaphnia d	ubia		В	rine: N	ot Applicable		
Test Le	ength:	6d 23h	Tax	on:	Branchiopoda			s	ource: A	quatic Biosys	tems, CO	Age: <2
Sample	e ID:	08-8458-1689	Cod	e:	VCF1221.122c	er		Р	roject: N	PDES Storm	water Wet S	eason
Sample	e Date:	14 Dec-21 09:15	Mate	erial:	Sample Water			S	ource: B	ioassay Repo	ort	
Receip	t Date:	14 Dec-21 15:00	CAS	(PC):				S	tation: M	IE-VR2		
Sample	e Age:	30h (2 °C)	Clie	nt:	Ventura County	Watershe	d Protection	n Distri				
Linear	interpo	lation Options										
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	6 CL Met	hod				
Linear		Linear	0		280	Yes	Two	-Point Int	erpolation			
Test Ac	cceptab	oility Criteria	TAC L	imits								
Attribu	te	Test Stat	Lower	Uppe	r Overlap	Decision	1					
Control	Resp	1	0.8	>>	Yes	Passes (Criteria					
Point E	stimat	es										
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	-					
EC10	>100			<1		***						
EC15	>100	***	(***	<1		***						
EC20	>100	***	***	<1		***						
EC25	>100			<1		100						
EC40	>100		***	<1								
EC50	>100			<1	**	***						
7d Sur	vival R	ate Summary		_		Calc	ulated Vari	ate(A/B)			Isotor	nic Variate
Conc-%	/ 6	Code	Count	Mean		Min	Max	CV%	%Effec		Mean	%Effec
0		N	10	1.000		1.0000	1.0000	0.00%		10/10	1.0000	0.00%
6.25			10	1.000		1.0000	1.0000	0.00%		10/10	1.0000	0.00%
12.5			10	1.000		1.0000	1.0000	0.00%		10/10	1.0000	0.00%
25			10	1.000		1.0000	1.0000	0.00%		10/10	1.0000	0.00%
50			10	1.000		1.0000	1.0000	0.00%		10/10	1.0000	0.00%
100			10	1.000	0 1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%
		ate Detail										
Conc-%	<u>/</u> 6	Code	Rep 1	Rep 2		Rep 4	Rep 5	Rep 6		Rep 8	Rep 9	Rep 10
0		N	1.0000	1.000		1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
6.25			1.0000	1.000		1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
12.5			1.0000	1.000		1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
25			1.0000	1.000		1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
50			1.0000	1.000		1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
100			1.0000	1.000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7d Sur	vival R	ate Binomials										
Conc-%	%	Code	Rep 1	Rep 2		Rep 4	Rep 5	Rep 6		Rep 8	Rep 9	Rep 10
0		N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25			1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5			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
50			1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
400			4/4	414	4.14	414	4/4	4/4	4/4	1/1	1/1	1/1



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Report Date:

12 Jan-22 10:11 (p 2 of 4)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 19-4173-4291 Analyzed:

12 Jan-22 10:11 12 Jan-22 10:00 Endpoint: 7d Survival Rate

Analysis: Linear Interpolation (ICPIN)

MD5 Hash: 6DFFCF255519977902535414E38EA216

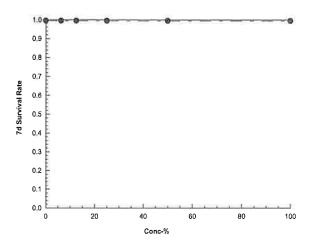
CETIS Version: Editor ID:

Status Level:

000-189-126-0

CETISv1.9.7

Edit Date: Graphics



Report Date:

12 Jan-22 10:11 (p 3 of 4)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

									Test	Code/ID:	VCF122	1.122cer /	13-8352-310
Ceriod	laphnia	7-d Survival an	d Reprodu	ction Te	est					Aquatic B	ioassay &	Consultin	g Labs, Inc.
Analys	is ID:	14-8957-7552	End	point:	Reproduction				CETI	S Version:	CETISV	1.9.7	
Analyz	ed:	12 Jan-22 10:11	1 Ana	lysis:	Linear Interpola	ation (ICPI	N)		Statu	ıs Level:	1		
Edit Da	ate:	12 Jan-22 10:00) MD:	5 Hash:	D95CCC51D69	A819136	A45F9CF	FDC9F641	Edito	or ID:	000-189	9-126-0	
Batch	ID:	21-1414-4784	Tes	t Type:	Reproduction-S	Survival (7d	d)		Analy	yst:			
Start D	ate:	15 Dec-21 15:24	4 Pro	tocol:	EPA/821/R-02-	013 (2002	2)		Dilue	nt: Lab	oratory Wa	ater	
Ending	Date:	22 Dec-21 14:10	6 Spe	cies:	Ceriodaphnia d	ubia			Brine	: Not	Applicable)	
Test Le	ength:	6d 23h	Tax	on:	Branchiopoda				Sour	ce: Aqu	atic Biosys	stems, CO	Age: <24
Sample	e ID:	08-8458-1689	Cod	le:	VCF1221.122c	er			Proje	ct: NPE	ES Storm	water Wet	Season
Sample	e Date:	14 Dec-21 09:1	5 Mat	erial:	Sample Water				Sour	ce: Bioa	issay Repo	ort	
Receip	t Date:	14 Dec-21 15:00	O CAS	(PC):					Static	on: ME-	VR2		
Sample	e Age:	30h (2 °C)	Clie	nt:	Ventura County	/ Watersh	ed Prote	ction Distri					
Linear	Interpo	olation Options											
X Tran	sform	Y Transforn	n See	d	Resamples	Exp 95	% CL	Method					
Linear		Linear	137	6343	280	Yes		Two-Point	Interpo	olation			
Test A	cceptal	bility Criteria	TAC L	imits									
Attribu	ite	Test Stat	Lower	Uppe	r Overlap	Decisio	n						
Control	Resp	24.6	15	>>	Yes	Passes	Criteria						
Point F	Estimat	res											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UC							
IC10	>100		3378 GGL	<1		33 /8 00							
IC15	>100		***	<1									
C20	>100			<1	***								
C25	>100			<1		***							
C40	>100		***	<1	***	***							
C50	>100			<1									
Reprod	duction	Summary				С	alculate	d Variate				Isoto	nic Variate
Conc-%	%	Code	Count	Mean	Median	Min	Max	CV%	6	%Effect		Mean	%Effect
)		N	10	24.6	24.5	21	29	11.0	4%	0.00%		26.93	0.00%
3.25			10	26.2	26	23	31	9.31	%	-6.50%		26.93	0.00%
12.5			10	26.4	26.5	21	31	13.2	7%	-7.32%		26.93	0.00%
25			10	27.7	28	22	34	15.1	3%	-12.60%		26.93	0.00%
50			10	27.3	27.5	22	31	11.2	0%	-10.98%		26.93	0.00%
100			10	29.4	29	24	34	11.8	0%	-19.51%		26.93	0.00%
Reprod	duction	Detail											
Conc-%	%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep	5 Rep	6	Rep 7	Rep 8	Rep 9	Rep 10
)		N	27	25	29	22	21	24		26	21	27	24
3.25			31	27	26	25	26	29		24	24	27	23
40.5			00	00	0.5	24	20	00		0.4	0.4	20	O.F.



12.5

Report Date:

12 Jan-22 10:11 (p 4 of 4)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 14-8957-7552 Analyzed: 12 Jan-22 10:11 Endpoint: Reproduction Analysis:

Linear Interpolation (ICPIN)

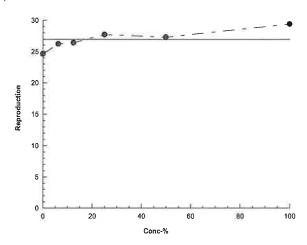
CETIS Version: Status Level:

CETISv1.9.7

Edit Date: 12 Jan-22 10:00 MD5 Hash: D95CCC51D69A819136A45F9CFDC9F641 Editor ID:

000-189-126-0

Graphics



Report Date:

12 Jan-22 10:11 (p 1 of 2)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Analysis ID: 18-9503-1 Analyzed: 12 Jan-22 Edit Date: 12 Jan-22 Batch ID: 21-1414-4 Start Date: 15 Dec-24	2 10:11 2 10:00	Analysis:	7d Survival Rat STP 2xK Conti SDFFCF25551	ngency Tabl			IS Versi us Leve		1.9.7	
Edit Date: 12 Jan-22 Batch ID: 21-1414-4 Start Date: 15 Dec-21	2 10:00	•				Stat	us Leve	l: 1		
Batch ID: 21-1414-4 Start Date: 15 Dec-21		MD5 Hash: 6	3DFFCF25551	0077000505						
Start Date: 15 Dec-21	704			9977902535	414E38EA	.216 Edit	or ID:	000-189	9-126-0	
	· / 84	Test Type:	Reproduction-S	Survival (7d)		Ana	lyst:			
Fading Date: 00 Dec 00	l 15:24	Protocol: E	EPA/821/R-02-	-013 (2002)		Dilu	ent:	Laboratory Wa	iter	
Ending Date: 22 Dec-21	l 14:16	Species: 0	Ceriodaphnia d	lubia		Brin	ie:	Not Applicable		
Test Length: 6d 23h		Taxon:	Branchiopoda			Sou	rce:	Aquatic Biosys	stems, CO	Age: <24
Sample ID: 08-8458-1	689	Code:	/CF1221.122c	er		Pro	ject:	NPDES Storm	water Wet S	Season
Sample Date: 14 Dec-21	l 09:15	Material:	Sample Water			Sou	rce:	Bioassay Repo	ort	
Receipt Date: 14 Dec-21	l 15:00	CAS (PC):				Stat	ion:	ME-VR2		
Sample Age: 30h (2 °C))	Client:	Ventura County	y Watershed	Protection	Distri				
Data Transform	Alt H	ур			NOEL	LOEL	TOEL	TU		
Untransformed	C > T				100	>100	***	1		
Fisher Exact/Bonferron	i-Holm Test									
Control vs Co	nc-%	Test St	at P-Type	P-Value	Decision	(a:5%)				
Negative Control 6.2	5	1.0000	Exact	1.0000		ificant Effec	t			
12,		1.0000	Exact	1.0000	-	ificant Effec				
25		1.0000	Exact	1.0000	_	ificant Effec				
50		1.0000	Exact	1.0000	Non-Sign	ificant Effec	:t			
100)	1.0000	Exact	1.0000	_	ificant Effec				
Test Acceptability Crite	ria TA	AC Limits								
Attribute Tes	t Stat Lowe		Overlap	Decision						
Control Resp 1	0.8	>>	Yes	Passes Ci	iteria					
7d Survival Rate Freque	encies									
Conc-% Cod		R	NR + R	Prop NR	Prop R	%Effect				
0 N	10	0	10	1.0000	0.0000	0.00%				
6.25	10	0	10	1.0000	0.0000	0.00%				
12,5	10	0	10	1.0000	0.0000	0.00%				
25	10	0	10	1.0000	0.0000	0.00%				
50	10	0	10	1.0000	0.0000	0.00%				
100	10	0	10	1.0000	0.0000	0.00%				
7d Survival Rate Summ	ary									
Conc-% Cod	le Coun	t Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0 N	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
6.25	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
12.5	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
25	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
50	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
100	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
7d Survival Rate Detail										
Conc-% Cod	le Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
) N	1.0000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	1.0000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
						4 0000	4 0000	1.0000	1.0000	1.0000
5.25	1.0000	0 1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6.25 12.5			1.0000 1.0000	1.0000 1.0000	1.0000	1.0000	1.0000		1.0000	1.0000
6.25 12.5 25 50	1.0000	0 1.0000						1.0000		



Report Date:

12 Jan-22 10:11 (p 2 of 2)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 18-9503-1331

12 Jan-22 10:11 12 Jan-22 10:00 Endpoint: 7d Survival Rate

Analysis: STP 2xK Contingency Tables MD5 Hash: 6DFFCF255519977902535414E38EA216

CETIS Version: Status Level:

Editor ID:

000-189-126-0

CETISv1.9.7

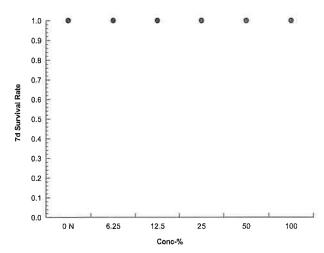
7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics

Analyzed:

Edit Date:



12 Jan-22 10:11 (p 1 of 8)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia	a 7-d Survival a	nd Repro	oduction Te	est				Aqua	tic Bioassay &	Consultin	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:	21-1414-4784 15 Dec-21 15:2 22 Dec-21 14:16d 23h	24 16	Test Type: Protocol: Species: Taxon:	Reproduction-S EPA/821/R-02 Ceriodaphnia of Branchiopoda	-013 (2002))		Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age : <24
Receipt Date:	08-8458-1689 : 14 Dec-21 09: : 14 Dec-21 15:0	15 00	Code: Material: CAS (PC):	VCF1221.1220 Sample Water		d Duada	de a Dietai	Project: Source: Station:	NPDES Stormy Bioassay Repo ME-VR2		Season
Sample Age:			Client:	Ventura Count	y vvatersne	Protec	tion Distri				
Alkalinity (Ca									3.6		
Conc-%	Code	Count		95% LCL	95% UCL	Min	Max	Std Er		CV%	QA Coun
0	N	8	62.62	61.74	63.51	60	63	0.1326		1.69%	0
100		8	98	98	98	98	98	0	0	0.00%	0 (00()
Overall		16	80.31	70.57	90.05	60	98	4.57	18.28	22.76%	0 (0%)
Conductivity	-µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Ei	r Std Dev	CV%	QA Coun
0	N	8	364.1	361.3	367	360	370	0.4249	3.399	0.93%	0
6.25		8	358.6	357.3	360	357	362	0.1997	1.598	0.45%	0
12.5		8	360.6	358.2	363.1	356	365	0.3656	2.925	0.81%	0
25		8	371.5	367.1	375.9	363	380	0.6547	5.237	1.41%	0
50		8	381.5	379	384	377	386	0.378	3.024	0.79%	0
100		8	416	413.2	418.8	410	420	0.4226	3.381	0.81%	0
Overall		48	375.4	369.5	381.3	356	420	2.911	20.17	5.37%	0 (0%)
Dissolved Ox	kygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Ei	r Std Dev	CV%	QA Coun
0	N	8	7.613	7.396	7.829	7.1	7.9	0.0323	35 0.2588	3.40%	0
6.25		8	7.5	7.268	7.732	7	7.8	0.0347	2 0.2777	3.70%	0
12.5		8	7.475	7.292	7.658	7.1	7.7	0.0273	35 0.2188	2.93%	0
25		8	7.425	7.217	7.633	7	7.7	0.0311	16 0.2493	3.36%	0
50		8	7.4	7.221	7.579	7	7.6	0.0267	3 0.2138	2.89%	0
100		8	7.4	7.2	7.6	7	7.7	0.0298		3.23%	0
Overall		48	7.469	7.398	7.539	7	7.9	0.035	0.2425	3.25%	0 (0%)
Hardness (Ca	aCO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Coun
0	N	8	73	73	73	73	73	0	0	0.00%	0
100		8	157	157	157	157	157	0	0	0.00%	0
Overall		16	115	91.89	138.1	73	157	10.84	43.38	37.72%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Coun
0	N	8	8.113	8.043	8.182	8	8.2	0.0104		1.03%	0
6.25		8	7.963	7.886	8.039	7.8	8.1	0.0114		1.15%	0
12.5		8	7.938	7.849	8.026	7.7	8	0.0132		1.34%	0
25		8	7.888	7.75	8.025	7.5	8	0.0205		2.08%	0
50		8	7.85	7.695	8.005	7.4	8	0.0231		2.36%	0
100		8	7.85	7.695	8.005	7.4	8	0.0231		2.36%	0
		48	7.933	7.886	7.981	7.4	8.2	0.0235		2.05%	0 (0%)

CETIS Measurement Report

Report Date:

12 Jan-22 10:11 (p 2 of 8)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

	Ceriodaphnia 7-d Survival and Reproduction Test	
- 1	outouspitting i a cultival alla itopioanottoi. Ioot	

Aquatic Bioassay	&	Consulting	Labs,	Inc.
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Temperature-°C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.03	23.99	24.06	24	24.1	0.005778	0.04623	0.19%	0
12.5		8	24.04	23.98	24.1	24	24.2	0.009295	0.07436	0.31%	0
25		8	24.04	23.98	24.1	24	24.2	0.009295	0.07436	0.31%	0
50		8	24.03	23.99	24.06	24	24.1	0.005778	0.04623	0.19%	0
100		8	24.04	23.98	24.1	24	24.2	0.009295	0.07436	0.31%	0
Overall		48	24.03	24.01	24.04	24	24.2	0.008283	0.05739	0.24%	0 (0%)

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Test Code/ID:

VCF1221.122cer / 13-8352-3108

10	Ceriodaphnia	7-d	Survival	and F	Reproduction	Test

Alkalinity (CaCO	3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		60					
100				98					
0	N	2		63					
100				98					
0	N	3		63					
100				98					
0	N	4		63					
100				98					
0	N	5		63					
100				98					
0	N	6		63					
100				98					
0	N	7		63					
100				98					
0	N	8		63					
100				98					

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Test Code/ID:

VCF1221.122cer / 13-8352-3108

Conc-%	Code	Read	Time Measure C	A Diff-%	Inst ID	Analyst	Notes
0	N	1	362				
6.25			358				
12.5			364				
25			372				
50			386				
100			413				
0	N	2	360				
3.25			357				
12.5			356				
25			370				
50			382				
100			410				
)	N	3	362				
6.25			357				
12.5			362				
25			377				
50			383				
100			416				
)	N	4	364				
6.25	IN	4	358				
12.5			360				
25			372				
50			384				
100			415				
0	N	5	362				
3.25			359				
12.5			359				
25			370				
50			382				
100			420				
)	N	6	365				
6.25		•	359				
12.5			359				
25			368				
50			378				
100			417				
	F1	7					
)	N	7	368				
3.25			359				
12.5			360				
25			363				
50			377				
100			417				
)	N	8	370				
6.25			362				
12.5			365				
25			380				
50			380				
100			420				

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Test Code/ID:

VCF1221.122cer / 13-8352-3108

Conc-%	Code	Read	Time	Measure (QA Diff-	% Inst ID	Analyst	Notes
0	N	1	111110	7.6	AL DIII	70 1113(12)	Analyst	110103
6.25				7.3				
12.5				7.3				
25				7.2				
50								
				7.2				
100				7.2				
0	N	2		7.6				
6.25				7.4				
12.5				7.4				
25				7.3				
50				7.3				
100				7.2				
0	N	3		7.4				
6.25	14	~		7.4				
12.5				7.4				
12.5 25								
50 50				7.5				
				7.5				
100				7.6				
0	N	4		7.8				
6.25				7.8				
12.5				7.7				
25				7.6				
50				7.5				
100				7.5				
0	N	5		7.9				
6.25	• • • • • • • • • • • • • • • • • • • •	Ü		7.8				
12.5				7.7				
25				7.7				
				7.6				
50								
100				7.5				
0	N	6		7.8				
6.25				7.7				
12.5				7.7				
25				7.7				
50				7.6				
100				7.7				
0	N	7		7.7				
6.25	1.4	•		7.6				
12.5				7.5				
				7.5 7.4				
25				7.4				
50				7.5				
100				7.5				
0	N	8		7.1				
6.25				7				
12.5				7.1				
25				7				
50				7				
100				7				

12 Jan-22 10:11 (p 6 of 8)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia	7-d Survival	and Repr	oduction 1	est					Aquatic Bioassay & Consulting Labs, Inc.
Hardness (Ca	CO3)-mg/L								
Conc-%	Code	Read	Time	Measure Q	A I	Diff-%	Inst ID	Analyst	Notes
0	N	1		73					
100				157					
0	N	2		73					
100				157					
0	N	3		73					
100				157					
0	N	4		73					
100				157					
0	N	5		73					
100				157					
0	N	6		73					
100				157					
0	N	7		73					
100				157					
0	N	8		73					
100				157					

12 Jan-22 10:11 (p 7 of 8)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2					
6.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7.9					
0	N	2		8					
6.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7.9					
0	N	3		8,2					
6.25				8					
12.5				8					
25				8					
50				8					
100				8					
0	N	4		8.1					
6.25				8					
12.5				8					
25				7.9					
50				7.9					
100				7.9					
0	N	5		8,1					
6.25				8					
12.5				8					
25				8					
50				7.9					
100				7.9					
0	N	6		8.2					
6.25				8.1					
12.5				8					
				8					
25 50				7.9					
100				7.9					
0	N	7		8.1					
6.25	-			8					
12.5				8					
25				7.9					
50				7.9					
100				7.9					
0	N	8		8					
6.25	11	J		7.8					
12.5				7.7					
25				7.5					
50				7.4					
100				7.4					
100				1.4					

12 Jan-22 10:11 (p 8 of 8)

Test Code/ID:

VCF1221.122cer / 13-8352-3108

Ceriodaphnia 7-d Survival and Reproduction Test

Temperature-°	C								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	2		24					
6.25		_		24.1					
12.5				24.1					
25				24.1					
50				24.1					
100				24.1					
0	N	3		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	4		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	5		24					
6.25		Ü		24.1					
12.5				24.2					
25				24.2					
20									
50 100				24.1 24.2					
0 6.25	N	6		24					
				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	7		24					
6.25				24					
12.5				24					
25				24					
50				24					
100				24					
0	N	8		24					
6.25		-		24					
12.5				24					
25				24					
25 50									
				24					
100				24					



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012.* "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Flood Control

SAMPLE I.D.: ME-VR2
DATE RECEIVED: 12/14/2021
ABC LAB. NO.: VCF1221.122

ACUTE HYALELLA SURVIVAL BIOASSAY

% Survival = 100 % Survival in 100% Sample

EC25 = >100.00 % EC50 = >100.00 %

*TU(a) = 0.00

* TU(a) Is calculated by: log (% Mortality)/1.7

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 13:16 (p 1 of 1)

Test Code/ID: VCF1221.122ahya / 03-4627-3658

Hyalella 96-h	Acute Survival T	est							Aqua	tic B	ioassay & 0	Consulting	Labs, I	lnc.
Batch ID: Start Date: Ending Date: Test Length:	04-5935-6498 15 Dec-21 15:30 19 Dec-21 15:35 4d 0h	Pı Si	est Type: rotocol: pecies: axon:	Survival (96h) EPA/821/R-02 Hyalella azteca Malacostraca				Di Br	nalyst: luent: rine: ource:	Not	oratory Wate Applicable atic Biosyste		Age:	
-	15-7069-9852 14 Dec-21 09:15 14 Dec-21 15:00 30h (6.5 °C)	M C	ode: aterial: AS (PC): lient:	VCF1221.122ahya Sample Water Ventura County Watershed Protection Distri					oject: ource: ation:		DES Stormw Issay Report VR2		ason	
Multiple Com	parison Summar	y												
Analysis ID	Endpoint		Com	parison Method			✓	NOEL	LOE	L	TOEL	PMSD	TU	S
13-8015-7439	96h Survival Rat	е	Steel	Many-One Ranl	Sum Test			100	>100			***	1	1
Point Estimat	te Summary													
Analysis ID	Endpoint		Point	Estimate Meth	od		√	Level	%		95% LCL	95% UCL	ΤU	s
	96h Survival Rat	е		r Interpolation (I				EC10 EC15 EC20 EC25 EC40 EC50	>100 >100 >100 >100 >100		-	 	<1 <1 <1 <1 <1 <1	1
								EC50	>100				<1	_
	Rate Summary													
Conc-%	Code	Count	Mean					Max	Std I		Std Dev	CV%	%Effe	
0 6.25	N	4	1.000 1.000		1.0000 1.0000	1.0000		1.0000	0.000		0.0000		0.00%	
12.5		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.00%	
25		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.00%	
50		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.00%	
100		4	1.000		1.0000	1.0000		1.0000	0.000	00	0.0000		0.00%	%
96h Survival	Rate Detail							M	ID5: E88	740A	7CB88EC46	B4EC0A60	E4B8A	EB7
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	1.0000	1.000	1.0000	1.0000									
6.25		1.0000	1.000	1.0000	1.0000									
12.5		1.0000	1.000	1.0000	1.0000									
25		1.0000	1.000	1.0000	1.0000									
50		1.0000	1.000	1.0000	1.0000									
100		1.0000	1.000	1.0000	1.0000									
96h Survival	Rate Binomials													
Conc-%	Code	Rep 1	Rep 2		Rep 4									
0	N	5/5	5/5	5/5	5/5									
6.25		5/5	5/5	5/5	5/5									
12.5		5/5	5/5	5/5	5/5									
25		5/5	5/5	5/5	5/5									
50		5/5	5/5	5/5	5/5									
100		5/5	5/5	5/5	5/5									

Report Date:

12 Jan-22 13:16 (p 1 of 2)

Test Code/ID: VCF1221.122ahya / 03-4627-3658

myalella 96-n A	Acute Survival	Test							Aquati	c Bioassay &	Consultin	g Labs, Inc
	13-8015-7439	Eı	ndpoint:	96h Survival R				CET	IS Versi	on: CETISv	1.9.7	
•	12 Jan-22 13:1		nalysis:	Nonparametric	-Control	vs T	reatments	Stat	us Level	: 1		
Edit Date:	12 Jan-22 13:1	4 M	D5 Hash:	E88740A7CB8	88EC46B	4EC	0A60E4B8	AEB Edit	or ID:	000-189	-126-0	
Batch ID:	04-5935-6498	Te	st Type:	Survival (96h)				Anal	yst:			
Start Date:	15 Dec-21 15:	30 P ı	otocol:	EPA/821/R-02	-012 (20	02)		Dilu	ent: l	_aboratory Wa	ter	
Ending Date:	19 Dec-21 15:	35 S I	oecies:	Hyalella azteca	а			Brin	e: f	Not Applicable		
Test Length:	4d 0h	Ta	ixon:	Malacostraca	•			Sou	rce: /	Aquatic Biosys	tems, CO	Age:
Sample ID:	15-7069-9852	C	ode:	VCF1221.122	ahya			Proj	ect:	NPDES Storm	water Wet	Season
Sample Date:	14 Dec-21 09:	15 M	aterial:	Sample Water				Sou	rce: E	Bioassay Repo	ort	
Receipt Date:	14 Dec-21 15:0	00 C	AS (PC):					Stati	ion: [ME-VR2		
Sample Age:	30h (6.5 °C)	C	ient:	Ventura Count	y Waters	shed	Protection	Distri				
Data Transforr	m	Alt Hyp					NOEL	LOEL	TOEL	TU		
Angular (Correc	cted)	C > T					100	>100	-11	1		
Steel Many-On	ne Rank Sum	Гest										
	vs Conc-%		Test \$	Stat Critical	Ties	DF	P-Type	P-Value	Decisi	on(α:5%)		
Negative Contro	ol 6.25		18	10	1	6	CDF	0.8333	Non-S	ignificant Effec	t	
	12.5		18	10	1	6	CDF	0.8333	Non-S	ignificant Effec	:t	
	25		18	10	1	6	CDF	0.8333	Non-S	ignificant Effec	t	
	50		18	10	1	6	CDF	0.8333	Non-S	ignificant Effec	;t	
	100		18	10	1	6	CDF	0.8333	Non-S	ignificant Effec	:t	
ANOVA Table												
Source	Sum Sq	uares	Mean	Square	DF		F Stat	P-Value	Decisi	on(α:5%)		
Between	0		0		5				Indete	rminate		
Error	0		0		18							
Total	0				23							
ANOVA Assum	nptions Tests											
Attribute	Test				Test S	Stat	Critical	P-Value	Decisi	on(a:1%)		
Variance	Bartlett E	quality of \	/ariance T	est						rminate		
Distribution		Wilk W No							Indete	rminate		
									_			
96h Survival R	Rate Summary											
	Rate Summary Code	Count	Mean	95% LCL	. 95% L	ICL	Median	Min	Max	Std Err	CV%	%Effect
	•		Mean		95% L	_	Median 1.0000	Min 1.0000	Max		CV%	%Effect 0.00%
Conc-%	Code	Count		1.0000)				0.0000		
Conc-% 0 6.25	Code	Count 4	1.000	1.0000	1.0000)	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
Conc-% 0 6.25 12.5	Code	Count 4 4	1.000	1.0000 1.0000 1.0000	1.0000)))	1.0000 1.0000	1.0000 1.0000	1.0000	0.0000 0.0000 0.0000	0.00% 0.00%	0.00%
Conc-% 0 6.25 12.5 25	Code	Count 4 4 4	1.000 1.000 1.000	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 0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50	Code	4 4 4 4	1.000 1.000 1.000	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 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100	Code N	4 4 4 4 4 4	1.000 1.000 1.000 1.000 1.000	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 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Angular (Corre	Code N	4 4 4 4 4 4	1.000 1.000 1.000 1.000 1.000	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 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Angular (Corre	Code N	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1.000 1.000 1.000 1.000 1.000 1.000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 95% LCL	1.0000 1.0000 1.0000 1.0000 1.0000	OCL	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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Angular (Corre	Code N ected) Transfo	Count 4 4 4 4 4 4 4 Count	1.000 1.000 1.000 1.000 1.000 1.000 mary	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 95% LCL	1.0000 1.0000 1.0000 1.0000 1.0000	ICL	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 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Std Err	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Angular (Corre Conc-% 0 6.25	Code N ected) Transfo	Count 4 4 4 4 4 4 4 Count Count 4	1.000 1.000 1.000 1.000 1.000 1.000 mary Mean 1.345	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 95% LCL 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 95% L	icl	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 Max 1.3450	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Std Err 0.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Angular (Corre Conc-% 0 6.25 12.5	Code N ected) Transfo	Count 4 4 4 4 4 4 Count Count 4	1.000 1.000 1.000 1.000 1.000 1.000 mary Mean 1.345 1.345	95% LCL 1.3450 1.0000 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.3460 1.3460	JCL	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 Max 1.3450 1.3450	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
96h Survival R Conc-% 0 6.25 12.5 25 50 100 Angular (Corre Conc-% 0 6.25 12.5 25 50	Code N ected) Transfo	Count 4 4 4 4 4 4 Count Count 4 4	1.000 1.000 1.000 1.000 1.000 1.000 1.345 1.345 1.345	95% LCL 1.3450 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.3460 1.3460 1.3460)))))))))	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 Max 1.3450 1.3450	0 0.0000 0 0.0000 0 0.0000 0 0.0000 0 0.0000 0 0.0000 0 0.0000 0 0.0000 0 0.0000 0 0.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% %Effect 0.00% 0.00%



Report Date:

12 Jan-22 13:16 (p 2 of 2)

Test Code/ID: VCF1221.122ahya / 03-4627-3658

Hyalella 96-h Acute Survival Test

12 Jan-22 13:14

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 13-8015-7439 Analyzed:

12 Jan-22 13:15 Analysis:

Endpoint: 96h Survival Rate

Nonparametric-Control vs Treatments

MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

CETIS Version:

Editor ID:

Status Level:

000-189-126-0

CETISv1.9.7

96h Survival Rate Detail

Edit Date:

Code	Rep 1	Rep 2	Rep 3	Rep 4	
N	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	
		N 1.0000 1.0000 1.0000 1.0000 1.0000	N 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	N 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	N 1.0000

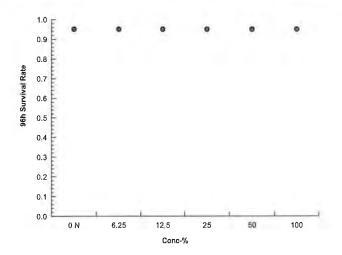
Angular (Corrected) Transformed Detail

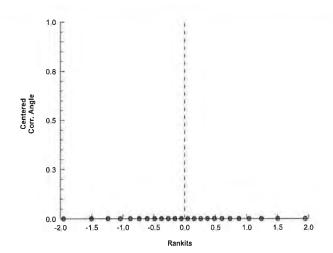
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.3450	1.3450	1.3450	1.3450
6.25		1.3450	1.3450	1.3450	1.3450
12.5		1.3450	1.3450	1.3450	1.3450
25		1.3450	1.3450	1.3450	1.3450
50		1.3450	1.3450	1.3450	1.3450
100		1.3450	1.3450	1.3450	1.3450

96h Survival Rate Binomials

Code	Rep 1	Rep 2	Rep 3	Rep 4	
N	5/5	5/5	5/5	5/5	
	5/5	5/5	5/5	5/5	
	5/5	5/5	5/5	5/5	
	5/5	5/5	5/5	5/5	
	5/5	5/5	5/5	5/5	
	5/5	5/5	5/5	5/5	
		N 5/5 5/5 5/5 5/5 5/5	N 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5	N 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5	N 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5 5/5

Graphics





Report Date:

12 Jan-22 13:16 (p 1 of 2)

Test Code/ID: VCF1221.122ahya / 03-4627-3658

Hyalell	a 96-h	Acute Survival T	est							Aquatic	Bio	assay &	Consulting	Labs, Inc
Analys	is ID:	16-1547-2144	End	point:	96h Survival Ra	ate			CETIS	Versio	n:	CETISv1	.9.7	
Analyz	ed:	12 Jan-22 13:15	Ana	lysis:	Linear Interpola	ation (ICPIN))		Status	Level:		1		
Edit Da		12 Jan-22 13:14	MD	Hash:	E88740A7CB8	8EC46B4EC	0A60E	E4B8AEB	Editor	ID:		000-189-	126-0	
Batch I	ID:	04-5935-6498	Test	t Type:	Survival (96h)				Analys	st:				
Start D	ate:	15 Dec-21 15:30	Prot	tocol:	EPA/821/R-02-	012 (2002)			Diluen		abor	atory Wat	er	
Ending	Date:	19 Dec-21 15:35	Spe	cies:	Hyalella azteca	, ,			Brine:	N	ot A	pplicable		
-		4d 0h	Tax		Malacostraca				Sourc			ic Biosyst	ems, CO	Age:
Sample	e ID·	15-7069-9852	Cod	e.	VCF1221.122a	hva			Projec	t: N	PDF	S Stormy	vater Wet S	eason
		14 Dec-21 09:15		erial:	Sample Water	,_			Sourc			say Repo		
		14 Dec-21 15:00		(PC):	Campio maio				Statio		E-V		-	
		30h (6.5 °C)	Clie		Ventura County	/ Watershed	Prote	ction Distri						
Linear	Interpo	olation Options												
X Tran		Y Transform	See	d	Resamples	Exp 95%	CL	Method						
Linear		Linear	0		280	Yes		Two-Point	Interpol	ation				
Point E	stimat	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL								
EC10	>100			<1	And a									
EC15	>100	, inches		<1		***								
EC20	>100			<1										
EC25	>100	-	-	<1										
EC40	>100			<1										
EC50	>100	202		<1	- 222					_				
96h Su	ırvival l	Rate Summary				Calcu	lated \	Variate(A/E	3)				Isotor	nic Variate
Conc-%	%	Code	Count	Mean	n Median	Min	Max	CV	%	%Effec	t	A/B	Mean	%Effec
0		N	4	1.000	1.0000	1.0000	1.000			0.00%		20/20	1.0000	0.00%
6.25			4	1.000		1.0000	1.000			0.00%		20/20	1.0000	0.00%
12.5			4	1.000		1.0000	1.000			0.00%		20/20	1.0000	0.00%
25			4	1.000		1.0000	1.000			0.00%		20/20	1.0000	0.00%
50			4	1.000		1.0000	1.000			0.00%		20/20	1.0000	0.00%
100			4	1.000	1.0000	1.0000	1.000	0.00)%	0.00%		20/20	1.0000	0.00%
96h Su	ırvival l	Rate Detail												
Conc-9	/6	Code	Rep 1	Rep 2	2 Rep 3	Rep 4								
0		N	1.0000	1.000	00 1.0000	1.0000								
6.25			1.0000	1.000	00 1.0000	1.0000								
12.5			1.0000	1.000	00 1.0000	1.0000								
25			1.0000	1.000	1.0000	1.0000								
50			1.0000	1.000	00 1.0000	1.0000								
100			1.0000	1.000	00 1.0000	1.0000								
96h Su	rvival l	Rate Binomials												
Conc-9	%	Code	Rep 1	Rep 2		Rep 4								
0		N	5/5	5/5	5/5	5/5								
6.25			5/5	5/5	5/5	5/5								
12.5			5/5	5/5	5/5	5/5								
25			5/5	5/5	5/5	5/5								
50			5/5	5/5	5/5	5/5								



5/5

5/5

5/5

5/5

100

Report Date:

12 Jan-22 13:16 (p 2 of 2)

Test Code/ID:

VCF1221.122ahya / 03-4627-3658

Hyalella 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed:

16-1547-2144

Endpoint: 96h Survival Rate

Linear Interpolation (ICPIN)

CETIS Version: Status Level:

CETISv1.9.7

Edit Date:

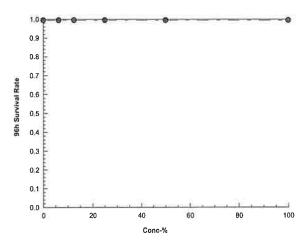
12 Jan-22 13:15 12 Jan-22 13:14

Analysis: MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

Editor ID:

000-189-126-0

Graphics



12 Jan-22 13:16 (p 1 of 4)

Tryatena oo 117	cute Survival T							714	Bioassay &		,,
Start Date:	04-5935-6498 15 Dec-21 15:30 19 Dec-21 15:35	F	est Type: Protocol: Species:	Survival (96h) EPA/821/R-02- Hyalella azteca	• '				aboratory Wa	ter	
Test Length:			Taxon:	Malacostraca					quatic Biosys	tems, CO	Age:
	15-7069-9852		Code:	VCF1221.122a	ıhya			Project: N	PDES Storm	vater Wet S	Season
	14 Dec-21 09:15		Material:	Sample Water					oassay Repo	rt	
	14 Dec-21 15:00		CAS (PC):					Station: M	E-VR2		
Sample Age:	30h (6.5 °C)		Client:	Ventura Count	y Watershed	Protecti	on Distri				
Alkalinity (CaC	O3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	60	60	60	60	60	0	0	0.00%	0
100		3	73	73	73	73	73	0	0	0.00%	0
Overall		6	66.5	59.03	73.97	60	73	2.907	7.12	10.71%	0 (0%)
Conductivity-µ	mhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	362.3	356.1	368.6	360	365	0.8389	2.517	0.69%	0
6.25		3	358	355.5	360.5	357	359	0.3333	1	0.28%	0
12.5		3	359.7	349.6	369.7	356	364	1.347	4.041	1.12%	0
25		3	370.7	367.8	373.5	370	372	0.3849	1.155	0.31%	0
50		3	383.3	377.6	389.1	382	386	0.7698	2.309	0.60%	0
100		3	414.3	401.6	427.1	410	420	1.711	5.132	1.24%	0
Overall		18	374.7	364.6	384.9	356	420	4.807	20.4	5.44%	0 (0%)
Dissolved Oxy	gen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max		Std Dev	CV%	QA Coun
0	N	3	7.433	6.716	8.15	7.1	7.6	0.09623	0.2887	3.88%	0
6.25		3	7.267	6.887	7.646	7.1	7.4	0.05092	0.1528	2.10%	0
12.5		3	7.233	6.716	7.75	7	7.4	0.06939	0.2082	2.88%	0
25		3	7.2	6.952	7.448	7.1	7.3	0.03333	0.1	1.39%	0
50		3	7.233	7.09	7.377	7.2	7.3	0.01924	0.05772	0.80%	0
100		3	7.167	7.023	7.31	7.1	7.2	0.01924	0.05773	0.81%	0 (00()
Overall		18	7.256	7.173	7.338	7	7.6	0.03896	0.1653	2.28%	0 (0%)
Hardness (Ca				050/ 1.01	05% 1101		Man	C44 E	Ctd Day	CV%	QA Coun
Conc-%	Code	Count	Mean		95% UCL		Max	Std Err 0	Std Dev	0.00%	0
0	N	3	98	98 157	98 157	98 157	98 157	0	0	0.00%	0
100 Overall		6	157 127.5	93.59	161.4	98	157	13.19	32.32	25.35%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	8.1	7.852	8.348	8	8.2	0.03334		1.23%	0
6.25	• •	3	7.933	7.79	8.077	7.9	8	0.01924		0.73%	0
12.5		3	7.933	7.79	8.077	7.9	8	0.01924		0.73%	0
25		3	7.9	7.896	7.904	7.9	7.9	0	0	0.00%	0
50		3	7.9	7.896	7.904	7.9	7.9	0	0	0.00%	0
100		3	7.9	7.896	7.904	7.9	7.9	0	0	0.00%	0
				7.902	7.987	7.9	8.2	0.02017	0.08556	1.08%	0 (0%)

CETIS Measurement Report

Report Date:

12 Jan-22 13:16 (p 2 of 4)

Hyalella 96-h Ad	ute Surviva	Test			Aquatic	Bioassay &	Consultin	g Labs, Inc.			
Temperature-°C	;										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	22	22	22	22	22	0	0	0.00%	0
6.25		3	22	22	22	22	22	0	0	0.00%	0
12.5		3	22	22	22	22	22	0	0	0.00%	0
25		3	22	22	22	22	22	0	0	0.00%	0
50		3	22	22	22	22	22	0	0	0.00%	0
100		3	22	22	22	22	22	0	0	0.00%	0
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)

12 Jan-22 13:16 (p 3 of 4)

O3)-mg/L								
		Time		QA	Diff-%	Inst ID	Analyst	Notes
N	1							
N	2		60					
			73					
N	3		60					
			73					
ımhos								
Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
N	1		362					
			358					
N	2							
			382					
			410					
N	3		365					
			420					
	Read	Time	Measure	OΔ	Diff-%	Inst ID	Δnalvst	Notes
		111110		- GE/1	D111 /0	marib	Allalyst	Hotes
. •								
N	2							
			7.3					
			7.3					
			7.2					
N	3							
			7.2 7.1					
	N N N Imhos Code N	Code Read N 1 N 3 Imhos Code Read N 1 N 2 N 3	Code Read Time N	Code Read Time Measure N 1 60 73 N 3 60 73 N 3 60 73 N 3 60 73 360 73 Imhos Measure Measure N 1 362 358 364 372 386 413 357 356 370 382 410 N 3 365 359 359 370 382 420 420 gen-mg/L Measure N 1 7.6 7.3 7.3 7.2 7.2 7.2 7.2 7.2 7.2 7.4 7.4 7.4 7.4 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3	Code Read Time Measure QA N 1 60 73 N 2 60 73 N 3 60 73 Imhos Code Read Time Measure QA N 1 362 358 364 372 386 413 372 386 413 367 356 370 382 410<	Code Read Time Measure QA Diff-%	Code Read Time Measure QA Diff-% Inst ID	Code Read Time

12 Jan-22 13:16 (p 4 of 4)

Hyalella 96-h A	cute Surviva	al Test							Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaC	O3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		98					
100				157					
0	N	2		98					
100				157					
0	N	3		98					
100				157					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2					
6.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7.9					
0	N	2		8					
6.25	14	2		7.9					
12.5				7.9					
				7.9					
25				7.9 7.9					
50									
100				7.9					
0	N	3		8.1					
6.25				8					
12.5				8					
25				7.9					
50				7.9					
100				7.9					-1-
Temperature-°	С								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
	N	3		22	_				
	1.4	5		22					
0 6.25									
6.25									
6.25 12.5				22					
6.25									



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012.* "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.:

ME-VR2

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.122

ACUTE CHIRONOMUS SURVIVAL BIOASSAY

% Survival = 95% Survival in 100% Sample

EC25 = >100.00 % EC50 = >100.00 %

*TU(a) = 0.41

* TU(a) Is calculated by: log (% Mortality)/1.7

Your very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 13:24 (p 1 of 1)

Test Code/ID:

VCF1221.122achi / 16-5522-9994

Chironomus	96-Hour Acute S	Survival	Bioassay						Aqua	tic B	ioassay & C	Consulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	10-5425-5304 15 Dec-21 15:2 19 Dec-21 15:3 4d 0h	5 F	Test Type: Protocol: Species: Taxon:	Survival (96h) EPA/821/R-02 Chironomus di Insecta	, ,			D B	nalyst: iluent: rine: ource:	Not	oratory Wate Applicable atic Biosyste		Age:	
Sample ID:	08-1369-5531 : 14 Dec-21 09:1		Code: Material:	VCF1221.122a Sample Water	achi				roject: ource:		ES Stormw		eason	
•	: 14 Dec-21 15:0		CAS (PC):	Campic Water					tation:		VR2	•		
Sample Age:	30h (2 °C)	(Client:	Ventura Count	y Water s hed	Protectio	n [
Multiple Com	nparison Summa	ary												
Analysis ID	Endpoint		Com	parison Method		_	/	NOEL	LOE	L	TOEL	PMSD	TU	S
17-7981-9249	96h Survival Ra	ite	Steel	Many-One Ranl	Sum Test			100	>100		NAME:	13.0%	1	1
Point Estima	te Summary													
Analysis ID	Endpoint		Point	Estimate Meth	od		√	Level	%		95% LCL	95% UCL	TU	S
04-8349-5734	96h Survival Ra	ite	Linea	r Interpolation (I	CPIN)			EC10	>100		200	358 ·	<1	1
								EC15	>100		****	531 3	<1	
								EC20	>100		255 3	220	<1	
								EC25	>100		515.C	***	<1	
								EC40 EC50	>100 >100				<1 <1	
	_						_	E030	-100		577			_
	Rate Summary													_
Conc-%	Code	Count				Min		Max	Std I		Std Dev	CV%	%Eff	
0	N	4	1.000		1.0000	1.0000		1.0000			0.0000	***	0.00	
6.25 12.5		4 4	1.000 0.950		1.0000 1.1090	1.0000 0.8000		1.0000			0.0000 0.1000	10.53%	0.00° 5.00°	
25		4	1.000		1.0000	1.0000		1.0000			0.0000	10.5576	0.00	
50		4	0.950		1.1090	0.8000		1.0000			0.1000	10.53%	5.00	
100		4	0.950		1.1090	0.8000		1.0000			0.1000	10.53%	5.00	
96h Survival	Rate Detail							N	иD5: 762	7EFB	233F2B44E	440121319	598684	48
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	1.0000			1.0000									-
6.25		1.0000	1.000	0 1.0000	1.0000									
12.5		1.0000	1.000	0 1.0000	0.8000									
25		1.0000	1.000	0 1.0000	1.0000									
50		0.8000			1.0000									
100		1.0000			1.0000									
96h Survival	Rate Binomials													
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	5/5	5/5	5/5	5/5									
0.05		5/5	5/5	5/5	5/5									
6.25														
12.5		5/5	5/5	5/5	4/5									
25		5/5	5/5	5/5	5/5									
12.5														

Report Date:

12 Jan-22 13:24 (p 1 of 2)

Test Code/ID: VCF1221.122achi / 16-5522-9994

Chironomus 9	96-Hour Acute Su	ırvival Bioassay				Aquati	c Bioassay	& Consulting	g Labs, Inc
Analysis ID: Analyzed: Edit Date:	17-7981-9249 12 Jan-22 13:23 12 Jan-22 13:21	Endpoint: Analysis: MD5 Hash:	96h Survival Rate Nonparametric-Control vs 7627EFB233F2B44E4401		;	CETIS Version Status Level Editor ID:	: 1	Sv1.9.7	
Batch ID: Start Date: Ending Date: Test Length:	10-5425-5304 15 Dec-21 15:25 19 Dec-21 15:30 4d 0h	Protocol:	Survival (96h) EPA/821/R-02-012 (2002) Chironomus dilutus Insecta		1	Brine: N	.aboratory \ Not Applical		Age:
•	08-1369-5531 14 Dec-21 09:15 14 Dec-21 15:00 30h (2 °C)		VCF1221.122achi Sample Water Ventura County Watershe	d Protection	:	Source: E	NPDES Sto Bioassay Re ME-VR2	rmwater Wet S eport	Season
Data Transfor	m	Alt Hyp		NOEL	LOEL	TOEL	TU	MSDu	PMSD
Angular (Corre	cted)	C > T		100	>100	56-20	4	0.13	13 00%

Data Transform	Аіт нур	NOEL	LOEL	TOEL	- 10	MSDu	LM2D
Angular (Corrected)	C > T	100	>100	Verificant Control	1	0.13	13.00%
Steel Many-One Rank St	ım Test						

Control vs	Conc-%	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(a:5%)
Negative Control	6.25	18	10	1	6	CDF	0.8333	Non-Significant Effect
	12.5	16	10	1	6	CDF	0.6105	Non-Significant Effect
	25	18	10	1	6	CDF	0.8333	Non-Significant Effect
	50	16	10	1	6	CDF	0.6105	Non-Significant Effect
	100	16	10	1	6	CDF	0.6105	Non-Significant Effect

ANOVA Table						
Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0212655	0.0042531	5	0.6	0.7006	Non-Significant Effect
Error	0.127593	0.0070885	18			
Total	0.148858		23			

ANOVA Assum	ptions Tests				
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test				Indeterminate
	Levene Equality of Variance Test	5.4	4.248	0.0033	Unequal Variances
	Mod Levene Equality of Variance Test	0.6	4.248	0.7006	Equal Variances
Distribution	Anderson-Darling A2 Test	3.596	3.878	<1.0E-05	Non-Normal Distribution
	D'Agostino Kurtosis Test	1.995	2.576	0.0460	Normal Distribution
	D'Agostino Skewness Test	3.217	2.576	0.0013	Non-Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	14.33	9.21	0.0008	Non-Normal Distribution
	Kolmogorov-Smirnov D Test	0.375	0.2056	<1.0E-05	Non-Normal Distribution
	Shapiro-Wilk W Normality Test	0.6694	0.884	<1.0E-05	Non-Normal Distribution

96h Survival I	96h Survival Rate Summary													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect			
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%			
6.25		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%			
12.5		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%			
25		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%			
50		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%			
100		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%			

Angular (Corrected) Transformed Summary												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect	
0	N	4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%	
6.25		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%	
12.5		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%	
25		4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%	
50		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%	
100		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%	

Report Date:

12 Jan-22 13:24 (p 2 of 2)

Test Code/ID:

VCF1221.122achi / 16-5522-9994

Chironomus 96-Hour Acute Survival Bioassay

12 Jan-22 13:21

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 17-7981-9249 **Analyzed:** 12 Jan-22 13:23

17-7981-9249 Endpoint: 12 Jan-22 13:23 Analysis:

Endpoint: 96h Survival Rate
Analysis: Nonparametric-Control vs Treatments
MD5 Hash: 7627EFB233F2B44E4401213195986848

CETIS Version: Status Level:

Status Level: Editor ID:

000-189-126-0

CETISv1.9.7

96h Survival Rate Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	0.8000
25		1.0000	1.0000	1.0000	1.0000
50		0.8000	1.0000	1.0000	1.0000
100		1.0000	0.8000	1.0000	1.0000

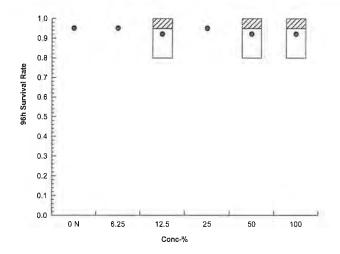
Angular (Corrected) Transformed Detail

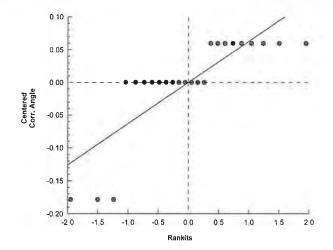
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.3450	1.3450	1.3450	1.3450	
6.25		1.3450	1.3450	1.3450	1.3450	
12.5		1.3450	1.3450	1.3450	1.1070	
25		1.3450	1.3450	1.3450	1.3450	
50		1.1070	1.3450	1.3450	1.3450	
100		1.3450	1.1070	1.3450	1.3450	

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	5/5	5/5	5/5	5/5	
6.25		5/5	5/5	5/5	5/5	
12.5		5/5	5/5	5/5	4/5	
25		5/5	5/5	5/5	5/5	
50		4/5	5/5	5/5	5/5	
100		5/5	4/5	5/5	5/5	

Graphics





Report Date:

12 Jan-22 13:24 (p 1 of 2)

Test Code/ID: VCF1221.122achi / 16-5522-9994

Chiron	omus 9	6-Hour Acute Si	urvival Bio	assay					Aquat	ic Bi	oassay &	Consulting	Labs, Inc
Analysi Analyze Edit Da	ed:	04-8349-5734 12 Jan-22 13:23 12 Jan-22 13:21	Anal	ysis:	96h Survival Ra Linear Interpola 7627EFB233F2	ation (ICPIN	•	Sta	CETIS Version: CETIS v1 Status Level: 1 Editor ID: 000-189				
Batch II Start Da Ending Test Le	ate: Date:	10-5425-5304 15 Dec-21 15:25 19 Dec-21 15:30 4d 0h	Prot	ocol: cies:	Survival (96h) EPA/821/R-02- Chironomus dil Insecta	` '		Dil Bri	Source: Bioassay Report Station: ME-VR2				Age:
Receipt	Date: Date:	08-1369-5531 14 Dec-21 09:15 14 Dec-21 15:00 30h (2 °C)		erial: (PC):	VCF1221.122a Sample Water Ventura County		l Protectio	So Sta				water Wet Season	
Linear I	Interpo	lation Options											
X Trans	form	Y Transform	Seed	t	Resamples	Exp 95%	CL Me	thod					
Linear		Linear	0		280	Yes	Two	o-Point Inter	polation				
Point E	stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
EC10	>100	WALL C	200	<1	20	7200							
EC15	>100	2227		<1	200	Value							
EC20	>100	2007	200	<1		1							
EC25	>100		522	<1	250	1999							
	>100	222	203	<1									
EC40	- 100			-1	1020	2							
	>100	22 3		<1		CHANGE COMMITTEE COMMITTE							
EC50	>100					Tende	lated Vari	ate(A/B)				Isoton	ic Variate
EC50 96h Su i	>100 rvival F	225 3 2				Tende	lated Vari	ate(A/B)	%Effe	ct	A/B	lsoton Mean	ic Variate %Effec
EC50 96h Su i Conc-% 0	>100 rvival F	Rate Summary	122	<1	 Median	Calcu			%Effe		A/B 20/20		%Effec 0.00%
96h Sur Conc-% 0 6.25	>100 rvival F	Rate Summary	Count 4 4	Mean 1.0000	Median 0 1.0000 0 1.0000	Calcu Min 1.0000 1.0000	Max 1.0000 1.0000	CV% 0.00% 0.00%	0.00%)	20/20 20/20	Mean 1.0000 1.0000	%Effec 0.00% 0.00%
96h Sur Conc-% 0 6.25 12.5	>100 rvival F	Rate Summary	Count 4 4 4	Mean 1.0000 1.0000 0.9500	Median 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000	Max 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53%	0.00% 0.00% 5.00%))	20/20 20/20 19/20	Mean 1.0000 1.0000 0.9750	%Effec 0.00% 0.00% 2.50%
96h Sur Conc-% 0 6.25 12.5	>100 rvival F	Rate Summary	Count 4 4 4 4 4	Mean 1.0000 1.0000 0.9500 1.0000	Median 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00%	0.00% 0.00% 5.00% 0.00%		20/20 20/20 19/20 20/20	Mean 1.0000 1.0000 0.9750 0.9750	%Effec 0.00% 0.00% 2.50% 2.50%
96h Sur Conc-% 0 6.25 12.5 25	>100 rvival F	Rate Summary	Count 4 4 4 4 4 4	Mean 1.0000 0.9500 1.0000 0.9500	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
96h Sur Conc-% 0 6.25 12.5 25	>100 rvival F	Rate Summary	Count 4 4 4 4 4	Mean 1.0000 1.0000 0.9500 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00%	0.00% 0.00% 5.00% 0.00%		20/20 20/20 19/20 20/20	Mean 1.0000 1.0000 0.9750 0.9750	%Effec 0.00% 0.00% 2.50% 2.50%
EC50 96h Sur Conc-% 0 6.25 12.5 25 50 100	>100 rvival F	Rate Summary	Count 4 4 4 4 4 4 4	Mean 1.0000 0.9500 1.0000 0.9500	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
96h Sur Conc-% 0 6.25 12.5 25 50 100	>100 rvival F	Rate Summary Code N	Count 4 4 4 4 4 4 4	Mean 1.0000 0.9500 1.0000 0.9500	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-%	>100 rvival F	Code N	Count 4 4 4 4 4 4 4 4 4	Mean 1.0000 0.9500 0.9500 0.9500	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-%	>100 rvival F	Code N Rate Detail Code	Count 4 4 4 4 4 4 4 Rep 1	Mean 1.0000 1.0000 0.9500 1.0000 0.9500 0.9500	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 Rep 4 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
96h Sur 06.25 12.5 25 50 100 Conc-% 06.25 12.5	>100 rvival F	Code N Rate Detail Code	Count 4 4 4 4 4 4 1 1.0000	Mean 1.0000 1.0000 0.9500 1.0000 0.9500 Rep 2 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 Rep 4 1.0000 1.0000 0.8000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 25	>100 rvival F	Code N Rate Detail Code	Count 4 4 4 4 4 1 1.0000 1.0000 1.0000 1.0000	Mean 1.0000 0.9500 1.0000 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 1.0000 0.8000 1.0000 1.0000 0.8000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
Conc-% 0 6.25 12.5 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 50 6.25 12.5 50	>100 rvival F	Code N Rate Detail Code	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000	Mean 1.0000 0.9500 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 25 50	>100 rvival F	Code N Rate Detail Code	Count 4 4 4 4 4 1 1.0000 1.0000 1.0000 1.0000	Mean 1.0000 0.9500 1.0000 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 1.0000 0.8000 1.0000 1.0000 0.8000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
96h Sur 06.25 12.5 225 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 100	>100 rvival F	Code N Rate Detail Code	Count 4 4 4 4 4 4 1 8ep 1 1.0000 1.0000 1.0000 0.8000	Mean 1.0000 0.9500 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur Conc-% 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 100 96h Sur Conc-%	>100 rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 0.8000 1.0000 Rep 1	Mean 1.0000 0.9500 1.0000 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000 0.8000 Rep 2	Median 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 3	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 100 96h Sur Conc-% 0	>100 rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5	Mean 1.0000 0.9500 1.0000 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000 0.8000 Rep 2 5/5	Median 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	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effect 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 1100 96h Sur Conc-% 0 6.25	>100 rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5 5/5	Mean 1.0000 1.0000 0.9500 0.9500 0.9500 1.0000 1.0000 1.0000 1.0000 0.8000 Rep 2 5/5 5/5	Median 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	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effect 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5	>100 rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5 5/5 5/5	Mean 1.0000 1.0000 0.9500 1.0000 0.9500 1.0000 1.0000 1.0000 1.0000 0.8000 Rep 2 5/5 5/5 5/5	Median 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	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 5/5 5/5 4/5	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effection 0.00% 0.00% 2.50% 2.50% 5.00%
Conc-% 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 12.5 25 50 12.5 25 50 12.5	>100 rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5 5/5 5/5 5/5	Mean 1.0000 1.0000 0.9500 1.0000 0.9500 1.0000 1.0000 1.0000 1.0000 0.8000 Rep 2 5/5 5/5 5/5 5/5	Median 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	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effect 0.00% 0.00% 2.50% 2.50% 5.00%
EC50 96h Sur 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5 25 50 100 96h Sur Conc-% 0 6.25 12.5	>100 rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5 5/5 5/5	Mean 1.0000 1.0000 0.9500 1.0000 0.9500 1.0000 1.0000 1.0000 1.0000 0.8000 Rep 2 5/5 5/5 5/5	Median 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	Calcu Min 1.0000 1.0000 0.8000 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 5/5 5/5 4/5	Max 1.0000 1.0000 1.0000 1.0000 1.0000	CV% 0.00% 0.00% 10.53% 0.00% 10.53%	0.00% 0.00% 5.00% 0.00% 5.00%		20/20 20/20 19/20 20/20 19/20	Mean 1.0000 1.0000 0.9750 0.9750 0.9500	%Effec 0.00% 0.00% 2.50% 2.50% 5.00%



Report Date:

12 Jan-22 13:24 (p 2 of 2)

Test Code/ID:

VCF1221.122achi / 16-5522-9994

Chironomus 96-Hour	Acute Survival	Bioassay
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Aquatic Bioassay & Consulting Labs, Inc.

Analyzed: Edit Date:

Analysis ID: 04-8349-5734 12 Jan-22 13:23

12 Jan-22 13:21

Endpoint: 96h Survival Rate Analysis: Linear Interpolation (ICPIN)

MD5 Hash: 7627EFB233F2B44E4401213195986848

CETIS Version:

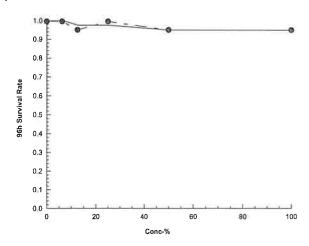
Editor ID:

Status Level:

000-189-126-0

CETISv1.9.7

Graphics



12 Jan-22 13:24 (p 1 of 4)

Test Code/ID:

VCF1221.122achi / 16-5522-9994

Chironomus 9	96-Hour Acute	Surviva	l Bioassay					Aqua	tic Bioassay &	Consultin	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:	10-5425-5304 15 Dec-21 15:3 19 Dec-21 15:3 4d 0h		Test Type: Protocol: Species: Taxon:	Survival (96h) EPA/821/R-02 Chironomus di Insecta	, ,			Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age:
	08-1369-5531 14 Dec-21 09: 14 Dec-21 15:0 30h (2 °C)		Code: Material: CAS (PC): Client:	VCF1221.122a Sample Water Ventura Count		d Protec	tion Distri	Project: Source: Station:	NPDES Storm Bioassay Repo ME-VR2		Season
Alkalinity (Cat	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	3	62	57.7	66.3	60	63	0.5774		2.79%	0
100		3	73	73	73	73	73	0	0	0.00%	0
Overall		6	67.5	61.07	73.93	60	73	2.5	6.124	9.07%	0 (0%)
Conductivity-	umhos						_			,	
Conc-%	Code	Count	. Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	3	363	358.7	367.3	362	365	0.5774		0.48%	0
6.25		3	358	355.5	360.5	357	359	0.3333		0.28%	0
12.5		3	363.7	349.5	377.8	359	370	1.895	5.686	1.56%	0
25		3	373	364	382	370	377	1.202	3.606	0.97%	0
50		3	383	375.5	390.5	380	386	1	3	0.78%	0
100		3	416.3	407.6	425.1	413	420	1.171	3.512	0.84%	0
Overall		18	376.2	366	386.4	357	420	4.827	20.48	5.44%	0 (0%)
Dissolved Ox	vaen-ma/L										
Conc-%	Code	Count	. Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	3	7.433	6.716	8.15	7.1	7.6	0.0962		3.88%	0
6.25		3	7.267	6.887	7.646	7.1	7.4	0.0509		2.10%	0
12.5		3	7.233	6.716	7.75	7	7.4	0.0693		2.88%	0
25		3	7.267	6.75	7.784	7.1	7.5	0.0693		2.86%	0
50		3	7.3	6.87	7.73	7.2	7.5	0.0577		2.37%	0
100		3	7.3	6.643	7.957	7.1	7.6	0.088		3.62%	0
Overall		18	7.3	7.202	7.398	7	7.6	0.0464		2.70%	0 (0%)
Hardness (Ca	CO3)-ma/l										, ,
Conc-%	Code	Count	. Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	3	98	98	98	98	98	0	0	0.00%	0
100	14	3	157	157	157	157	157	0	0	0.00%	0
Overall		6	127.5	93.59	161.4	98	157	13.19	32.32	25.35%	0 (0%)
pH-Units										-	
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Ei	r Std Dev	CV%	QA Count
0	N	3	8.1	7.852	8.348	8	8.2	0.0333		1.23%	0
6.25	. •	3	7.967	7.823	8.11	7.9	8	0.0192		0.72%	0
12.5		3	7.967	7.823	8.11	7.9	8	0.0192		0.72%	0
25		3	7.933	7.79	8.077	7.9	8	0.0192		0.73%	0
		3	7.933	7.79	8.077	7.9	8	0.0192		0.73%	0
50											
50 100		3	7.933	7.79	8.077	7.9	8	0.0192	24 0.05772	0.73%	0

CETIS Measurement Report

Report Date:

12 Jan-22 13:24 (p 2 of 4)

Test Code/ID:

VCF1221.122achi / 16-5522-9994

Chironomus 9	Chironomus 96-Hour Acute Survival Bioassay Aquatic Bioassay & Consulting Lab											
Temperature-	,C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count	
0	N	3	22	22	22	22	22	0	0	0.00%	0	
6.25		3	22	22	22	22	22	0	0	0.00%	0	
12.5		3	22	22	22	22	22	0	0	0.00%	0	
25		3	22	22	22	22	22	0	0	0.00%	0	
50		3	22	22	22	22	22	0	0	0.00%	0	
100		3	22	22	22	22	22	0	0	0.00%	0	
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)	

12 Jan-22 13:24 (p 3 of 4)

Test Code/ID: VCF1221.122achi / 16-5522-9994

Alkalinity (CaC	O3)-ma/l								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notos	
0	N	1	Time	60	DIII-/0	IIISUID	Analyst	Notes	
100		'		73					
0	N	2		63					
100	- 1	_		73					
0	N	3		63					
100	IN	3		73					
Conductivity-µ	mhac								
Conc-%	Code	Read	Time	Measure QA	Diff-%	In at ID	Amaluat	Mataa	
0	N	1	Time	362	DIIT-%	inst ID	Analyst	Notes	
6.25	14	'		358					
12.5				370					
25									
				372					
50				386					
100				413					
0	N	2		362					
6.25				357					
12.5				362					
25				377					
50				383					
100									
				416					
0	N	3		365					
6.25				359					
12.5				359					
25				370					
50				380					
100				420					
Dissolved Oxy	gen-mg/L								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		7.6					
6.25				7.3					
12.5				7.3					
25				7.2					
50				7.2					
100				7.2					
	N	2		7.6					
0	IN	4							
6.25				7.4					
12.5				7.4					
25				7.5					
50				7.5					
				7.6					
100	N	3		7.1					
				7.1					
0	.,								
0 6.25									
0 6.25 12,5	.,			7					
100 0 6.25 12.5 25 50									

12 Jan-22 13:24 (p 4 of 4)

Test Code/ID:

VCF1221.122achi / 16-5522-9994

Chironomus 96-H	lour Acute	Survival	Bioassay						Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaCO:	3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		98					
100				157					
0	N	2		98					
100				157					
0	N	3		98					
100				157					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2					
6.25				7.9					
12.5				7.9					
25				7.9					
50				7.9					
100				7.9					
0	N	2		8					
6.25		_		8					
12.5				8					
25				8					
50				8					
100				8					
	- 11								
0	N	3		8.1					
6.25				8					
12.5				8					
25				7.9					
50				7.9					
100				7.9					
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	3		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					



January 14, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receving Waters to West Coast Estuarine Organisms*, EPA/821/R-02-014. Results were as follows:

CLIENT:

Ventura County Flood Control

SAMPLE I.D.:

ME-SCR

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.123

CHRONIC TOPSMELT SURVIVAL AND GROWTH BIOASSAY

Survival NOEC = 100.00

TUc = 1.00

EC25 = >100.00 %

EC50 = >100.00 %

Biomass NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 %

IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

14 Jan-22 10:34 (p 1 of 2)

Test Code/ID: VCF122

Pacific Topsn	nelt 7-d Survival an	d Growth Test						Aquat	ic Bioa	assay & C	onsulting	Labs, lı	nc.
Batch ID:	01-1989-3478	Test Type:	Growth-Surviva	ıl (7d)			Anal	yst:					
Start Date:	15 Dec-21 15:02	Protocol:	EPA/600/R-95/	136 (1995)			Dilu	ent:	Laboratory Seawater		vater		
•	22 Dec-21 13:22	Species:	Atherinops affir	nis			Brin	e:	Not Applicable				
Test Length:	6d 22h	Taxon:	Actinopterygii				Sou	rce:	Aquatio	Aquatic Biosystems, CO			
Sample ID:	06-8334-2998	Code:	VCF1221.123td	ops			Proj	ect:	NPDES	PDES Stormwater Wet Season			
Sample Date:	14 Dec-21 11:00	Material:	Sample Water				Soul	rce:	Bioass	ay Report	t		
Receipt Date:	14 Dec-21 15:00	CAS (PC):					Stati	ion:	ME-SC	R			
Sample Age:	28h (6 °C)	Client:	Ventura County	/ Watershed	Protection	Distr	i						
Multiple Com	parison Summary												
Analysis ID	Endpoint		oarison Method		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ NC		LOEL		OEL	PMSD	TU	S
	7d Survival Rate		Many-One Rank			10		>100	-		8.2%	1	1
08-6285-8497	Mean Dry Biomass	-mg Dunn	ett Multiple Com	parison Test		10	0	>100	- 2	÷	16.6%	1	1
Point Estimat	e Summary												
Analysis ID	Endpoint		Estimate Meth			/ Le		%	9	5% LCL	95% UCL		S
19-9414-9280	7d Survival Rate	Linea	r Interpolation (I	CPIN)		/ EC		>100	-			<1	1
						/ EC		>100				<1	
					`	/ EC		>100	**	44		<1	
					`			>100	-			<1	
						/ EC		>100	-		***	<1	
						/ EC		>100	_	**	***	<1	
12-0883-1689	Mean Dry Biomass	-mg Linea	r Interpolation (I	CPIN)		/ IC		>100		**		<1	1
						/ IC		>100	*			<1	
						/ IC		>100			***	<1	
						/ IC:		>100				<1	
						/ IC:		>100 >100		_		<1 <1	
Took Assemble	L:1:4							- 100					_
Test Acceptal Analysis ID	Endpoint	Attrik	vuto	Test Stat	TAC		per	Overl	an F	Decision			
	7d Survival Rate		ol Resp	1	0.8	>>		Yes		Passes Cr	iteria	_	
	7d Survival Rate		of Resp	1	0.8	>>		Yes		Passes Cr			
	Mean Dry Biomass		of Resp	1.067	0.85	>>		Yes		Passes Cr			
	Mean Dry Biomass	ū	of Resp	1.067	0.85	>>		Yes		Passes Cr			
	7d Survival Rate	PMSI		0.08202	<<	0.2		No		Passes Cr			
7d Survival R	ate Summary												
Conc-%	Code C	ount Mear	95% LCL	95% UCL	Min	Ma	ıx	Std E	rr S	Std Dev	CV%	%Effe	ect
	N 5	1.000	0 1.0000	1.0000	1.0000	1.0	0000	0.000	0 0	0.0000	/	0.00%	ò
0							0000	0.040	0 0	0.0894	9.32%	4.00%	
	5	0.960	0 0.8489	1.0710	0.8000	1.0		0.0.0				0.000	ó
6.25	5 5			1.0000	1.0000	1.0	0000	0.000		0.0000	5	0.00%	
6.25 12.5 25	5 5 5	0.960 1.000 1.000	0 1.0000 0 1.0000	1.0000 1.0000	1.0000 1.0000	1.0 1.0	0000	0.000	0 0	0.0000	_	0.00%	
6.25 12.5 25 50	5 5 5 5	0.960 1.000 1.000 1.000	0 1.0000 0 1.0000 0 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0 1.0 1.0	0000 0000 0000	0.000	0 0	0.0000 0.0000		0.00% 0.00%	6
6.25 12.5 25 50	5 5 5	0.960 1.000 1.000 1.000	0 1.0000 0 1.0000 0 1.0000	1.0000 1.0000	1.0000 1.0000	1.0 1.0 1.0	0000	0.000	0 0	0.0000		0.00%	6
6.25 12.5 25 50 100	5 5 5 5 mass-mg Summar	0.960 1.000 1.000 1.000	0 1.0000 0 1.0000 0 1.0000 0 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0 1.0 1.0 1.0	0000	0.000 0.000 0.000 0.000	0 0 0 0 0 0	0.0000		0.00% 0.00% 0.00%	6
6.25 12.5 25 50 100 Mean Dry Bio Conc- %	5 5 5 5 mass-mg Summar Code C	0.960 1.000 1.000 1.000 1.000 y	0 1.0000 0 1.0000 0 1.0000 0 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0 1.0 1.0 1.0	0000 0000 0000	0.0000 0.0000 0.0000 0.0000	0 0 0 0 0 0	0.0000 0.0000 0.0000 Std Dev	 	0.00% 0.00% 0.00%	6 6 ect
6.25 12.5 25 50 100 Mean Dry Bio Conc-%	5 5 5 5 5 mass-mg Summar Code C	0.960 1.000 1.000 1.000 1.000 y y ount Mear	0 1.0000 0 1.0000 0 1.0000 0 1.0000 95% LCL 0.8084	1.0000 1.0000 1.0000 1.0000 95% UCL	1.0000 1.0000 1.0000 1.0000 Min 0.904	1.0 1.0 1.0 1.0	0000 0000 0000 0000	0.0000 0.0000 0.0000 0.0000 Std E	0 0 0 0 0 0 rr S 22 0	0.0000 0.0000 0.0000 0.0000 Std Dev	CV% 19.53%	0.00% 0.00% 0.00% %Effe	6 ect
6.25 12.5 25 50 100 Mean Dry Bio Conc-% 0 6.25	5 5 5 5 5 mass-mg Summar Code C N 5 5	0.960 1.000 1.000 1.000 7 9 0unt Mear 1.067 1.026	0 1.0000 0 1.0000 0 1.0000 0 1.0000 95% LCL 0.8084 0.8926	1.0000 1.0000 1.0000 1.0000 95% UCL 1.326 1.159	1.0000 1.0000 1.0000 1.0000 Min 0.904 0.926	1.0 1.0 1.0 1.0 Ma 1.4	0000 0000 0000 0000	0.0000 0.0000 0.0000 0.0000 Std E 0.0933 0.0486	0 0 0 0 0 0 rr \$ 22 0	0.0000 0.0000 0.0000 Std Dev 0.2084 0.1075	CV% 19.53% 10.47%	0.00% 0.00% 0.00% %Effe 0.00% 3.86%	6 6 6 6
6.25 12.5 25 50 100 Mean Dry Bio Conc-% 0 6.25 12.5	5 5 5 5 5 mass-mg Summar Code C N 5 5	0.960 1.000 1.000 1.000 7 9 0unt Mear 1.067 1.026 0.919	0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 95% LCL 0.8084 0.8926 6 0.7853	1.0000 1.0000 1.0000 1.0000 95% UCL 1.326 1.159 1.054	1.0000 1.0000 1.0000 1.0000 Min 0.904 0.926 0.804	1.0 1.0 1.0 1.0 Ma 1.4 1.1	0000 0000 0000 0000 114 84	0.0000 0.0000 0.0000 Std E 0.0933 0.0486 0.048	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 Std Dev 0.2084 0.1075 0.1082	CV% 19.53% 10.47% 11.76%	0.00% 0.00% 0.00% %Effe 0.00% 3.86% 13.83	6 6 6 6 6 8
6.25 12.5 25 50 100 Mean Dry Bio Conc-% 0 6.25 12.5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.960 1.000 1.000 1.000 1.000 1.000 y fount Mear 1.067 1.026 0.919 0.983	0 1.0000 0 1.0000 0 1.0000 0 1.0000 95% LCL 0.8084 0.8926 6 0.7853 2 0.8655	1.0000 1.0000 1.0000 1.0000 95% UCL 1.326 1.159 1.054 1.101	1.0000 1.0000 1.0000 1.0000 Min 0.904 0.926 0.804 0.862	1.0 1.0 1.0 1.0 1.0 1.4 1.1	0000 0000 0000 0000 0000	0.000 0.000 0.000 0.000 Std E 0.093 0.048 0.048	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.2084 0.1075 0.1082 0.09478	CV% 19.53% 10.47% 11.76% 9.64%	0.00% 0.00% 0.00% %Effe 0.00% 3.86% 13.83 7.87%	66666666666666666666666666666666666666
6.25 12.5 25 50 100	5 5 5 5 5 mass-mg Summar Code C N 5 5	0.960 1.000 1.000 1.000 1.000 1.000 1.000 1.007 1.026 0.919 0.983 1.021	0 1.0000 0 1.0000 0 1.0000 0 1.0000 95% LCL 0.8084 0.8926 6 0.7853 2 0.8655 0.9247	1.0000 1.0000 1.0000 1.0000 95% UCL 1.326 1.159 1.054	1.0000 1.0000 1.0000 1.0000 Min 0.904 0.926 0.804	1.0 1.0 1.0 1.0 1.4 1.1 1.0 1.1	0000 0000 0000 0000 114 84	0.0000 0.0000 0.0000 Std E 0.0933 0.0486 0.048	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 Std Dev 0.2084 0.1075 0.1082	CV% 19.53% 10.47% 11.76%	0.00% 0.00% 0.00% %Effe 0.00% 3.86% 13.83	66666666666666666666666666666666666666

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Test Code/ID: VCF1221.123tops / 05-9834-0790

							rest Code/ID: VCF1221.123tops / 05-9634-0790
Pacific Topsm	nelt 7-d Surviv	al and Grov	vth Test				Aquatic Bioassay & Consulting Labs, Inc.
7d Survival R	ate Detail						MD5: D28893FA667B9042AC679B353EDED42F
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	
6.25		1.0000	1.0000	0.8000	1.0000	1.0000	
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	1.0000	
50		1.0000	1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	1.0000	
Mean Dry Bio	mass-mg Deta	il					MD5: EF7D2218CDF8B32EBE8690F2CA66A050
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	0.974	1.414	0.938	1.106	0.904	
6.25		0.926	1.01	0.934	1.184	1.076	
12.5		0.882	1.054	0.804	1.012	0.846	
25		0.862	1.122	0.966	1.012	0.954	
50		0.962	1.126	0.938	1.072	1.008	
100		0.962	1.058	1.022	0.932	0.946	
7d Survival Ra	ate Binomials						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	5/5	5/5	5/5	5/5	5/5	
6.25		5/5	5/5	4/5	5/5	5/5	
12.5		5/5	5/5	5/5	5/5	5/5	
25		5/5	5/5	5/5	5/5	5/5	
50		5/5	5/5	5/5	5/5	5/5	
100		5/5	5/5	5/5	5/5	5/5	

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Test Code/ID: VCF1221.123tops / 05-9834-0790

								_									
Pacific Topsn	nelt 7	7-d Survival	and G	rowth Test								Aquat	ic Bic	assay &	Consulting	Labs, In	
Analysis ID:	20-4	470-6096		Endpoint:	7d Su	rvival Ra	te				CETI	S Versi	on:	CETISv1	.9.7		
Analyzed:	14 J	an-22 10:33	}	Analysis:	Nonpa	arametric	-Contro	l vs T	reatments		Statu	ıs Leve	l:	1			
Edit Date:	14 J	an-22 10:29)	MD5 Hash:	D2889	93FA667	B9042A	C679	9B353EDE	D42F	Editor ID: 000-189-126-0						
Batch ID:	01-1	989-3478		Test Type:	Growt	h-Surviva	al (7d)				Analyst:						
Start Date:	15 E	Dec-21 15:02	2	Protocol:	EPA/6	300/R-95	/136 (19	95)			Dilue	ent:	Labor	atory Sea	water		
Ending Date:	22 C	Dec-21 13:22	2	Species:		nops affin		,			Brine			pplicable			
Test Length:				Taxon:		pterygii					Sour			ic Biosyst	ems, CO	Age:	
Sample ID:	06-8	334-2998		Code:	VCF1	221.123t	ops				Proje	ect:	NPDE	S Stormw	ater Wet S	eason	
Sample Date:	14 C	ec-21 11:00)	Material:		le Water					Sour		Bioas	say Repor	t		
Receipt Date:				CAS (PC):							Stati		ME-S				
Sample Age:				Client:	Ventu	ra Count	y Water	shed	Protection	Distri	O.C.			0, (
Data Transfor	m		Alt F	lyn					NOEL	LOE		TOEL		TU	MSDu	PMSD	
Angular (Corre		1	C > T						100	>100				1	0.08202	8.20%	
									100	- 100					0.00202	0.2070	
Steel Many-O			est	T44	C4-4 6	N_141 1	T'		D. T	D. V.	.1	D '-		- 50/)			
Control Negative Conti	vs	6.25	_	Test 5		Critical 6	Ties 1	8	CDF	0.63		Decis Non-S	<u> </u>	cant Effect			
vegative conti	101	12.5		27.5		16	1	8	CDF	0.83			-	cant Effect			
		25		27.5		16	1	8	CDF	0.83			-	cant Effect			
		50		27.5		16	1	8	CDF	0.83			_	cant Effect			
		100		27.5		16	1	8	CDF	0.83			-	cant Effect			
_		100		27.0			-		051	0.00		14011-0	ng min	Juni Liloui			
Test Acceptab	bility	Criteria	T.	AC Limits													
Attribute		Test Stat	Lowe	er Uppe	r (Overlap	Decis	sion									
Control Resp		1	0.8	>>	1	es/	Pass	es Cr	riteria								
PMSD		0.08202	<<	0.25	١	10	Pass	es Cr	riteria								
ANOVA Table			_														
Source		Sum Squa	ares	Mean	Squar	e	DF		F Stat	P-Va	alue	Decis	ion(α:	:5%)			
Between		0.0094513		0.001			5		1	0.43	89			cant Effect			
Error		0.0453663		0.001			24						J				
Total		0.0548176					29		_								
ANOVA Assur	mptic	ons Tests															
Attribute		Test					Test :	Stat	Critical	P-Va	alue	Decis	ion(α:	:1%)			
/ariance		Bartlett Ec	uality	of Variance 1	Γest							Indete	rmina	ite			
				of Variance 1			7.111		3.895	0.00	03			riances			
				ality of Varia		st	1		4.248	0.44		Equal					
Distribution		Anderson-		-			7.95		3.878		E-05	•		l Distributi	on		
*		D'Agostino	-	•			4.912		2.576		E-05			l Distributi			
		D'Agostino					5.58		2.576		E-05			l Distributi			
				son K2 Omni	bus Te	st	55.27		9.21		E-05			l Distributi			
		_		rnov D Test	•		0.466		0.1853		E-05			l Distributi			
		_		Normality Te	st		0.406		0.9031		E-05			Distributi			
d Survival R	ate S	ummary															
Conc-%		Code	Cour	nt Mean	9	5% LCL	95% l	JCL	Median	Min		Max		Std Err	CV%	%Effec	
)		N	5	1.000		.0000	1.000		1.0000	1.00	00	1.0000	0	0.0000	0.00%	0.00%	
6.25			5	0.960		.8489	1.000	0	1.0000	0.80	00	1.0000	0	0.0400	9.32%	4.00%	
12.5			5	1.000	0 1	.0000	1.000		1.0000	1.00	00	1.0000	0	0.0000	0.00%	0.00%	
25			5	1.000		.0000	1.000		1.0000	1.00	00	1.0000	0	0.0000	0.00%	0.00%	
			_	4.000	Λ 4	0000	4.000	^	4.0000	4.00	00	4.0000	^	0.000	0.000/	0.000/	

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Report Date:

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Test Code/ID: VCF1221.123tops / 05-9834-0790

Pacific Topsmelt 7-d Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 20-4470-6096 Endpoint: 7d Survival Rate CETIS Version: CETISv1.9.7

Analyzed: 14 Jan-22 10:33 Analysis: Nonparametric-Control vs Treatments Status Level: 1

Edit Date: 14 Jan-22 10:29 MD5 Hash: D28893FA667B9042AC679B353EDED42F Editor ID: 000-189-126-0

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
6.25		5	1.2980	1.1650	1.4300	1.3450	1.1070	1.3450	0.0476	8.21%	3.54%
12.5		5	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
25		5	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
50		5	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
100		5	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	
6.25		1.0000	1.0000	0.8000	1.0000	1.0000	
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	1.0000	
50		1.0000	1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	1.0000	

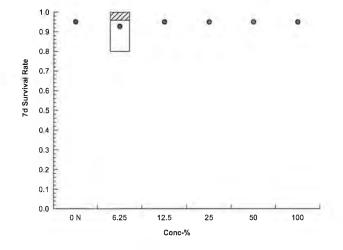
Angular (Corrected) Transformed Detail

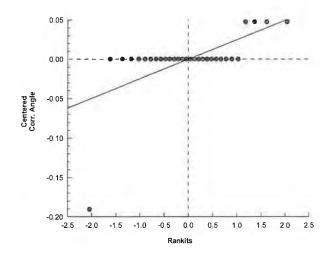
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.3450	1.3450	1.3450	1.3450	1.3450
6.25		1.3450	1.3450	1.1070	1.3450	1.3450
12.5		1.3450	1.3450	1.3450	1.3450	1.3450
25		1.3450	1.3450	1.3450	1.3450	1.3450
50		1.3450	1.3450	1.3450	1.3450	1.3450
100		1.3450	1.3450	1.3450	1.3450	1.3450

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	5/5	5/5	5/5	5/5	5/5
6.25		5/5	5/5	4/5	5/5	5/5
12.5		5/5	5/5	5/5	5/5	5/5
25		5/5	5/5	5/5	5/5	5/5
50		5/5	5/5	5/5	5/5	5/5
100		5/5	5/5	5/5	5/5	5/5

Graphics







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Test Code/ID: VCF1221.123tops / 05-9834-0790

D 10 T						_			1031	Code/IL		1201000 7 0			
Pacific Topsn	nelt 7-d Survi	ival and Gr	owth Test							Aquat	ic Bioassay &	Consulting	g Labs, Ir		
Analysis ID:	08-6285-849	7	Endpoint:	Mean Dry B	3iomass-mg				CETI	S Versi	on: CETISv1	1.9.7			
Analyzed:	14 Jan-22 10		Analysis:		-Control vs				Statu	ıs Level	l: 1				
Edit Date:	14 Jan-22 10):29 I	MD5 Hash:	EF7D2218	CDF8B32E	3E86	590F2CA66	6A050	Editor ID: 000-189-126-0						
Batch ID:	01-1989-347	8 1	Test Type:	Growth-Su	rvival (7d)				Analyst:						
Start Date:	15 Dec-21 15		Protocol:		k-95/136 (19	95)			Diluent: Laboratory Seawater						
Ending Date:			Species:	Atherinops		00,			Brine: Not Applicable						
Test Length:			Taxon:	Actinoptery					Sour		Aquatic Biosyst	ome CO	A		
rest Length,	00 2211		axuii.						Soul	ce.	Aqualic Biosysi	eilis, co	Age:		
Sample ID:	06-8334-299		Code:	VCF1221.1	23tops				Proje	ect:	NPDES Stormv	vater Wet S	Season		
Sample Date:	14 Dec-21 1	1:00 I	Material:	Sample Wa	ater				Sour	rce:	Bioassay Repo	rt			
Receipt Date:	14 Dec-21 15	5:00	CAS (PC):						Stati	on:	ME-SCR				
Sample Age:	28h (6 °C)	(Client:	Ventura Co	ounty Water	shed	Protection	Distri							
Data Transfor	m	Alt Hy	/D				NOEL	LOE	L	TOEL	TU	MSDu	PMSD		
Untransformed		C > T					100	>10		-	1	0.1774	16.62%		
Dunnett Multi	nle Comparie	son Test													
Control	vs Conc-		Test S	Stat Critic	al MSD	DE	P-Type	P-Va	alue	Decis	ion(α:5%)				
Negative Conti		70	0.5486				CDF	0.62			ignificant Effec	t			
rogalivo com	12.5		1.965	2.362			CDF	0.10			ignificant Effec				
	25		1.118	2.362			CDF	0.36			ignificant Effec				
	50		0.612				CDF	0.59			ignificant Effec				
	100		1.108	2.362			CDF	0.37			ignificant Effec				
_				2.002	• • • • • • • • • • • • • • • • • • • •			0.07			igililoant 2.100				
Test Acceptat	oility Criteria	TA	C Limits												
Attribute	Test S	tat Lower	Uppei	Overl	ap Decis	ion									
Control Resp	1.067	0.85	>>	Yes	Passe	es Cı	riteria								
ANOVA Table															
Source	Sum S	quares	Mean	Square	DF		F Stat	P-Va	alue	Decis	ion(α:5%)				
Between	0.0632	172	0.012	5434	5		0.8967	0.49	92	Non-S	ignificant Effec	t			
Error	0.3384	18	0.014	1007	24										
Total	0.4016	35			29		_								
ANOVA Assur	nptions Test	s													
Attribute	Test				Test \$	Stat	Critical	P-Va	alue	Decis	ion(α:1%)				
Variance	Bartlett	Equality of	Variance T	est	7.821		15.09	0.16	64	Equal	Variances				
	Levene	Equality of	Variance T	est	1.902		3.895	0.13	14	Equal	Variances				
	Mod Le	vene Equa	lity of Varia	nce Test	0.857		4.248	0.52			Variances				
Distribution		on-Darling ،	•		0.571		3.878	0.14			al Distribution				
		tino Kurtosi			2.018		2.576	0.04		Norma	al Distribution				
	_	tino Skewn			2.55		2.576	0.01	80	Norma	al Distribution				
	_	tino-Pearso		bus Test	10.58		9.21	0.00		Non-N	ormal Distribut	ion			
	_	gorov-Smirn			0.148		0.1853	0.08			al Distribution				
	•	o-Wilk W No		st	0.926		0.9031	0.04			al Distribution				
Mean Dry Bio	mass-ma Su	mmarv													
Conc-%	Code	Count	Mean	95% L	CL 95% l	JCL	Median	Min		Max	Std Err	CV%	%Effec		
)	N	5	1.067	0.8084			0.974	0.90	4	1.414	0.09322	19.53%	0.00%		
6.25		5	1.026	0.892			1.01	0.92		1.184	0.04805	10.47%	3.86%		
12.5		5	0.9196				0.882	0.80		1.054	0.04837	11.76%	13.83%		
25		5	0.9832				0.966	0.86		1.122	0.04239	9.64%	7.87%		
50		5	1.021	0.924			1.008	0.93		1.126	0.03476	7.61%	4.31%		
100		E	0.094	0.017			0.062	0.03		1 050	0.02402	E 460/	7 900/		

5.46%

7.80%

1.051

0.962

0.932

1.058

0.02403

0.984

0.9173

100

Report Date:

14 Jan-22 10:34 (p 4 of 4)

Test Code/ID:

VCF1221.123tops / 05-9834-0790

Pacific Topsmelt 7-d Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: Edit Date: 08-6285-8497 14 Jan-22 10:33 14 Jan-22 10:29 **Endpoint:** Mean Dry Biomass-mg

CETIS Version:

: CETISv1.9.7

Analysis: Parametric-Control vs Treatments

MD5 Hash: EF7D2218CDF8B32EBE8690F2CA66A050 Editor ID:

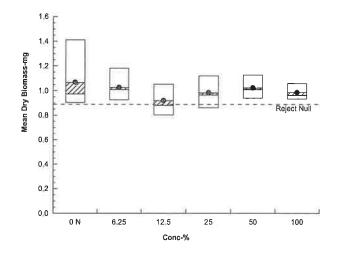
Status Level:

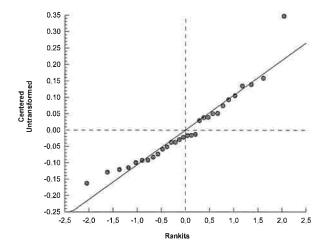
000-189-126-0

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.974	1.414	0.938	1.106	0.904
6.25		0.926	1.01	0.934	1.184	1.076
12.5		0.882	1.054	0.804	1.012	0.846
25		0.862	1.122	0.966	1.012	0.954
50		0.962	1.126	0.938	1.072	1.008
100		0.962	1.058	1.022	0.932	0.946

Graphics





Report Date:

14 Jan-22 10:34 (p 1 of 4)

Test Code/ID:

Pacific	Topsm	nelt 7-d Survival	and Growt	h Test						Aquati	c Bic	bassay 8	k Consultin	g Labs, Ind
Analys	is ID:	19-9414-9280	End	point:	7d Survival Rat	e			CETI	S Versi	on:	CETIS	/1.9.7	
Analyz	ed:	14 Jan-22 10:33	Ana	lysis:	Linear Interpola	tion (ICPI	٧)		Statu	ıs Level	:	1		
Edit Da	ate:	14 Jan-22 10:29	MD	Hash:	D28893FA667E	39042AC6	79B353ED	ED42F	Edito	or ID:		000-189	9-126-0	
Batch I	ID:	01-1989-3478	Test	Type:	Growth-Surviva	l (7d)			Anal	yst:				
Start D	ate:	15 Dec-21 15:02	Prof	locol:	EPA/600/R-95/	136 (1995)			Dilue	ent: l	_abor	atory Se	awater	
Ending	Date:	22 Dec-21 13:22	Spe	cies:	Atherinops affir	nis			Brine	e: 1	Not A	pplicable	•	
Test Le	ength:	6d 22h	Tax	on:	Actinopterygii				Sour	ce; /	Aquat	ic Biosy	stems, CO	Age:
Sample	e ID:	06-8334-2998	Cod	e:	VCF1221.123td	ps			Proje	ect: N	NPDE	S Storm	water Wet S	Season
Sample	e Date:	14 Dec-21 11:00	Mate	erial:	Sample Water				Sour	ce: E	∃ioas	say Rep	ort	
Receip	t Date:	14 Dec-21 15:00	CAS	(PC):					Stati	on: N	ME-S	CR		
Sample	e Age:	28h (6 °C)	Clie	nt:	Ventura County	/ Watershe	d Protection	on Distri						
Linear	Interpo	lation Options												
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	6CL Me	thod						
Linear		Linear	0		280	Yes	Tw	o-Point	Interp	olation				
Test Ad	cceptab	ility Criteria	TAC L	imits										
Attribu	te	Test Stat		Upper	Overlap	Decision	1							
Control		1	0.8	>>	Yes	Passes (
Point F	stimate	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI								
EC10	>100			<1							-			
EC15	>100			<1	***									
				<1	***	***								
EC20	>100		***	- 1										
EC20 EC25	>100 >100			<1										
EC25	>100			<1										
EC25 EC40 EC50	>100 >100 >100			<1 <1			ulated Var	riate(A/E	3)				Isoto	nic Variate
EC25 EC40 EC50 7d Sur Conc- %	>100 >100 >100 vival Ra	 ate Summary Code	 Count	<1 <1 <1 Mean	 Median	Calc	Max	CV9	6	%Effe		A/B	Mean	%Effec
EC25 EC40 EC50 7d Sur Conc- %	>100 >100 >100 vival Ra	 ate Summary	 	<1 <1 <1	 Median	Calc			6	%Effec		A/B 25/25		
EC25 EC40 EC50 7d Sur Conc- % 0 6.25	>100 >100 >100 vival Ra	 ate Summary Code	 Count	<1 <1 <1 Mean	Median 1.0000	Calc	Max	CV9	%				Mean	%Effec
EC25 EC40 EC50 7d Sur Conc-% 0 6.25 12.5	>100 >100 >100 vival Ra	 ate Summary Code	 Count 5 5 5	<1 <1 <1 Mean 1.0000	Median 0 1.0000 0 1.0000 0 1.0000	Calc Min 1.0000 0.8000 1.0000	Max 1.0000 1.0000 1.0000	CV %	%)% 2%	0.00%		25/25 24/25 25/25	Mean 1.0000	%Effec 0.00% 0.80% 0.80%
EC25 EC40 EC50	>100 >100 >100 vival Ra	 ate Summary Code	 Count 5 5	<1 <1 <1 <1 <1 Mean 1.0000 0.9600	Median 0 1.0000 0 1.0000 0 1.0000	Calc Min 1.0000 0.8000	Max 1.0000 1.0000	0.00 9.32	%)% 2%)%	0.00% 4.00%		25/25 24/25	Mean 1.0000 0.9920	%Effec 0.00% 0.80%
EC25 EC40 EC50 7d Surr Conc- % 0 6.25 12.5 25	>100 >100 >100 vival Ra	 ate Summary Code	 Count 5 5 5	<1 <1 <1 <1 Mean 1.0000 0.9600 1.00	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000	0.00 9.32 0.00	%)% 2%)%	0.00% 4.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25	>100 >100 >100 vival Ra	 ate Summary Code	Count 5 5 5 5 5	<1 <1 <1 <1 Mean 1.0000 0.9600 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00%		25/25 24/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100	 ate Summary Code	Count 5 5 5 5 5 5	<1 <1 <1 <1 Mean 1.0000 0.9600 1.00	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 5	<1 <1 <1 <1 Mean 1.0000 0.9600 1.00	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur Conc-9 0 6.25 12.5 25 50 100 7d Sur Conc-9	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 5 5 5 5	<1 <1 <1 <1	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 0	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 7 7 7 8 7 8 7 8 7 8 7 8 7 8	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 0 6.25	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 7 7 8 8 6 7 1 1 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 7 8 8 1.0000 1.0000	<pre></pre>	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 0.8000 0.1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur Conc- % 0 6.25 12.5 25 50 100 7d Sur Conc- % 0 6.25 12.5	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 5 5 5 5 1.0000 1.0000 1.0000	<pre></pre>	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 0.8000 0.1.0000	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur 0 6.25 12.5 25 50 100 7d Sur Conc-% 0 6.25 12.5 25 50	>100 >100 >100 vival Ra	ate Summary Code N	Count 5 5 5 5 5 7 1.0000 1.0000 1.0000 1.0000	<pre></pre>	Median 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	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 vival Ra 4	ate Summary Code N	Count 5 5 5 5 5 1.0000 1.0000 1.0000 1.0000 1.0000	<1 <1 <1 <1 <1 <1 <1 <1	Median 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	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Sur Conc-% 0 6.25 12.5 25 50 100 7d Sur Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 vival Ra 6	ate Summary Code N ate Detail Code N	Count 5 5 5 5 5 1.0000 1.0000 1.0000 1.0000 1.0000	<1 <1 <1 <1 <1 <1 <1 <1	Median 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	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 7d Surr Conc-%	>100 >100 >100 vival Ra 6	ate Summary Code N ate Detail Code N	Count 5 5 5 5 5 1 0000 1.0000 1.0000 1.0000 1.0000 1.0000	<1 <1 <1 <1 <1 <1 <1 <1	Median 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	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 0	>100 >100 >100 vival Ra 6	ate Summary Code N ate Detail Code N	Count 5 5 5 5 5 5 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1	Control Cont	Median 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	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 0 6.25	>100 >100 >100 vival Ra 6	ate Summary Code N ate Detail Code N	Count 5 5 5 5 5 5 7 8ep 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5	Continue	Median 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	Calc Min 1.0000 0.8000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 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	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5	>100 >100 >100 vival Ra 6	ate Summary Code N ate Detail Code N	Count 5 5 5 5 5 5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5 5/5	<1 <1 <1 <1 <1 <1 <1 <1	Median 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	Calc Min 1.0000 0.8000 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	Max 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	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%
EC25 EC40 EC50 7d Surr Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 vival Ra 6	ate Summary Code N ate Detail Code N	Count 5 5 5 5 5 5 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5 5/5 5/5	<1 <1 <1 <1 <1 <1 <1 <1	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 5/5 4/5 5/5	Calc Min 1.0000 0.8000 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	Max 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	0.00 9.32 0.00 0.00	% 0% 2% 0% 0%	0.00% 4.00% 0.00% 0.00% 0.00%		25/25 24/25 25/25 25/25 25/25	Mean 1.0000 0.9920 0.9920 0.9920 0.9920	%Effec 0.00% 0.80% 0.80% 0.80% 0.80%



Report Date:

14 Jan-22 10:34 (p 2 of 4)

Test Code/ID:

VCF1221.123tops / 05-9834-0790

Pacific Topsmelt 7-d Survival and Growth	Test
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Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: Edit Date:

19-9414-9280 14 Jan-22 10:33 14 Jan-22 10:29 Endpoint: 7d Survival Rate

Analysis: Linear Interpolation (ICPIN) MD5 Hash: D28893FA667B9042AC679B353EDED42F

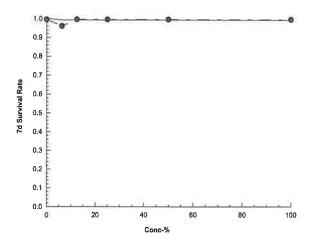
CETIS Version: Status Level:

Editor ID:

CETISv1.9.7

000-189-126-0

Graphics



Report Date:

14 Jan-22 10:34 (p 3 of 4)

Test Code/ID:

Pacific													
	Topsm	elt 7-d Survival	and Growt	h Test					Aq	uatic Bi	oassay &	Consulting	g Labs, Inc
Analysi		12-0883-1689			Mean Dry Biom	_			CETIS V	ersion:	CETISv1	.9.7	
Analyz		14 Jan-22 10:33		-	Linear Interpola	,	,		Status Lo		1		
Edit Da	ate:	14 Jan-22 10:29	MD5	Hash:	EF7D2218CDF	8B32EBE8	690F2	CA66A050	Editor ID	:	000-189-	126-0	
Batch I	ID:	01-1989-3478	Test	Type:	Growth-Surviva	al (7d)			Analyst:				
Start D		15 Dec-21 15:02		ocol:	EPA/600/R-95/	136 (1995)			Diluent:	Labo	ratory Sea	water	
Ending	Date:	22 Dec-21 13:22	Spe	cies:	Atherinops affir	nis			Brine:	Not A	Applicable		
Test Le	ength:	6d 22h	Taxo	on:	Actinopterygii				Source:	Aqua	atic Biosyst	ems, CO	Age:
Sample	e ID:	06-8334-2998	Cod	e:	VCF1221.123to	ops			Project:	NPD	ES Stormw	ater Wet S	Season
Sample	e Date:	14 Dec-21 11:00	Mate	erial:	Sample Water				Source:	Bioas	ssay Repor	t	
Receip	t Date:	14 Dec-21 15:00	CAS	(PC):					Station:	ME-S	SCR		
Sample	e Age:	28h (6 °C)	Clie	nt:	Ventura County	/ Watershed	d Prote	ection Distri					
Linear	Interpo	lation Options											
X Trans	sform	Y Transform	See	<u></u>	Resamples	Exp 95%	CL	Method					
Linear		Linear	6887	'48	280	Yes		Two-Point	Interpolation	n			
Test Ac	cceptab	ility Criteria	TAC L	imits									
Attribut	te	Test Stat		Upper	Overlap	Decision							
Control		1.067	0.85	>>	Yes	Passes C							
Point E	stimate	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
IC10	>100			<1	44								
IC15	>100			<1									
IC20	>100			<1									
IC25	>100			<1									
C40	>100			<1									
IC50	>100	44-		<1									
Mean D	7 Bior	nass-mg Summ	ary			Ca	Iculate	ed Variate				Isotor	nic Variate
		nass-mg Summ Code	ary	Mean	Median	Ca Min			% %E	ffect		-	
Conc-%				Mean 1.067	Median 0.974		Iculate Max 1.41	CV%		Effect		Mean 1.067	%Effec
Conc-%		Code	Count			Min	Max	CV%	3% 0.0			Mean	%Effec
Conc- % 0 6.25		Code	Count 5	1.067	0.974 1.01	Min 0.904	Max	CV% 4 19.5 4 10.4	3% 0.0 7% 3.8	0%		Mean 1.067	%Effec
Conc- % 0 6.25 12.5		Code	Count 5 5	1.067 1.026	0.974 1.01 6 0.882	Min 0.904 0.926	Max 1.41 1.18	CV% 4 19.5 4 10.4 4 11.7	3% 0.0 7% 3.8 6% 13	0% 6%		Mean 1.067 1.026	%Effec 0.00% 3.86% 8.45%
Conc-% 0 6.25 12.5 25		Code	5 5 5	1.067 1.026 0.9196	0.974 1.01 6 0.882	Min 0.904 0.926 0.804	Max 1.41 1.18 1.05	CV% 4 19.5 4 10.4 4 11.7 2 9.64	3% 0.0 7% 3.8 6% 13 % 7.8	0% 6% 83%		Mean 1.067 1.026 0.977	%Effec 0.00% 3.86%
Conc-% 0 6.25 12.5 25 50		Code	5 5 5 5	1.067 1.026 0.9196 0.9832	0.974 1.01 6 0.882 2 0.966	Min 0.904 0.926 0.804 0.862	Max 1.41 1.18 1.05 1.12	CV% 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effect 0.00% 3.86% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50	6	Code	5 5 5 5 5	1.067 1.026 0.9196 0.9832 1.021	0.974 1.01 6 0.882 2 0.966 1.008	Min 0.904 0.926 0.804 0.862 0.938	Max 1.41 1.18 1.05 1.12 1.12	CV% 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50 100 Mean D	Ory Bior	Code N	5 5 5 5 5	1.067 1.026 0.9196 0.9832 1.021	0.974 1.01 6 0.882 2 0.966 1.008 0.962	Min 0.904 0.926 0.804 0.862 0.938	Max 1.41 1.18 1.05 1.12 1.12	CV9 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61 8 5.46	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50 100 Mean D Conc-%	Ory Bior	Code N	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1.067 1.026 0.9196 0.9832 1.021 0.984	0.974 1.01 6 0.882 2 0.966 1.008 0.962	Min 0.904 0.926 0.804 0.862 0.938 0.932	Max 1.41 1.18 1.05 1.12 1.12 1.05	CV9 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61 8 5.46	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50 100 Mean D Conc-%	Ory Bior	Code N nass-mg Detail Code	Count 5 5 5 5 5 5 5 5 8 Rep 1	1.067 1.026 0.9196 0.9832 1.021 0.984	0.974 1.01 0.882 2 0.966 1.008 0.962	Min 0.904 0.926 0.804 0.862 0.938 0.932	Max 1.41 1.18 1.05 1.12 1.05	CV9 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61 8 5.46	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50 100 Mean D Conc-% 0 6.25	Ory Bior	Code N nass-mg Detail Code	Count 5 5 5 5 5 5 5 5 5 5 7 7 7 7 7 7 7 7 7	1.067 1.026 0.9196 0.9832 1.021 0.984 Rep 2 1.414 1.01	0.974 1.01 0.882 2 0.966 1.008 0.962 Rep 3 0.938 0.934	Min 0.904 0.926 0.804 0.862 0.938 0.932 Rep 4 1.106 1.184	Max 1.41 1.18 1.05 1.12 1.05 Rep 0.90 1.07	CV9 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61 8 5.46 5 4	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50 100 Mean D Conc-% 0 6.25 12.5	Ory Bior	Code N nass-mg Detail Code	Count 5 5 5 5 5 5 7 7 8ep 1 0.974 0.926 0.882	1.067 1.026 0.9196 0.9832 1.021 0.984 Rep 2 1.414 1.01 1.054	0.974 1.01 6 0.882 2 0.966 1.008 0.962 Rep 3 0.938 0.934 0.804	Min 0.904 0.926 0.804 0.862 0.938 0.932 Rep 4 1.106 1.184 1.012	Max 1.41 1.18 1.05 1.12 1.05 Rep 0.90 1.07 0.84	CV9 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61 8 5.46 5 4 6 6	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%
Conc-% 0 6.25 12.5 25 50	Ory Bior	Code N nass-mg Detail Code	Count 5 5 5 5 5 5 5 5 5 5 7 7 7 7 7 7 7 7 7	1.067 1.026 0.9196 0.9832 1.021 0.984 Rep 2 1.414 1.01	0.974 1.01 0.882 2 0.966 1.008 0.962 Rep 3 0.938 0.934	Min 0.904 0.926 0.804 0.862 0.938 0.932 Rep 4 1.106 1.184	Max 1.41 1.18 1.05 1.12 1.05 Rep 0.90 1.07	CV9 4 19.5 4 10.4 4 11.7 2 9.64 6 7.61 8 5.46 5 4 6 6 4	3% 0.0 7% 3.8 6% 13 % 7.8 % 4.3	0% 6% 83% 7%		Mean 1.067 1.026 0.977 0.977	%Effection 0.00% 3.86% 8.45% 8.45% 8.45%



Report Date:

14 Jan-22 10:34 (p 4 of 4)

Test Code/ID:

VCF1221.123tops / 05-9834-0790

Pacific Topsmelt 7-d Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed:

12-0883-1689 14 Jan-22 10:33 14 Jan-22 10:29 Endpoint: Mean Dry Biomass-mg
Analysis: Linear Interpolation (ICPIN)

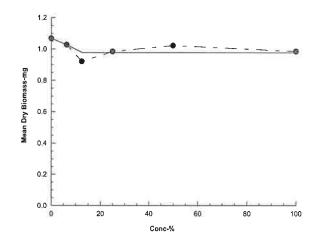
CETIS Version: Status Level:

ersion: CETISv1.9.7

Analysis: Linear Interpolation (ICPIN) Status Lev MD5 Hash: EF7D2218CDF8B32EBE8690F2CA66A050 Editor ID:

000-189-126-0

Edit Date: Graphics



CETIS Measurement Report

Report Date:

14 Jan-22 10:34 (p 1 of 5)

Test Code/ID:

Pacific Topsm	elt 7-d Surviv	al and G	owth Test					Aqua	tic Bioassay &	Consultin	g Labs, Inc.
		02 22	Test Type: Protocol: Species: Taxon:	Growth-Surviv EPA/600/R-95 Atherinops affi Actinopterygii	/136 (1995)			Analyst: Diluent: Brine: Source:	Laboratory Sea Not Applicable Aquatic Biosys		Age:
Sample Date: Receipt Date:	14 Dec-21 15:	00	Code: Material: CAS (PC):	VCF1221.123f Sample Water	. *	d Door		Project: Source: Station:	NPDES Storm Bioassay Repo ME-SCR		Season
Sample Age:			Client:	Ventura Count	y watersne	d Protec	tion Distri				
Dissolved Oxy Conc-%	/gen-mg/L Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Coun
0	N	8	7.3	7.121	7.479	7	7.6	0.0267	73 0.2138	2.93%	0
6.25		8	7.25	7.05	7.45	6.9	7.5	0.0298	38 0.239	3.30%	0
12.5		8	7.25	7.077	7.423	7	7.5	0.0258	38 0.207	2.86%	0
25		8	7.238	7.077	7.398	7	7.5	0.0240		2.66%	0
50		8	7.275	7.081	7.469	7	7.6	0.0289		3.18%	0
100		8	7.287	7.062	7.513	7	7.7	0.0337	0.2696	3.70%	0
Overall		48	7.267	7.204	7.329	6.9	7.7	0.0311		2.97%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Coun
0	N	8	7.7	7.7	7.7	7.7	7.7	0	0	0.00%	0
6.25		8	7.662	7.6	7.725	7.5	7.7	0.0093	0.0744	0.97%	0
12.5		8	7.637	7.575	7.7	7.5	7.7	0.0093	0.0744	0.97%	0
25		8	7.625	7.551	7.699	7.5	7.7	0.0110	0.08864	1.16%	0
50		8	7.612	7.53	7.695	7.5	7.7	0.0123	39 0.0991	1.30%	0
100		8	7.6	7.523	7.677	7.5	7.7	0.0115	0.09258	1.22%	0
Overall		48	7.64	7.616	7.663	7.5	7.7	0.0118	31 0.08184	1.07%	0 (0%)
Salinity-ppt											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	r Std Dev	CV%	QA Coun
0	N	8	34	34	34	34	34	0	0	0.00%	0
6.25		8	34	34	34	34	34	0	0	0.00%	0
12.5		8	34	34	34	34	34	0	0	0.00%	0
25		8	34	34	34	34	34	0	0	0.00%	0
50		8	34	34	34	34	34	0	0	0.00%	0
100		8	34	34	34	34	34	0	0	0.00%	0
Overall		48	34	34	34	34	34	0	0	0.00%	0 (0%)
Temperature-°	С										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun
0	N	8	21	21	21	21	21	0	0	0.00%	0
6.25		8	21	21	21	21	21	0	0	0.00%	0
12.5		8	21	21	21	21	21	0	0	0.00%	0
25		8	21	21	21	21	21	0	0	0.00%	0
50		8	21	21	21	21	21	0	0	0.00%	0
100		8	21	21	21	21	21	0	0	0.00%	0
Overall		48	21	21	21	21	21	0	0	0.00%	0 (0%)

14 Jan-22 10:34 (p 2 of 5)

Test Code/ID:

			owth Test						Bioassay & Consulting Labs, In
Dissolved Oxyg	gen-mg/L								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		7.3					
6.25				6.9					
12.5				7					
25				7					
50				7					
100				7					
0	N	2		7.2					
6.25				7.3					
12.5				7.3					
25				7.2					
50				7.2					
100				7.1					
0	N	3		7.2					
6.25				7					
12.5				7					
25				7					
50				, 7					
100				7					
0	N	4		7.5					
6.25				7.5					
12.5				7.5					
25				7.4					
50				7.5					
100				7.4					
0	N	5		7.6					
6.25				7.5					
12.5				7.5					
25				7.4					
50				7.4					
100				7.5					
0	N	6		7.5					
6.25				7.5					
12.5				7.4					
25				7.5					
50				7.6					
100				7.7					
0	N	7		7					
6.25		•		7.2					
12.5				7.2					
25				7.3					
50				7.4					
100				7. 4 7.5					
)	N	8		7.1		_			
6.25	IN	U		7.1					
12.5				7.1					
25				7.1					
50				7.1					
100				7.1					

14 Jan-22 10:34 (p 3 of 5)

Test Code/ID:

pH-Units			_					
Conc-%	Code N	Read 1	Time	Measure QA 7.7	Diff-%	Inst ID	Analyst	Notes
6.25	IN	1						
				7.5				
12.5				7.5				
25				7.5				
50				7.5				
100				7.5				
0	N	2		7.7				
6.25				7.7				
12.5				7.7				
25				7.7				
50				7.7				
100				7.7				
0	N	3		7.7				
6.25				7.6				
12.5				7.6				
25				7.6				
50				7.6				
100				7.6				
0	N	4		7.7				
6.25				7.7				
12.5				7.7				
25				7.7				
50				7.7				
100				7.7				
0	N	5		7.7				
6.25				7.7				
12.5				7.7				
25				7.7				
50				7.7				
100				7.7				
0	N	6		7.7				
6.25	14	U		7.7				
12.5								
				7.6				
25				7.6				
50				7.5 7.5				
100								
0	N	7		7.7				
6.25				7.7				
12.5				7.6				
25				7.5				
50				7.5				
100				7.5				
)	N	8		7.7				
3.25	14	O		7.7				
12.5				7.7				
25				7.7				
50				7.7				
100				7.6				

Report Date:

14 Jan-22 10:34 (p 4 of 5)

Test Code/ID:

			rowth Test						Aquatic Bioassay & Consulting Labs, I
Salinity-ppt									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		34					
6.25				34					
12.5				34					
25 50				34					
50				34					
100				34					
0	N	2		34					
6.25				34					
12.5				34					
25				34					
50				34					
100				34					
0	N	3		34					
6.25				34					
12.5				34					
25				34					
50				34					
100				34					
0	N	4		34					
6.25		·		34					
12.5				34					
25				34					
50				34					
100				34					
0	N	5		34					
6.25	IN	5		34					
12.5				34					
25				34					
50				34					
100				34					
0	N	6		34					
5.25				34					
12.5				34					
25				34					
50				34					
100				34					
)	N	7		34					
6.25				34					
12.5				34					
25				34					
50				34					
100				34					
)	N	8		34				-	
3.25				34					
12.5				34					
25				34					
50				34					
100				34					

14 Jan-22 10:34 (p 5 of 5)

Test Code/ID: VCF1221.123tops / 05-9834-0790

Pacific Topsmelt	7-d Survi	val and G	owth Test						Aquatic Bioassay & Consulting Labs, Inc
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		21					
6.25				21					
12.5				21					
25				21					
50				21					
100				21					
0	N	2		21					
6.25				21					
12.5				21					
25				21					
50				21					
100				21					
0	N	3		21					
6.25				21					
12.5				21					
25				21					
50				21					
100				21					
0	N	4		21					
6.25	.,			21					
12.5				21					
25				21					
50				21					
100				21					
0	N	5		21					
6.25		Ū		21					
12.5				21					
25				21					
50				21					
100				21					
0	N	6		21					
6.25	IN	6							
12.5				21 21					
25 50				21 21					
100				21					
						_			
0	N	7		21					
6.25				21					
12.5				21					
25				21					
50				21					
100				21					
0	N	8		21					
6.25				21					
12.5				21					
25				21					
50				21					
100				21					



January 14, 2022

Mr. Arnie Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA-600/R95/136, 1995*. Results were as follows:

CLIENT: County of Ventura

SAMPLE I.D.: ME-SCR
DATE RECEIVED: 12/14/2021
ABC LAB. NO.: VCF1221.123

CHRONIC KELP GERMINATION AND GROWTH BIOASSAY

GERMINATION NOEC = 100.00 %

TUc = 1.00

EC25 = >100.00 % EC50 = >100.00 %

TUBE LENGTH NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 % IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 15:11 (p 1 of 2)

Test Code/ID:

VCF1221.123klp / 02-3903-2962

Macrocystis	Germination an	id Germ Tu	be Grow	th Test				Aquat	ic Bioassay &	Consulting	Labs, I	nc.
Batch ID: Start Date: Ending Date: Test Length:	16-6342-4820 15 Dec-21 16:0 : 17 Dec-21 16:0 48h	01 Pr 01 S p	st Type: otocol: pecies: xon:	Growth-Germir EPA/600/R-95/ Macrocystis py Ochrophyta	136 (1995)		[E	Brine:	Laboratory Sea Not Applicable David Gutoff	water	Age:	
Sample ID:	16-1822-1613	Co	de:	VCF1221.123k	lp		F	Project:	NPDES Storm	water Wet Se	ason	
Sample Date:	: 14 Dec-21 11:0	00 M a	aterial:	Sample Water	•			-	Bioassay Repo			
Receipt Date:	: 14 Dec-21 15:0	00 CA	AS (PC):				5	Station:	ME-SCR			
Sample Age:	29h (6 °C)	CI	ient:	Ventura County	y Watershed	Protection	Distri					
Multiple Com	nparison Summ	ary										
Analysis ID	Endpoint		Comp	arison Method			NOEL	LOEL	TOEL	PMSD	TU	5
05-6402-7479	Germination R	ate	Dunne	tt Multiple Com	parison Test		100	>100		3.3%	1	
07-0983-2671	Mean Length		Dunne	tt Multiple Com	parison Test		100	>100	-	1.1%	1	
Point Estimat	te Summary											
Analysis ID	Endpoint			Estimate Meth			Level		95% LCI	95% UCL	TU	
08-9593 - 0374	Germination R	ate	Linear	Interpolation (I	CPIN)		EC10			-	<1	
							EC15				<1	
							EC20		***		<1	
							EC25			***	<1	
						√				***	<1	
04 4000 4404				1.4. 1.4. 41.	001111		EC50		***	***	<1	
01-1062-4181	Mean Length		Linear	Interpolation (I	CPIN)		IC10	>100		***	<1	13
						√ /		>100		***	<1	
						√ √		>100 >100			<1 <1	
							IC40	>100			<1	
							IC50	>100			<1	
Test Accepta	bility					TAC L	imite					
Analysis ID	Endpoint		Attrib	ute	Test Stat	Lower	Uppe	r Overl	ap Decision			
05-6402-7479	Germination R	ate	Contro	l Resp	0.922	0.7	>>	Yes	Passes (Criteria		
08-9593-0374	Germination R	ate	Contro	l Resp	0.922	0.7	>>	Yes	Passes (Criteria		
01-1062-4181	Mean Length		Contro	l Resp	13.1	10	>>	Yes	Passes (Criteria		
07-0983-2671	Mean Length		Contro	l Resp	13.1	10	>>	Yes	Passes (Criteria		
05-6402-7479	Germination R	ate	PMSD		0.03299	<<	0.2	No	Passes (Criteria		
07-0983-2671	Mean Length		PMSD		0.01102	<<	0.2	No	Passes (Criteria		
Germination	Rate Summary											
Conc-%	Code	Count	Mean	95% LCL		Min	Max	Std E		CV%	%Effe	
0	N	5	0.9220		0.9424	0.9000	0.940			1.78%	0.00%	
6.25		5	0.9220		0.9489	0.9000	0.950			2.35%	0.00%	
		-	0.0000					0.006	6 0.0148	1.59%	-1.089	
12.5		5	0.9320		0.9504	0.9100	0.950			2 270/	0.00	/n
12.5 25		5	0.9240	0.8968	0.9512	0.9100	0.960	0.0098	8 0.0219	2.37%	-0.22	
12.5 25 50				0.8968 0.9034				0.0098 0 0.008	0.0219 0.0182	2.37% 1.96% 1.42%	-0.22° -0.43° -2.60°	%
12.5 25 50 100	Summary	5 5	0.9240 0.9260	0.8968 0.9034	0.9512 0.9486	0.9100 0.9100	0.960 0.950	0.0098 0 0.008	0.0219 0.0182	1.96%	-0.43	%
12.5 25 50 100 Mean Length	Summary Code	5 5	0.9240 0.9260	0.8968 0.9034	0.9512 0.9486	0.9100 0.9100	0.960 0.950	0.0098 0 0.008	8 0.0219 1 0.0182 0 0.0134	1.96%	-0.43	% % —
12.5 25 50 100 Mean Length Conc-%		5 5 5	0.9240 0.9260 0.9460	0.8968 0.9034 0.9293	0.9512 0.9486 0.9627	0.9100 0.9100 0.9300	0.960 0.950 0.960	0 0.0098 0 0.008 0 0.0060	8 0.0219 1 0.0182 0 0.0134 rr Std Dev	1.96% 1.42%	-0.43° -2.60°	% % ect
12.5 25 50 100 Mean Length Conc-%	Code	5 5 5 Count	0.9240 0.9260 0.9460 Mean	0 0.8968 0 0.9034 0 0.9293 95% LCL	0.9512 0.9486 0.9627 95% UCL	0.9100 0.9100 0.9300	0.960 0.950 0.960 Max	0 0.0098 0 0.008 0 0.0066 Std E	8 0.0219 1 0.0182 0 0.0134 rr Std Dev 52 0.07071	1.96% 1.42% CV%	-0.43° -2.60° %Effe	% % ect
12.5 25 50 100 Mean Length Conc-% 0 6.25	Code	5 5 5 Count	0.9240 0.9260 0.9460 Mean	0 0.8968 0 0.9034 0 0.9293 95% LCL	0.9512 0.9486 0.9627 95% UCL 13.19	0.9100 0.9100 0.9300 Min 13	0.960 0.950 0.960 Max	0 0.0098 0 0.008 0 0.0066 Std E	8 0.0219 1 0.0182 0 0.0134 err Std Dev 52 0.07071 42 0.08367	1.96% 1.42% CV% 0.54%	-0.43° -2.60° %Effe	% % ect %
12.5 25 50 100 Mean Length Conc-% 0 6.25 12.5	Code	5 5 5 Count 5 5	0.9240 0.9260 0.9460 Mean 13.1 13.22	0 0.8968 0 0.9034 0 0.9293 95% LCL 13.01 13.12	0.9512 0.9486 0.9627 95% UCL 13.19 13.32	0.9100 0.9100 0.9300 Min 13 13.1	0.960 0.950 0.960 Max 13.2 13.3	0 0.0098 0 0.0086 0 0.0066 Std E	8 0.0219 1 0.0182 0 0.0134 err Std Dev 62 0.07071 42 0.08367 42 0.08367	1.96% 1.42% CV% 0.54% 0.63%	-0.43° -2.60° %Effe	% % ect % %
12.5 25 50 100 Mean Length Conc-% 0 6.25 12.5 25	Code	5 5 5 Count 5 5	0.9240 0.9260 0.9460 Mean 13.1 13.22 13.12	9 0.8968 0 0.9034 0 0.9293 95% LCL 13.01 13.12 13.02	0.9512 0.9486 0.9627 95% UCL 13.19 13.32 13.22	0.9100 0.9100 0.9300 Min 13 13.1	0.960 0.950 0.960 Max 13.2 13.3	0 0.0098 0 0.008 0 0.0060 Std Ei 0.0316 0.0374	8 0.0219 1 0.0182 0 0.0134 err Std Dev 62 0.07071 42 0.08367 42 0.08367	1.96% 1.42% CV% 0.54% 0.63% 0.64%	-0.43° -2.60° %Effe 0.00% -0.92° -0.15°	% % ect % % %



CETIS Summary Report

Report Date:

12 Jan-22 15:11 (p 2 of 2)

Test Code/ID:

VCF1221.123kln / 02-3903-2962

							Test Code/ID:	VCF1221.123klp / 02-3903-2962
Macrocystis C	Sermination ar	nd Germ Tu	be Growth	Test			Aquatic E	Bioassay & Consulting Labs, Inc.
Germination I	Rate Detail						MD5: 6B9721E	B04B4A481EE127926748FFC642
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5		
0	N	0.9000	0.9100	0.9300	0.9400	0.9300		
6.25		0.9000	0.9100	0.9500	0.9100	0.9400		
12.5		0.9300	0.9100	0.9300	0.9500	0.9400		
25		0.9100	0.9100	0.9100	0.9600	0.9300		
50		0.9100	0.9500	0.9100	0.9200	0.9400		
100		0.9400	0.9600	0.9400	0.9600	0.9300		
Mean Length Detail							MD5: 53913BE	BFA8C6FBF35320CA4F337CF6D2
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5		
0	N	13.1	13.1	13	13.1	13.2		
6.25		13.1	13.3	13.2	13.2	13.3		
12.5		13.1	13.1	13.2	13	13.2		
25		13.2	13.1	13.2	13.1	13.3		
50		13.1	13.2	13.1	13	13.3		
100		13	13	13.3	13.1	13.2		
Germination F	Rate Binomials	<u> </u>						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5		
0	N	90/100	91/100	93/100	94/100	93/100		
6.25		90/100	91/100	95/100	91/100	94/100		
12.5		93/100	91/100	93/100	95/100	94/100		
25		91/100	91/100	91/100	96/100	93/100		
50		91/100	95/100	91/100	92/100	94/100		
100		94/100	96/100	94/100	96/100	93/100		

Report Date:

12 Jan-22 15:11 (p 1 of 4)

Test Code/ID:

VCF1221.123klp / 02-3903-2962

Macrocystis G	ermination a	nd Germ	Tube Grow	th Te	est						Aquat	ic Bioassay	& Consultir	ng Labs, In
•	05-6402-7479 12 Jan-22 15:		Germination Rate Parametric-Control vs Treatments						CETIS Version: CETISv1.9.7 Status Level: 1					
Edit Date:	12 Jan-22 15:	06	MD5 Hash	6B9	721B04B4	4481EE	127	926748FFC	0642	Editor	ID:	000-18	9-126-0	
Batch ID:	16-6342-4820)	Test Type:	Gro	wth-Germin	ation				Analys	st:			
Start Date:	15 Dec-21 16	:01	Protocol:		A/600/R-95/		95)			Diluen		Laboratory Se	eawater	
Ending Date:	17 Dec-21 16	:01	Species:		crocystis py	•	/			Brine:		Not Applicabl		
Test Length: 4	48h		Taxon:		rophyta					Source		David Gutoff		Age:
Sample ID:	16 - 1822-1613		Code:	_		I.a.	-							
Sample ID.			Material:		F1221.123k nple Water	ıþ				Projec		NPDES Storn		Season
Receipt Date:			CAS (PC):	Sali	ipie watei					Source		Bioassay Rep	οσπ	
Sample Age: 2		.00	Client:	Ven	tura County	/ Waters	hec	d Protection	Distri	Station	n:	ME-SCR		
		A14 1			iara ocarri,	77460								
Data Transforn Angular (Correc		Alt I						NOEL	LOE		TOEL	TU	MSDu	PMSD
								100	>100	,	-	1	0.03042	2 3.30%
Dunnett Multip	le Comparis	on Test												
	vs Conc-	%	Test	Stat		MSD	DF	P-Type	P-Va	lue	Decis	ion(α:5%)		
Negative Contro			-0.046		2.362	0.054	8	CDF	0.84			ignificant Effe		
	12.5		-0.84		2.362	0.054		CDF	0.97			ignificant Effe		
	25		-0.23	11	2.362	0.054		CDF	0.89	26	Non-S	ignificant Effe	ect	
	50		-0.35	5	2.362	0.054	8	CDF	0.91	71	Non-S	ignificant Effe	ect	
	100		-2.149	9	2.362	0.054	8	CDF	0.99	96	Non-S	ignificant Effe	ect	
Test Acceptabi	ility Criteria	Т	AC Limits											
Attribute	Test Sta			r	Overlap	Decisi	ion							
Control Resp	0.922	0.7	>>		Yes	Passe	s C	riteria						
PMSD	0.03299	<<	0.2		No	Passe	s C	riteria						
ANOVA Table														
Source	Sum So	uares	Mean	Sau	are	DF		F Stat	P-Va	lue	Decisi	ion(α:5%)		
Between	0.00856			0017137		5	1.329		0.2857					
Error	0.03094		0.001			24			0.20			igimount a nd		
Total	0.03951	53				29		_						
ANOVA Assum	ptions Tests													
Attribute	Test					Test S	tat	Critical	P-Va	lue	Decisi	ion(α:1%)		
/ariance	Bartlett	Bartlett Equality of Variance T						15.09	0.93		Equal Variances			
		Levene Equality of Variance 7						3.895	0.68		Equal Variances			
		Mod Levene Equality of Varia						4.248	0.98		Equal Variances			
Distribution			A2 Test			0.9352		3.878	0.01			I Distribution		
		no Kurto				1.108		2.576	0.26					
	_		ness Test			1.299		2.576	0.19		Normal Distribution			
	•		son K2 Omni	hus T	Test	2.914		9.21	0.23		Normal Distribution Normal Distribution			
					001	0.1574		0.1853	0.05					
Kolmogorov-Smirnov D To Shapiro-Wilk W Normality				st		0.9241		0.1853 0.05			Normal Distribution Normal Distribution			
Sermination R	ate Summary	,	•											
Conc-%	Code	Cour	ıt Mean		95% LCL	95% U	CI	Median	Min		Max	Std Err	CV%	%Effect
)	N	5	0.922		0.9016	0.9424	_	0.9300	0.900		0.9400		1.78%	0.00%
5.25		5	0.922		0.8951	0.9489		0.9100	0.900		0.9500		2.35%	0.00%
12.5		5	0.932		0.9136	0.9504		0.9300	0.910		0.9500		1.59%	-1.08%
25		5	0.932		0.8968	0.9504		0.9300	0.910		0.9600 0.9600			
		J	0.924	-	0.0500	0.9512		0.9100	0.910	٠ (U.30UL	0.0098	2.37%	-0.22%



1.96%

1.42%

-0.43%

-2.60%

0.9486

0.9627

0.9200

0.9400

0.9100

0.9300

0.9500

0.9600

0.0081

0.0060

0.9034

0.9293

0.9260

0.9460

5

5

50

100

Report Date:

12 Jan-22 15:11 (p 2 of 4)

Test Code/ID: VCF1221.123klp / 02-3903-2962

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 05-6402-7479 Endpoint:

Germination Rate Analysis: Parametric-Control vs Treatments **CETIS Version: CETISv1.9.7** Status Level:

Analyzed: **Edit Date:**

12 Jan-22 15:10 12 Jan-22 15:06

MD5 Hash: 6B9721B04B4A481EE127926748FFC642

Editor ID:

000-189-126-0

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.2890	1.2510	1.3270	1.3030	1.2490	1.3230	0.0136	2.36%	0.00%
6.25		5	1.2900	1.2380	1.3420	1.2660	1.2490	1.3450	0.0187	3.24%	-0.08%
12.5		5	1.3080	1.2720	1.3450	1.3030	1.2660	1.3450	0.0131	2.24%	-1.49%
25		5	1.2940	1.2380	1.3500	1.2660	1.2660	1.3690	0.0201	3.48%	-0.41%
50		5	1.2970	1.2530	1.3410	1.2840	1.2660	1.3450	0.0160	2.75%	-0.63%
100		5	1.3380	1.3000	1.3750	1.3230	1.3030	1.3690	0.0135	2.25%	-3.79%

Germination Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	0.9000	0.9100	0.9300	0.9400	0.9300	
6.25		0.9000	0.9100	0.9500	0.9100	0.9400	
12.5		0.9300	0.9100	0.9300	0.9500	0.9400	
25		0.9100	0.9100	0.9100	0.9600	0.9300	
50		0.9100	0.9500	0.9100	0.9200	0.9400	
100		0.9400	0.9600	0.9400	0.9600	0.9300	

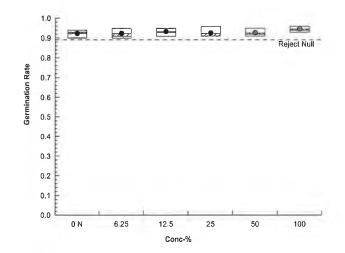
Angular (Corrected) Transformed Detail

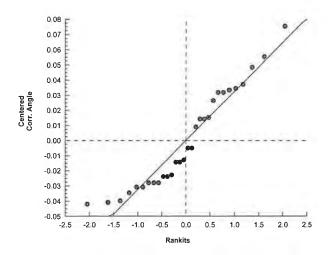
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.2490	1.2660	1.3030	1.3230	1.3030
6.25		1.2490	1.2660	1.3450	1.2660	1.3230
12.5		1.3030	1.2660	1.3030	1.3450	1.3230
25		1.2660	1.2660	1.2660	1.3690	1.3030
50		1.2660	1.3450	1.2660	1.2840	1.3230
100		1.3230	1.3690	1.3230	1.3690	1.3030

Germination Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	90/100	91/100	93/100	94/100	93/100
6.25		90/100	91/100	95/100	91/100	94/100
12.5		93/100	91/100	93/100	95/100	94/100
25		91/100	91/100	91/100	96/100	93/100
50		91/100	95/100	91/100	92/100	94/100
100		94/100	96/100	94/100	96/100	93/100

Graphics







Report Date:

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Test Code/ID:

Macrocystis (Germ	ination and	Germ Ti	ube Growt	th Test				Aqua	ntic Bioassay &	Consultin	g Labs, Inc
Analysis ID:	07-0	983-2671	E	ndpoint:	Mean Length			CE	TIS Vers	sion: CETISv1	.9.7	
Analyzed:	12 J	an-22 15:10	A	nalysis:	Parametric-C	ontrol vs Tre	eatments	St	atus Lev	el: 1		
Edit Date:	12 J	an-22 15:06	М	D5 Hash:	53913BBFA8	C6FBF3532	0CA4F337C	F6D2 Ed	litor ID:	000-189-	126-0	
Batch ID:	16-6	342-4820	Te	est Type:	Growth-Germ	ination		An	alyst:			
Start Date:	15 E	ec-21 16:01	Pi	rotocol:	EPA/600/R-9	5/136 (1995)	Di	luent:	Laboratory Sea	water	
Ending Date:	17 🗆	ec-21 16:01	S	pecies:	Macrocystis p	yrifera		Br	ine:	Not Applicable		
Test Length:	48h		Ta	axon:	Ochrophyta			So	игсе:	David Gutoff		Age:
Sample ID:	16-1	822-1613	С	ode:	VCF1221.123	3klp		Pr	oject:	NPDES Stormw	/ater Wet §	Season
Sample Date:	14 C	ec-21 11:00	M	aterial:	Sample Wate	er .		So	urce:	Bioassay Repor	t	
Receipt Date:	14 C	ec-21 15:00	C	AS (PC):				Sta	ation:	ME-SCR		
Sample Age:	29h	(6 °C)	C	ient:	Ventura Cour	ity Watershe	ed Protection	Distri				
Data Transfor	m		Alt Hyp				NOEL	LOEL	TOE	L TU	MSDu	PMSD
Untransformed		C > T				100	>100		1	0.1443	1.10%	
Dunnett Multi	ple C	omparison	Test									
Control	vs	Conc-%		Test S	itat Critical	MSD E	OF P-Type	P-Value	e Deci	sion(α:5%)		
Negative Conti	rol	6.25		-1.964	2.362	0.144 8	CDF	0.9992	Non-	Significant Effect		
		12.5		-0.327	3 2.362	0.144 8	CDF	0.9121	Non-	Significant Effect	:	
		25		-1.309	2.362	0.144 8	CDF	0.9932	Non-	Significant Effect		
		50		-0.654	7 2.362	0.144 8	CDF	0.9586	Non-	Significant Effect	:	
		100		-0.327	3 2.362	0.144 8	CDF	0.9121	Non-	Significant Effect	:	
Test Acceptab	oility	Criteria	TAC	Limits								
Attribute		Test Stat	Lower	Upper	Overlap	Decisio	n					
Control Resp		13.1	10	>>	Yes	Passes	Criteria					
PMSD		0.01102	<<	0.2	No	Passes	Criteria					
ANOVA Table												
Source		Sum Squa	res	Mean	Square	DF	F Stat	P-Value	Deci	sion(a:5%)		
Between		0.0506666		0.0101	333	5	1.086	0.3934	Non-	Significant Effect		
Error		0.224		0.0093	333	24						
Total		0.274666				29						
ANOVA Assur	mptic	ns Tests										
Attribute		Test										
√ariance						Test Sta	t Critical	P-Value	e Deci	sion(α:1%)		
		Bartlett Eq	uality of \	/ariance T	est	Test Sta 2.028	t Critical	P-Value 0.8453		sion(α:1%) Il Variances		
		Bartlett Eq Levene Eq	•						Equa			
		-	uality of \	/ariance T	est	2.028	15.09	0.8453	Equa Equa	l Variances		
Distribution		Levene Eq	uality of \ ne Equalit	/ariance T y of Variar	est	2.028 0.9658	15.09 3.895 4.248	0.8453 0.4582 0.5640	Equa Equa Equa	l Variances I Variances		
Distribution		Levene Eq Mod Lever	uality of \ ne Equalit Darling A	/ariance T y of Variar 2 Test	est	2.028 0.9658 0.8	15.09 3.895	0.8453 0.4582	Equa Equa Equa Norm	Il Variances Il Variances Il Variances		
Distribution		Levene Eq Mod Lever Anderson- D'Agostino	uality of Nie Equalit Darling A Kurtosis	/ariance T y of Variar 2 Test Test	est	2.028 0.9658 0.8 0.5061	15.09 3.895 4.248 3.878 2.576	0.8453 0.4582 0.5640 0.2054 0.2905	Equa Equa Equa Norm Norm	Il Variances Il Variances Il Variances nal Distribution		
Distribution		Levene Eq Mod Lever Anderson-	uality of Nie Equalit Darling A Kurtosis Skewne	/ariance T y of Variar 2 Test Test ss Test	est nce Test	2.028 0.9658 0.8 0.5061 1.057	15.09 3.895 4.248 3.878	0.8453 0.4582 0.5640 0.2054	Equa Equa Equa Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution Il Distribution		
Distribution		Levene Eq Mod Lever Anderson- D'Agostino D'Agostino	uality of Note Equality Darling A Kurtosis Skewnes -Pearson	/ariance T y of Variar 2 Test Test ss Test K2 Omnib	est nce Test	2.028 0.9658 0.8 0.5061 1.057 0.4848	15.09 3.895 4.248 3.878 2.576 2.576	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278	Equa Equa Equa Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution Il Distribution Il Distribution		
Distribution		Levene Eq Mod Lever Anderson-I D'Agostino D'Agostino D'Agostino	uality of Note Equality Darling A Kurtosis Skewnes -Pearson v-Smirno	/ariance T y of Variar 2 Test Test ss Test K2 Omnib v D Test	est nce Test ous Test	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353	15.09 3.895 4.248 3.878 2.576 2.576 9.21	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085	Equa Equa Equa Norm Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution Il Distribution Il Distribution Il Distribution Il Distribution Il Distribution		
	Sum	Levene Eq Mod Lever Anderson-I D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W	uality of Note Equality Darling A Kurtosis Skewnes -Pearson v-Smirno	/ariance T y of Variar 2 Test Test ss Test K2 Omnib v D Test	est nce Test ous Test	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364	Equa Equa Equa Norm Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution		
Mean Length	Sum	Levene Eq Mod Lever Anderson-I D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W	uality of Note Equality Darling A Kurtosis Skewnes -Pearson v-Smirno	/ariance T y of Variar 2 Test Test ss Test K2 Omnib v D Test	est nce Test ous Test	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187 0.9555	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364	Equa Equa Equa Norm Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution	CV%	%Effect
Mean Length Conc-%	Sum	Levene Eq Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W	uality of V ne Equalit Darling A Kurtosis Skewne: -Pearson v-Smirno ilk W Nor	/ariance T y of Variar 2 Test Test ss Test K2 Omnib v D Test mality Tes	est nce Test bus Test t 95% LCI 13.01	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187 0.9555	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 L Median	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364 0.2360	Equa Equa Equa Norm Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution	CV% 0.54%	%Effect 0.00%
Mean Length Conc-%	Sum	Levene Eq Mod Lever Anderson- D'Agostino D'Agostino Colmogoro Shapiro-W	uality of Variety of V	/ariance T y of Variar 2 Test Test ss Test K2 Omnib v D Test mality Tes	est nce Test ous Test t 95% LCI	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187 0.9555	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364 0.2360	Equa Equa Equa Norm Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Distribution		
Mean Length Conc-% 0 6.25	Sum	Levene Eq Mod Lever Anderson- D'Agostino D'Agostino Colmogoro Shapiro-W	uality of Vale Equality Darling A Kurtosis Skewnes -Pearson v-Smirno ilk W Nor	/ariance T y of Variar 2 Test Test ss Test K2 Omnit v D Test mality Tes Mean 13.1	est nce Test bus Test t 95% LCI 13.01	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187 0.9555	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 L Median	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364 0.2360 Min	Equa Equa Norm Norm Norm Norm Norm	Il Variances Il Variances Il Variances Il Variances Il Variances Il Distribution	0.54%	0.00%
Mean Length Conc-% 0 6.25 12.5	Sum	Levene Eq Mod Lever Anderson- D'Agostino D'Agostino Colmogoro Shapiro-W	uality of Vale Equality Darling A Kurtosis Skewnes -Pearson v-Smirno ilk W Nor	/ariance T y of Variar 2 Test Test ss Test K2 Omnit v D Test mality Tes Mean 13.1 13.22	est nce Test bus Test t	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187 0.9555 L 95% UC 13.19 13.32	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 L Median 13.1 13.2	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364 0.2360 Min 13 13.1	Equa Equa Norm Norm Norm Norm Norm 13.2	Il Variances Il Variances Il Variances Il Variances Il Variances Il Distribution Il Distributi	0.54% 0.63%	0.00% -0.92%
Mean Length Conc-% 0 6.25 12.5 25	Sumi	Levene Eq Mod Lever Anderson- D'Agostino D'Agostino Colmogoro Shapiro-W	uality of Vale Equality Darling A Kurtosis Skewnes -Pearson v-Smirno ilk W Nor Count 5 5 5	/ariance T y of Variar 2 Test Test ss Test K2 Omnit v D Test mality Tes Mean 13.1 13.22 13.12	est nce Test ous Test t 95% LCI 13.01 13.12 13.02	2.028 0.9658 0.8 0.5061 1.057 0.4848 1.353 0.1187 0.9555 L 95% UC 13.19 13.32 13.22	15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 L Median 13.1 13.2 13.1	0.8453 0.4582 0.5640 0.2054 0.2905 0.6278 0.5085 0.3364 0.2360 Min 13 13.1	Equa Equa Norm Norm Norm Norm Norm Norm 13.2 13.3	Il Variances Il Variances Il Variances Il Variances Il Variances Il Distribution Il Distributi	0.54% 0.63% 0.64%	0.00% -0.92% -0.15%



Report Date:

12 Jan-22 15:11 (p 4 of 4)

Test Code/ID:

VCF1221.123klp / 02-3903-2962

Macrocystis Germination and Germ Tube Growth Test

12 Jan-22 15:06

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 07-0983-2671 Analyzed: 12 Jan-22 15:10

Endpoint: Mean Length Analysis:

Parametric-Control vs Treatments

CETIS Version:

Status Level:

000-189-126-0

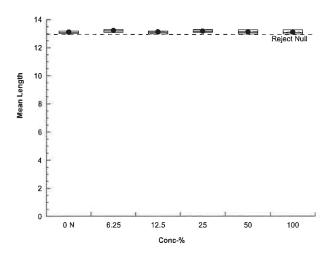
CETISv1.9.7

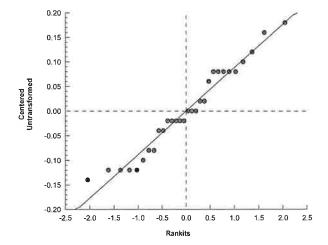
Mean Length Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	13.1	13.1	13	13.1	13.2
6.25		13.1	13.3	13.2	13.2	13.3
12.5		13.1	13.1	13.2	13	13.2
25		13.2	13.1	13.2	13.1	13.3
50		13.1	13.2	13.1	13	13.3
100		13	13	13.3	13.1	13.2

Graphics





Report Date:

12 Jan-22 15:11 (p 1 of 4)

Test Code/ID:

Macroc	cystis C	Germination and	Germ Tub	e Growtl	n Test				A	quatic E	Bioassay & 🛚	Consulting	ı Labs, Ind
Analysi	is ID;	08-9593-0374	End	point:	Germination Ra	ate			CETIS V	ersion:	CETISv1	.9.7	
Analyze		12 Jan-22 15:10		•	_inear Interpola		1)		Status L		1		
Edit Da	ate:	12 Jan-22 15:06	MD5	Hash: (3B9721B04B4A	481EE127	926748FFC	642	Editor II	D:	000-189-	126-0	
Batch I	D:	16-6342-4820	Test	Туре:	Growth-Germin	ation			Analyst:				
Start D	ate:	15 Dec-21 16:01	Prot	ocol:	EPA/600/R-95/	136 (1995)			Diluent:	Lab	oratory Sea	water	
_	,	17 Dec-21 16:01	Spe	cies:	Macrocystis py	rifera			Brine:	Not	Applicable		
Test Le	ength:	48h	Taxo	on: (Ochrophyta		Source: Da				id Gutoff		Age:
Sample	e ID:	16-1822-1613	Cod	e: '	√CF1221.123k	lp			Project:	NPI	DES Stormw	ater Wet S	eason
Sample	e Date:	14 Dec-21 11:00	Mate	erial: 3	Sample Water				Source:	Bio	assay Repor	t	
-		14 Dec-21 15:00	CAS	(PC):					Station:	ME	-SCR		
Sample	e Age:	29h (6 °C)	Clie	nt: \	Ventura County	Watershe	d Protection	Distri					
Linear	Interpo	olation Options											
X Trans	sform	Y Transform	See		Resamples	Exp 95%	CL Meth	nod					
Linear		Linear	0	2	280	Yes	Two-	Point	Interpolat	ion			
Test Ac	cceptab	oility Criteria	TAC L	imits									
Attribut	te	Test Stat	Lower	Upper	Overlap	Decision							
Control	Resp	0.922	0.7	>>	Yes	Passes C	Criteria						
Point E	stimate	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
EC10	>100			<1									
				<1									
	>100												
EC20	>100			<1									
EC20 EC25	>100 >100			<1 <1									
EC20 EC25 EC40	>100 >100 >100			<1 <1 <1									
EC20 EC25 EC40 EC50	>100 >100 >100 >100	-	_	<1 <1	-		ulated Varia	+ο/Λ/R				leoton	ic Variate
EC20 EC25 EC40 EC50 Germin	>100 >100 >100 >100 >aation F	 Rate Summary	<u>-</u>	<1 <1 <1 <1		Calc	ulated Varia			Effect	Δ/R		ic Variate
EC20 EC25 EC40 EC50 Germin Conc-%	>100 >100 >100 >100 >aation F	Rate Summary	Count	<1 <1 <1 <1 Mean	 Median	Calc	Max	CV%	6 %	Effect	A/B 461/500	Mean	%Effec
EC20 EC25 EC40 EC50 Germin Conc- %	>100 >100 >100 >100 >aation F	 Rate Summary	 Count	<1 <1 <1 <1 Mean 0.9220	Median 0.9300	Calco	Max 0.9400	CV %	% %	00%	461/500	Mean 0.9287	%Effec
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25	>100 >100 >100 >100 >aation F	Rate Summary	Count	<1 <1 <1 <1 Mean	 Median	Calc	Max	CV%	% 0. % 0.			Mean	%Effec
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5	>100 >100 >100 >100 >aation F	Rate Summary	Count 5 5	<1 <1 <1 <1 Mean 0.9220 0.9220	Median 0.9300 0.9100	Calco Min 0.9000 0.9000	Max 0.9400 0.9500	CV% 1.78 2.35	% % % 0. % 0. % -1	00% 00%	461/500 461/500	Mean 0.9287 0.9287	%Effec 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5	>100 >100 >100 >100 >aation F	Rate Summary	Count 5 5 5 5	<1 <1 <1 <1 Mean 0.9220 0.9220 0.9320	Median 0.9300 0.9100 0.9300	Calco Min 0.9000 0.9000 0.9100	Max 0.9400 0.9500 0.9500	CV% 1.78 2.35 1.59	% % 6% 0. 6% -1 6% -0	00% 00% .08%	461/500 461/500 466/500	Mean 0.9287 0.9287 0.9287	%Effec 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25	>100 >100 >100 >100 >aation F	Rate Summary	Count 5 5 5 5 5	<1 <1 <1 <1 <1 <1 0.9220 0.9320 0.9240	Median 0.9300 0.9100 0.9300 0.9100	Calc Min 0.9000 0.9000 0.9100 0.9100	Max 0.9400 0.9500 0.9500 0.9600	1.78 2.35 1.59 2.37	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500	Mean 0.9287 0.9287 0.9287 0.9287	%Effec 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50	>100 >100 >100 >100 >100	Rate Summary	Count 5 5 5 5 5 5 5	<1 <1 <1 <1 <1 <1 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0	Median 0.9300 0.9100 0.9300 0.9100 0.9200	Calci Min 0.9000 0.9000 0.9100 0.9100 0.9100	Max 0.9400 0.9500 0.9500 0.9600 0.9500	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effec 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 nation F	Rate Summary Code N	Count 5 5 5 5 5 5 5	<1 <1 <1 <1 <1 <1 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0 <0	Median 0.9300 0.9100 0.9300 0.9100 0.9200	Calci Min 0.9000 0.9000 0.9100 0.9100 0.9100	Max 0.9400 0.9500 0.9500 0.9600 0.9500	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effec 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-%	>100 >100 >100 >100 nation F	Rate Summary Code N	Count 5 5 5 5 5 5 5 5 5	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9100 0.9300	Max 0.9400 0.9500 0.9500 0.9600 0.9600	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-%	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code	Count 5 5 5 5 5 5 5 5 5 7 5 7 7 8 8 9 1	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9100 0.9300	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code	Count 5 5 5 5 5 5 5 7 8 8 Page 1 0.9000	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5 25	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code	Count 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	<pre><1 <1 <1 <1 <1 </pre> <pre>Mean 0.9220 0.9220 0.9320 0.9240 0.9260 0.9460</pre> <pre>Rep 2 0.9100 0.9100</pre>	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code	Count 5 5 5 5 5 5 5 5 5 0.9000 0.9000 0.9300	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100 0.9500	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9400	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 Germin Conc-% 0 6.25 12.5 25 50	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code	Count 5 5 5 5 5 7 Rep 1 0.9000 0.9000 0.9300 0.9100	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100 0.9500 0.9600	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9400 0.9300	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code	Count 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9300 0.9100 0.9100	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9100	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100 0.9500 0.9600 0.9200	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9300 0.9400	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 50 100 Germin Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code N	Count 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9300 0.9100 0.9100	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9100	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100 0.9500 0.9600 0.9200	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9300 0.9400	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code N	Count 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9300 0.9100 0.9100 0.9400	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9100 0.9100 0.9400	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100 0.9500 0.9500 0.9600 0.9600 0.9600	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9400 0.9300 0.9400 0.9300	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effection 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-%	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code N	Count 5 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9300 0.9100 0.9100 0.9400 Rep 1	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9100 0.9400 Rep 3	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9100 0.9500 0.9600 0.9600 0.9600	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9400 0.9300 0.9400 0.9300 Rep 5	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effection 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code N	Count 5 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9300 0.9100 0.9400 Rep 1 90/100	<pre><1 <1 <1 <1 <1 </pre> <pre>Mean 0.9220 0.9220 0.9320 0.9240 0.9260 0.9460</pre> <pre>Rep 2 0.9100 0.9100 0.9100 0.9500 0.9500 0.9600</pre> <pre>Rep 2 91/100</pre>	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9100 0.9400 Rep 3 93/100	Calco Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600 0.9600 Rep 4 94/100	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9400 0.9300 0.9400 0.9300 Rep 5 93/100	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
EC20 EC25 EC40 EC50 Germin Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code N	Count 5 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9300 0.9100 0.9100 0.9400 Rep 1 90/100 90/100	**Company of the company of the comp	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9400 Rep 3 93/100 95/100	Calci Min 0.9000 0.9000 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600 0.9600 Rep 4 94/100 91/100	Max 0.9400 0.9500 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9300 0.9400 0.9300 0.9400 0.9300 0.9400 0.9300 0.9400 0.9300	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Germin Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 nation F	Rate Summary Code N Rate Detail Code N	Count 5 5 5 5 5 5 7 8ep 1 0.9000 0.9000 0.9100 0.9100 0.9400 Rep 1 90/100 90/100 93/100	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	Median 0.9300 0.9100 0.9300 0.9100 0.9200 0.9400 Rep 3 0.9300 0.9500 0.9300 0.9100 0.9400 Rep 3 93/100 95/100 93/100	Calco Min 0.9000 0.9100 0.9100 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600 0.9600 0.9600 0.9600 0.9600 0.9600 0.9600 0.9600	Max 0.9400 0.9500 0.9500 0.9600 0.9600 0.9600 Rep 5 0.9300 0.9400 0.9300 0.9400 0.9300 Rep 5 93/100 94/100	CV% 1.78 2.35 1.59 2.37 1.96	6 % 6% 0. 6% 0. 6% -1 6% -0 6% -0	00% 00% .08% 0.22%	461/500 461/500 466/500 462/500 463/500	Mean 0.9287 0.9287 0.9287 0.9287 0.9287	%Effec 0.00% 0.00% 0.00% 0.00% 0.00%



Report Date:

12 Jan-22 15:11 (p 2 of 4)

Test Code/ID:

VCF1221.123klp / 02-3903-2962

Macrocystis (Germination	and Germ	Tube (3rowth 1	Test
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Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: **Edit Date:**

08-9593-0374 12 Jan-22 15:10

12 Jan-22 15:06

Endpoint: Germination Rate

Linear Interpolation (ICPIN)

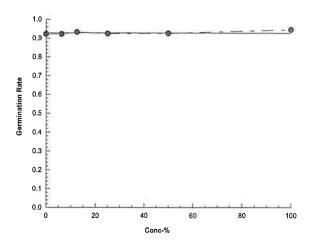
MD5 Hash: 6B9721B04B4A481EE127926748FFC642

CETIS Version: Status Level: **Editor ID:**

000-189-126-0

CETISv1.9.7

Graphics



Report Date:

12 Jan-22 15:11 (p 3 of 4)

Test Code/ID:

VCF1221.123kip / 02-3903-2962

									rest Code	/ID:	VCF 1221, 123	KIP / C	12-3903-291
Macro	cystis C	Sermination and	Germ Tub	e Grow	th Test				Aqu	atic Bi	oassay & Cons	ulting	g Labs, Inc
Analys		01-1062-4181		point:	•				CETIS Ver	sion;	CETISv1.9.7		
Analyz		12 Jan-22 15:10		lysis:	Linear Interpola	,	,		Status Lev	/el:	1		
Edit Da	ate:	12 Jan-22 15:06	MDS	Hash:	53913BBFA8C	6FBF3532	20CA4F3	37CF6D2	Editor ID:		000-189-126-0)	
Batch I	ID:	16-6342-4820	Test	Type:	Growth-Germin				Analyst:				
Start D		15 Dec-21 16:01		ocol:	EPA/600/R-95/	136 (1995)		Diluent:	Labo	ratory Seawater		
_		17 Dec-21 16:01	Spe	cies:	Macrocystis py	rifera			Brine:	Not A	Applicable		
Test Le	ength:	48h	Taxo	on:	Ochrophyta				Source:	Davi	d Gutoff		Age:
Sample	e ID:	16-1822-1613	Cod	e:	VCF1221.123k	lp			Project:	NPD	ES Stormwater	Wet S	Season
Sample	e Date:	14 Dec-21 11:00	Mate	erial:	Sample Water				Source:	Bioa	ssay Report		
Receip	Receipt Date: 14 Dec-21 15:00 CAS (PC			(PC):					Station:	ME-S	SCR		
Sample	e Age:	29h (6 °C)	Clie	nt:	Ventura County	/ Watersh	ed Protec	tion Distri					
Linear	Interpo	lation Options											
X Trans	sform	Y Transform	See	d	Resamples	Exp 95	% CL	Method					
Linear		Linear	1907	7681	280	Yes		Two-Point I	nterpolation	1			
Test Ac	cceptab	oility Criteria	TAC Li	imits									
Attribu	ite	Test Stat		Uppe	r Overlap	Decisio	n						
Control	Resp	13.1	10	>>	Yes	Passes	Criteria						
Point E	Estimate	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UC	L						
IC10	>100	***		<1	***								
IC15	>100	***	***	<1									
IC20	>100	***		<1									
IC25	>100	***		<1									
IC40	>100			<1									
IC50	>100	***		<1	-								
Mean L	ength	Summary				С	alculated	l Variate				soto	nic Variate
Conc-%	%	Code	Count	Mean	Median	Min	Max	CV%	%Ef	fect	Me	an	%Effect
0		N	5	13.1	13.1	13	13.2	0.54	% 0.00	%	13.	16	0.00%
6.25			5	13.22	13.2	13.1	13.3	0.63	% -0.9	2%	13.	16	0.00%
12.5			5	13.12	13.1	13	13.2	0.64			13.		0.08%
25			5	13.18	13.2	13.1	13.3	0.63			13.		0.08%
50			5	13.14	13.1	13	13.3	0.87			13.		0.15%
100			5	13.12	13.1	13	13.3	0.99	% -0.1	5%	13.	12	0.30%
Mean L	ength	Detail											
Conc-%	6	Code	Rep 1	Rep 2		Rep 4	Rep 5						
0		N	13.1	13.1	13	13.1	13.2						
6.25			13.1	13.3	13.2	13.2	13.3						
12.5			13.1	13.1	13.2	13	13.2						
25			13.2	13.1	13.2	13.1	13.3						
50				10.1	15.2	10.1	13.3						

13.1

13.2

13

13

13.3

100

Report Date:

12 Jan-22 15:11 (p 4 of 4)

Test Code/ID:

VCF1221.123klp / 02-3903-2962

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed:

01-1062-4181 12 Jan-22 15:10

12 Jan-22 15:06

Endpoint: Mean Length

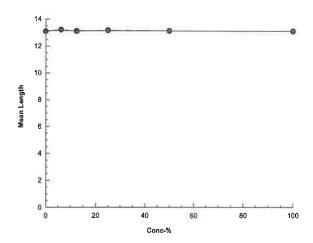
Analysis: Linear Interpolation (ICPIN) **CETIS Version:**

Status Level: MD5 Hash: 53913BBFA8C6FBF35320CA4F337CF6D2 Editor ID:

000-189-126-0

CETISv1.9.7

Edit Date: Graphics



CETIS Measurement Report

Report Date:

12 Jan-22 15:11 (p 1 of 3)

Test Code/ID:

Macrocystis G	ermination a	nd Germ	Tube Grow		Aqua	tic Bioassay &	Consultir	ng Labs, Inc.			
		01	Test Type: Protocol: Species: Taxon:	Growth-Germi EPA/600/R-95 Macrocystis py Ochrophyta	/136 (1995)			Analyst: Diluent: Brine: Source:	Laboratory Sea Not Applicable David Gutoff		Age:
Sample ID:	16-1822-1613		Code:	VCF1221.123	klp			Project:	NPDES Storm	water Wet	Season
Sample Date:			Material:	Sample Water				Source:	Bioassay Repo	ort	
Receipt Date:		00	CAS (PC):					Station:	ME-SCR		
Sample Age:	29h (6 °C)		Client:	Ventura Count	ty Watershe	d Protecti	on Distri				
Dissolved Oxy	/gen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	2	6.5	5.229	7.771	6.4	6.6	0.0707	'1 0.1414	2.18%	0
6.25		2	6.45	5.815	7.085	6.4	6.5	0.0353	6 0.07072	1.10%	0
12.5		2	6.45	5.815	7.085	6.4	6.5	0.0353	6 0.07072	1.10%	0
25		2	6.4	6.384	6.416	6.4	6.4	0	0	0.00%	0
50		2	6.4	6.384	6.416	6.4	6.4	0	0	0.00%	0
100		2	6.2	6.187	6.213	6.2	6.2	0	0	0.00%	0
Overall		12	6.4	6.328	6.472	6.2	6.6	0.0325	7 0.1128	1.76%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	2	8.2	8.187	8.213	8.2	8.2	0	0	0.00%	0
6.25		2	8	8	8	8	8	0	0	0.00%	0
12.5		2	8.1	8.082	8.118	8.1	8.1	0	0	0.00%	0
25		2	8.1	8.082	8.118	8.1	8.1	0	0	0.00%	0
50		2	8.1	8.082	8.118	8.1	8.1	0	0	0.00%	0
100		2	8.1	8.082	8.118	8.1	8.1	0	0	0.00%	0
Overall		12	8.1	8.062	8.138	8	8.2	0.0174	1 0.0603	0.74%	0 (0%)
Salinity-ppt											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.00%	0
6.25		2	34	34	34	34	34	0	0	0.00%	0
12.5		2	34	34	34	34	34	0	0	0.00%	0
25		2	34	34	34	34	34	0	0	0.00%	0
50		2	34	34	34	34	34	0	0	0.00%	0
100		2	34	34	34	34	34	0	0	0.00%	0
Overall		12	34	34	34	34	34	0	0	0.00%	0 (0%)
Temperature-°	С										
Conc-%	Code	Count		95% LCL	95% UCL		Max	Std Er	r Std Dev	CV%	QA Count
0	N	2	15.6	15.57	15.63	15.6	15.6	0	0	0.00%	0
6.25		2	15.6	15.57	15.63	15.6	15.6	0	0	0.00%	0
12.5		2	15.6	15.57	15.63	15.6	15.6	0	0	0.00%	0
25		2	15.6	15.57	15.63	15.6	15.6	0	0	0.00%	0
50		2	15.6	15.57	15.63	15.6	15.6	0	0	0.00%	0
100		2	15.6	15.57	15.63	15.6	15.6	0	0	0.00%	0
Overall		12	15.6	15.6	15.6	15.6	15.6	0	0	0.00%	0 (0%)

Report Date:

12 Jan-22 15:11 (p 2 of 3)

Test Code/ID:

	rmination a			Aquatic Bioassay & Consulting Labs, Inc						
Dissolved Oxyg	jen-mg/L									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		6,6						
6.25				6.4						
12.5				6.5						
25				6.4						
50				6.4						
100				6.2						
0	N	2		6.4						
6.25		_		6.5						
12.5				6.4						
25				6.4						
50				6.4						
100				6.2						
				0,2						
pH-Units										
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		8.2						
6.25				8						
12.5				8.1						
25				8.1						
50				8.1						
100				8.1						
0	N	2		8.2						
6.25				8						
12.5				8.1						
25				8.1						
50				8.1						
100				8.1						
Salinity-ppt										
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		34						
6.25				34						
12.5				34						
25				34						
50				34						
100				34						
0	N	2		34						
6.25				34						
12.5				34						
25				34						
50				34						
100				34						

CETIS Measurement Report

Report Date:

12 Jan-22 15:11 (p 3 of 3)

Test Code/ID:

Macrocystis Germ	ination a	nd Germ		Aquatic Bioassay & Consulting Labs, Inc.					
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		15.6					
6.25				15.6					
12.5				15.6					
25				15.6					
50				15.6					
100				15.6					
0	N	2		15.6					
6.25				15.6					
12.5				15.6					
25				15.6					
50				15.6					
100				15.6					



January 14, 2022

Mr. Arnie Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA-600/R95/136, 1995*. Results were as follows:

CLIENT:

County of Ventura

SAMPLE I.D.:

ME-SCR

DATE RECEIVED:

12/14/2021

ABC LAB. NO.:

VCF1221.123

CHRONIC SEA URCHIN FERTILIZATION BIOASSAY

NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 %

IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

12 Jan-22 15:04 (p 1 of 1)

Test Code/ID:

Purnie Sea II	rchin Sperm Ce	II Fortili	zation Tost						Code/ID			-7786-7	
										c Bioassay & (Consulting	Labs, I	nc.
Batch ID:	15-3433-9223			Fertilization				Ana					
Start Date:	15 Dec-21 16:0		Protocol:	EPA/600/R-95/				Dilu		_aboratory Sea	water		
•	15 Dec-21 16:4		Species:	Strongylocentre	otus purpura	itus		Brin		Not Applicable			
Test Length:	40m		Taxon:	Echinoidea				Sou	rce: \	∕entura Dive		Age:	
Sample ID:	08-2027-3834		Code:	VCF1221.123u	ILC			Proj	ect: 1	NPDES Stormw	ater Wet Se	eason	
-	14 Dec-21 11:0		Material:	Sample Water				Sou		Bioassay Repor	t		
•	: 14 Dec-21 15:0		CAS (PC):					Stat	ion: N	ME-SCR			
Sample Age:	29h (6 °C)		Client:	Ventura County	y Watershed	l Protecti	on D	istri					
	parison Summa	ary											
Analysis ID	Endpoint Date	1.		parison Method				NOEL	LOEL	TOEL	PMSD	TU	
00-6563-9697	Fertilization Ra	te	Dunne	ett Multiple Com	parison Tes			100	>100		2.31%	1	
Point Estimat	te Summary												
Analysis ID	Endpoint			Estimate Meth			✓	Level	%	95% LCL	95% UCL	TU	
01-1997-7145	Fertilization Rat	te	Linear	Interpolation (I	CPIN)			EC10	>100	-	***	<1	
								EC15	>100			<1	
								EC20	>100			<1	
								EC25	>100			<1	
								EC40	>100	***	***	<1	
								EC50	>100	***	***	<1	
Test Acceptal	bility					TAC	C Lin	nits					
Analysis ID	Endpoint		Attrib	ute	Test Stat	Lower		Upper	Overla	p Decision			
	Fertilization Rat			ol Resp	0.96	0.7		>>	Yes	Passes Ci	riteria		
	Fertilization Rat		Contro	ol Resp	0.96	0.7		>>	Yes	Passes Ci	riteria		
00-6563-9697	Fertilization Rat	te	PMSD)	0.0231	<<		0.25	No	Passes Ci	riteria		
Fertilization F	Rate Summary												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std Er	r Std Dev	CV%	%Effe	ct
0	N	4	0.9600		0.9730	0.9500	-	0.9700	0.0041		0.85%	0.00%)
6.25		4	0.932		0.9597	0.9100	1	0.9500	0.0085	0.0171	1.83%	2.86%)
12,5		4	0.947		0.9714	0.9300		0.9600	0.0075		1.58%	1.30%	
25		4	0.9350		0.9655	0.9100		0.9500	0.0096		2.05%	2.60%	
50		4	0.9300		0.9525	0.9100		0.9400	0.0071		1.52%	3.12%	
100		4	0.9400	0.9216	0.9584	0.9300	-	0.9500	0.0058	0.0116	1.23%	2.08%)
Fertilization R	Rate Detail							MD	5: 7A655	88AA5E230A76	D642D0226	0D125	-1
Conc-%	Code	Rep 1	Rep 2		Rep 4								
)													
	N	0.9600			0.9500								
	N	0.9500	0.9100	0.9300	0.9400								
12.5	N	0.9500 0.9300	0.9100	0.9300 0.9600	0.9400 0.9600								
12.5 25	N	0.9500	0.9100	0.9300 0.9600	0.9400								
12.5 25 50	N	0.9500 0.9300	0.9100 0.9400 0.9500	0.9300 0.9600 0.9100	0.9400 0.9600								
12.5 25 50	N	0.9500 0.9300 0.9300	0.9100 0.9400 0.9500 0.9300	0.9300 0.9600 0.9100 0.9400	0.9400 0.9600 0.9500								
6.25 12.5 25 50 100 Fertilization R	N late Binomials	0.9500 0.9300 0.9300 0.9100	0.9100 0.9400 0.9500 0.9300	0.9300 0.9600 0.9100 0.9400	0.9400 0.9600 0.9500 0.9400								
12.5 25 50 100 Fertilization R		0.9500 0.9300 0.9300 0.9100	0.9100 0.9400 0.9500 0.9300	0.9300 0.9600 0.9100 0.9400 0.9500	0.9400 0.9600 0.9500 0.9400								
12.5 25 100 Fertilization R Conc-%	tate Binomials	0.9500 0.9300 0.9300 0.9100 0.9500	0.9100 0.9400 0.9500 0.9300 0.9300	0.9300 0.9600 0.9100 0.9400 0.9500 Rep 3	0.9400 0.9600 0.9500 0.9400 0.9300								
12.5 25 100 Fertilization R Conc-%	ate Binomials Code	0.9500 0.9300 0.9300 0.9100 0.9500	0.9100 0.9400 0.9500 0.9300 0.9300 Rep 2	0.9300 0.9600 0.9100 0.9400 0.9500 Rep 3	0.9400 0.9600 0.9500 0.9400 0.9300								
12.5 25 100 Fertilization R Conc-%	ate Binomials Code	0.9500 0.9300 0.9300 0.9100 0.9500 Rep 1	0.9100 0.9400 0.9500 0.9300 0.9300 Rep 2 97/100 91/100	0 0.9300 0 0.9600 0 0.9100 0 0.9400 0 0.9500 Rep 3 0 96/100 0 93/100	0.9400 0.9600 0.9500 0.9400 0.9300 Rep 4 95/100								
12.5 50 100 Fertilization R Conc-% 0 3.25	ate Binomials Code	0.9500 0.9300 0.9300 0.9100 0.9500 Rep 1 96/100 95/100	0.9100 0.9400 0.9500 0.9300 0.9300 Rep 2 97/100 91/100	0.9300 0.9600 0.9100 0.9400 0.9500 Rep 3 96/100 96/100	0.9400 0.9600 0.9500 0.9400 0.9300 Rep 4 95/100 94/100								
12.5 25 50 100	ate Binomials Code	0.9500 0.9300 0.9300 0.9100 0.9500 Rep 1 96/100 95/100	0.9100 0.9400 0.9500 0.9300 0.9300 Rep 2 97/100 91/100 94/100	0.9300 0.9600 0.9100 0.9400 0.9500 Rep 3 96/100 93/100 91/100	0.9400 0.9600 0.9500 0.9400 0.9300 Rep 4 95/100 94/100								_



Report Date:

12 Jan-22 15:04 (p 1 of 2)

Test Code/ID:

	n Sperm Cel	II Fertiliza	tion Test					Aqua	tic Bioassay &	Consulting	Labs, In
Analysis ID: 00-	6563-9697	En	dpoint:	Fertilization Ra	te		CE	TIS Vers	ion: CETISv1	.9.7	
Analyzed: 12	Jan-22 15:04	. An	alysis:	Parametric-Cor	ntrol vs Trea	tments	Sta	tus Leve	el: 1		
Edit Date: 12	Jan-22 15:01	M	05 Hash:	7A6558AA5E2	30A76D642	D02260D12	25F1 Edi	tor ID:	000-189-	126-0	
Batch ID: 15-	3433-9223	Te	st Type:	Fertilization			Ana	alyst:			
Start Date: 15	Dec-21 16:01	1 Pr	otocol:	EPA/600/R-95/	136 (1995)			uent:	Laboratory Sea	water	
Ending Date: 15	Dec-21 16:41	1 Sp		Strongylocentro		tus	Brir	ne:	Not Applicable		
Test Length: 40r	n	Ta		Echinoidea			Sou	ırce:	Ventura Dive		Age:
	2027-3834	C-	de:	VCE4004 400							
Sample Date: 14				VCF1221.123u	IC			ject:	NPDES Stormw		eason
Receipt Date: 14			S (PC):	Sample Water				ırce:	Bioassay Repor	τ	
Sample Age: 29h				Ventura County	/ Matarahad	Protoction		tion:	ME-SCR		
	1(0 0)		ent.	ventura County	/ watersned	Protection	Distri				
Data Transform		Alt Hyp				NOEL	LOEL	TOEL		MSDu	PMSD
Angular (Corrected	d)	C > T				100	>100		1	0.02217	2.31%
Dunnett Multiple	Comparison	Test									
Control vs	Conc-%		Test S	tat Critical	MSD DF	P-Type	P-Value	Decis	sion(α:5%)		
Negative Control	6.25*		2.845	2.407	0.051 6	CDF	0.0211		icant Effect		
	12.5		1.353	2.407	0.051 6	CDF	0.2783	_	Significant Effect	:	
	25*		2.588	2.407	0.051 6	CDF	0.0353		icant Effect		
	50*		3.102	2.407	0.051 6	CDF	0.0125	_	icant Effect		
	100		2.156	2.407	0.051 6	CDF	0.0794	-	Significant Effect		
Test Acceptability	v Criteria										
Attribute	Test Stat		Limits Upper	Overlap	Decision						
Control Resp	0.96	0.7	>>	Yes	Passes Cr	riteria					
PMSD	0.0231	<<	0.25	No	Passes Cr						
	0.0201		0.20	110	1 45565 61	Tiona					
ANOVA Table				_							
			Mean :	Square	DF	F Stat	P-Value		sion(a:5%)		
	Sum Squa		0.0004	FOF	-	0.007	0.0000		Significant Effect		
Between	0.0122624		0.0024		5	2.687	0.0553	Non-S	organicant Endoc		
Between Error	0.0122624 0.01643		0.0024 0.0009		18	2.687 -	0.0553	Non-S	g		
Between Error	0.0122624					2.687	0.0553	Non-S			
Between Error Fotal	0.0122624 0.01643 0.0286924				18	2.687	0.0553	Non-S			
Between Error Fotal ANOVA Assumpti	0.0122624 0.01643 0.0286924				18	-	0.0553 P-Value		sion(α:1%)		
Between Error Total ANOVA Assumpti Attribute	0.0122624 0.01643 0.0286924 ions Tests		0.0009	128	18	-		Decis			
Between Error Fotal ANOVA Assumpti Attribute	0.0122624 0.01643 0.0286924 ions Tests Test	l ∣ quality of V	0.0009 ariance Te	128 est	18 23 Test Stat	- Critical	P-Value	Decis Equal	sìon(α:1%)		
Between Error Fotal ANOVA Assumpti Attribute	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq	l quality of V quality of V	0.0009 ariance Te	128 est	18 23 Test Stat 1.3	Critical	P-Value 0.9349	Decis Equal Equal	sion(α:1%) Variances		
Between Error Fotal ANOVA Assumpti Attribute √ariance	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever	uality of V quality of V ne Equality	0.0009 ariance Te ariance T	128 est	18 23 Test Stat 1.3 0.9037	Critical 15.09 4.248 4.248	P-Value 0.9349 0.5001 0.6092	Decis Equal Equal Equal	sion(α:1%) Variances Variances		
Between Error Fotal ANOVA Assumpti Attribute √ariance	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever	uality of V quality of V ne Equality Darling A2	0.0009 ariance To ariance To of Variance To Test	128 est	18 23 Test Stat 1.3 0.9037 0.7313 0.7814	Critical 15.09 4.248 4.248 3.878	P-Value 0.9349 0.5001 0.6092 0.0423	Decis Equal Equal Equal Norm	sion(α:1%) Variances Variances Variances		
Between Error Fotal ANOVA Assumpti Attribute √ariance	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino	quality of V quality of V ne Equality Darling A2 o Kurtosis	ariance To fariance To of Varian 2 Test Test	128 est	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985	Critical 15.09 4.248 4.248	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471	Decis Equal Equal Equal Norm Norm	sion(α:1%) Variances Variances Variances al Distribution		
Between Error Fotal ANOVA Assumpti Attribute √ariance	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes	ariance To fariance To for Varian P. Test Test s Test	est est ce Test	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218	Critical 15.09 4.248 4.248 3.878 2.576 2.576	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112	Decis Equal Equal Equal Norm Norm	Variances Variances Variances Variances al Distribution al Distribution		
Between Error Total ANOVA Assumpti Attribute Variance	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson	ariance To fariance To for Varian Test Test s Test K2 Omnib	est est ce Test	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616	Critical 15.09 4.248 4.248 3.878 2.576	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471	Decis Equal Equal Equal Norm Norm	Variances Variances Variances Variances al Distribution al Distribution al Distribution		
Between Error Total ANOVA Assumpti Attribute Variance	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov	ariance To fariance To for Varian Test Test Test S Test K2 Omnib	est est ce Test	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994	Decis Equal Equal Norm Norm Norm	Variances Variances Variances Variances al Distribution al Distribution		
Between Error Total ANOVA Assumpti Attribute Variance Distribution	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino C'Agostino Kolmogoro Shapiro-W	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov	ariance To fariance To for Varian Test Test Test S Test K2 Omnib	est est ce Test	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377	Decis Equal Equal Norm Norm Norm	Variances Variances Variances Variances al Distribution al Distribution al Distribution al Distribution		
Between Error Total ANOVA Assumpti Attribute Variance Distribution	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ed Mod Lever Anderson- D'Agostind D'Agostind D'Agostind Kolmogord Shapiro-W	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov	ariance To ariance To of Varian Test Test s Test K2 Omnib o Test mality Tes	est est ce Test us Test	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825 0.9177	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377 0.0520	Decis Equal Equal Norm Norm Norm Norm	Variances Variances Variances Variances al Distribution al Distribution al Distribution al Distribution al Distribution		%Effec
Between Error Fotal ANOVA Assumpti Attribute Variance Distribution Fertilization Rate Conc-%	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W Summary Code	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov filk W Norr	ariance To ariance To of Varian Prest Test S Test K2 Omnib O D Test mality Tes	est est ce Test us Test t	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825 0.9177	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377 0.0520	Decis Equal Equal Norm Norm Norm Norm	Sion(α:1%) Variances Variances Variances al Distribution al Distribution al Distribution al Distribution al Distribution al Distribution Std Err	CV%	
Between Error Total ANOVA Assumpti Attribute Variance Distribution Fertilization Rate Conc-%	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ed Mod Lever Anderson- D'Agostind D'Agostind D'Agostind Kolmogord Shapiro-W	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov filk W Norr	ariance To ariance To ariance To of Varian Prest Test S Test K2 Omnib of D Test mality Tes	est est est ce Test us Test t 95% LCL 0.9470	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825 0.9177 95% UCL 0.9730	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 0.9600	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377 0.0520 Min 0.9500	Decis Equal Equal Norm Norm Norm Norm Norm Norm	Sion(α:1%) Variances Variances Variances al Distribution al Distribution al Distribution al Distribution al Distribution Std Err 0 0.0041	CV% 0.85%	%Effec 0.00% 2.86%
Between Error Total ANOVA Assumpti Attribute Variance Distribution Fertilization Rate Conc-% 0 6.25	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W Summary Code	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov Vilk W Norr	ariance To fariance To of Varian Prest Test S Test K2 Omnib O Test mality Tes Mean 0.9600 0.9325	128 est est est t 95% LCL 0.9470 0.9053	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825 0.9177 95% UCL 0.9730 0.9597	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 0.9600 0.9350	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377 0.0520 Min 0.9500 0.9100	Decis Equal Equal Norm Norm Norm Norm Norm Onem Norm	Sion(α:1%) Variances Variances Variances al Distribution al Distribution al Distribution al Distribution al Distribution al Distribution Std Err 0 0.0041 0 0.0085	CV% 0.85% 1.83%	0.00% 2.86%
Between Error Total ANOVA Assumpti Attribute Variance Distribution Fertilization Rate Conc-% 0 6.25 12.5	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W Summary Code	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov Vilk W Norr Count 4 4	ariance To fariance To for Variant Test Test S Test K2 Omnib for D Test mality Tes Mean 0.9600 0.9325 0.9475	128 est est est t 95% LCL 0.9470 0.9053 0.9236	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825 0.9177 95% UCL 0.9730 0.9597 0.9714	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 0.9600 0.9350 0.9500	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377 0.0520 Min 0.9500 0.9100 0.9300	Decis Equal Equal Norm Norm Norm Norm Norm 0.970 0.950 0.960	Sion(a:1%) Variances Variances Variances al Distribution Std Err 0 0.0041 0 0.0085 0 0.0075	CV% 0.85% 1.83% 1.58%	0.00% 2.86% 1.30%
Source Between Error Total ANOVA Assumpti Attribute Variance Distribution Fertilization Rate Conc-% 0 6.25 12.5 25	0.0122624 0.01643 0.0286924 ions Tests Test Bartlett Eq Levene Ec Mod Lever Anderson- D'Agostino D'Agostino D'Agostino Kolmogoro Shapiro-W Summary Code	quality of V quality of V ne Equality Darling A2 o Kurtosis o Skewnes o-Pearson ov-Smirnov Vilk W Norr	ariance To fariance To of Varian Prest Test S Test K2 Omnib O Test mality Tes Mean 0.9600 0.9325	95% LCL 0.9470 0.9053 0.9236 0.9045	18 23 Test Stat 1.3 0.9037 0.7313 0.7814 1.985 0.8218 4.616 0.1825 0.9177 95% UCL 0.9730 0.9597	Critical 15.09 4.248 4.248 3.878 2.576 2.576 9.21 0.2056 0.884 Median 0.9600 0.9350	P-Value 0.9349 0.5001 0.6092 0.0423 0.0471 0.4112 0.0994 0.0377 0.0520 Min 0.9500 0.9100	Decis Equal Equal Norm Norm Norm Norm Norm Onem Norm	Sion(a:1%) Variances Variances Variances al Distribution 3 O.0041 0 0.0085 0 0.0075 0 0.0096	CV% 0.85% 1.83%	0.00% 2.86%

Report Date:

12 Jan-22 15:04 (p 2 of 2)

Test Code/ID:

VCF1221.123urc / 19-7786-7736

Purple Sea Urchin Sperm Cell Fertilization Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 00-6563-9697 Analyzed: 12 Jan-22 15:04

Edit Date:

Endpoint: Fertilization Rate Analysis:

Parametric-Control vs Treatments

MD5 Hash: 7A6558AA5E230A76D642D02260D125F1

CETIS Version:

Status Level: **Editor ID:**

CETISv1.9.7 000-189-126-0

12 Jan-22 15:01 Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.3700	1.3370	1.4040	1.3690	1.3450	1.3970	0.0105	1.53%	0.00%
6.25		4	1.3090	1.2560	1.3630	1.3130	1.2660	1.3450	0.0168	2.57%	4.44%
12.5		4	1.3410	1.2880	1.3950	1.3460	1.3030	1.3690	0.0168	2.50%	2.11%
25		4	1.3150	1.2540	1.3760	1.3240	1.2660	1.3450	0.0191	2.90%	4.04%
50		4	1.3040	1.2610	1.3470	1.3130	1.2660	1.3230	0.0135	2.07%	4.84%
100		4	1.3240	1.2850	1.3630	1.3240	1.3030	1.3450	0.0122	1.84%	3.36%

Fertilization Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	0.9600	0.9700	0.9600	0.9500
6.25		0.9500	0.9100	0.9300	0.9400
12.5		0.9300	0.9400	0.9600	0.9600
25		0.9300	0.9500	0.9100	0.9500
50		0.9100	0.9300	0.9400	0.9400
100		0.9500	0.9300	0.9500	0.9300

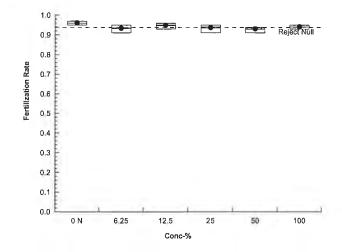
Angular (Corrected) Transformed Detail

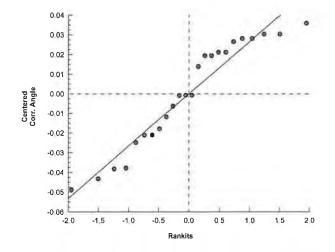
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.3690	1.3970	1.3690	1.3450
6.25		1.3450	1.2660	1.3030	1.3230
12.5		1.3030	1.3230	1.3690	1.3690
25		1.3030	1.3450	1.2660	1.3450
50		1.2660	1.3030	1.3230	1.3230
100		1.3450	1.3030	1.3450	1.3030

Fertilization Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	96/100	97/100	96/100	95/100
6.25		95/100	91/100	93/100	94/100
12,5		93/100	94/100	96/100	96/100
25		93/100	95/100	91/100	95/100
50		91/100	93/100	94/100	94/100
100		95/100	93/100	95/100	93/100

Graphics







Report Date:

12 Jan-22 15:04 (p 1 of 2)

Test Code/ID:

									Test Code/			.123u10 / 1	
Purple	Sea U	rchin Sperm Cell	Fertilization	on Test					Aqua	tic Bi	oassay &	Consulting	Labs, In
Analys	is ID:	01-1997-7145	End	point:	Fertilization Ra	te			CETIS Vers	sion:	CETISv1	.9.7	
Analyz	ed:	12 Jan-22 15:04	Ana	lysis:	Linear Interpola	ation (ICPII	N)		Status Lev	el:	1		
Edit Da	ite:	12 Jan-22 15:01	MD	Hash:	7A6558AA5E2	30A76D64	2D02260D1	25F1	Editor ID:		000-189-	126-0	
Batch I	D:	15-3433-9223	Test	t Type:	Fertilization				Analyst:				
Start D	ate:	15 Dec-21 16:01	Prot	ocol:	EPA/600/R-95/	136 (1995))		Diluent:	Labo	ratory Sea	water	
Ending	Date:	15 Dec-21 16:41	Spe	cies:	Strongylocentro	otus purpui	ratus		Brine: Not Applicable				
Test Le	ngth:	40m	Tax	on:	Echinoidea				Source:	Vent	ura Dive		Age:
Sample	e ID:	08-2027-3834	Cod	e:	VCF1221.123u	rc			Project:	NPD	ES Stormw	ater Wet S	eason
Sample	Date:	14 Dec-21 11:00	Mat	erial:	Sample Water				Source:	Bioa	ssay Repor	t	
Receip	t Date:	14 Dec-21 15:00	CAS	(PC):					Station:	ME-S	SCR		
Sample	Age:	29h (6 °C)	Clie	nt:	Ventura County	/ Watershe	ed Protectio	n Distri					
Linear	Interpo	lation Options											
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	% CL Me	thod					
Linear		Linear	0		280	Yes	Tw	o-Point	Interpolation				
Test Ad	ceptal	oility Criteria	TAC L	imits									
Attribu	te	Test Stat	Lower	Upper	r Overlap	Decision	n						
Control	Resp	0.96	0.7	>>	Yes	Passes (Criteria						
Point E	stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UC	L						
EC10	>100			<1		**							
EC15	>100			<1									
EC20	>100			<1									
EC25	>100			<1									
EC40	>100			<1	,								
EC50	>100			<1	***								
Fertiliz	ation R	late Summary		_		Calc	ulated Vari					Isoton	ic Variate
Conc-%	6	Code	Count	Mean	Median	Min	Max	CV%			A/B	Mean	%Effec
0		N	4	0.9600		0.9500	0.9700	0.85			384/400	0.9600	0.00%
6.25			4	0.932		0.9100	0.9500	1.83			373/400	0.9400	2.08%
12.5 25			4	0.947		0.9300	0.9600	1.58			379/400	0.9400	2.08% 2.60%
25 50			4	0.9350		0.9100	0.9500	2.05 1.52			374/400	0.9350	2.60%
100			4	0.9400		0.9100 0.9300	0.9400 0.9500	1.23			372/400 376/400	0.9350 0.9350	2.60%
_			4	0.5400	0.5400	0.9300	0.5500	1.20	2.00	/0	370/400	0.9330	2.00 /6
		tate Detail		_	_								
Conc-%	o .	Code	Rep 1	Rep 2		Rep 4							
) 2.05		N	0.9600	0.9700		0.9500							
6.25			0.9500	0.9100		0.9400							
12.5			0.9300	0.9400		0.9600							
25 50			0.9300	0.9500		0.9500							
100			0.9100 0.9500	0.9300		0.9400 0.9300							
			0.8300	0.5300	. 0.3000	0.3000							
		ate Binomials	D-: 4	D		D							
Conc-%	0	Code	Rep 1	Rep 2		Rep 4							
0		N	96/100	97/100		95/100							
3.25			95/100	91/100		94/100							
12.5			93/100	94/100		96/100							
25			93/100	95/100		95/100							
50			91/100	93/100		94/100							
100			95/100	93/100	95/100	93/100							



Report Date:

12 Jan-22 15:04 (p 2 of 2)

Test Code/ID:

VCF1221.123urc / 19-7786-7736

Aquatic Bioassay & Consulting Labs, Inc.

CETISv1.9.7

Analyzed: **Edit Date:**

Analysis ID: 01-1997-7145 12 Jan-22 15:04 12 Jan-22 15:01 Endpoint: Fertilization Rate

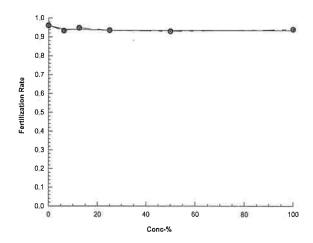
Analysis: Linear Interpolation (ICPIN)

MD5 Hash: 7A6558AA5E230A76D642D02260D125F1

CETIS Version: Status Level:

Editor ID: 000-189-126-0

Graphics



Report Date:

12 Jan-22 15:04 (p 1 of 3)

Test Code/ID:

									st Code/II	, VOI IZZ	1.1200107	19-7786-7736		
Purple Sea Urc	hin Sperm C	ell Fertili	zation Tes						Aquat	ic Bioassay &	Consultin	g Labs, Inc.		
		01 41	Test Type: Protocol: Species: Taxon:	Fertilizatio EPA/600/F Strongyloo Echinoide		atus	Dil Br	ine:	Laboratory Sea Not Applicable Ventura Dive		Age:			
Sample ID: 0 Sample Date: 1 Receipt Date: 1		00	Code: Material: CAS (PC):	VCF1221.123urc Sample Water					Project: NPDES Stormwater Wet Season Source: Bioassay Report Station: ME-SCR					
Sample Age: 2			Client:	Ventura C	ounty	Watershe	d Protect							
Parameter Acce	ptability Crit	teria			T,	AC Limits								
Parameter			Min	Max	Lowe	er Upp	er	Overlap	Decisio	n				
Salinity			34	34	32	36		Yes	Passes	Criteria				
Temperature			15.6	15.6	11	13		Yes	Above 0	Criteria				
Dissolved Oxyg	jen-mg/L													
Conc-%	Code	Count	Mean	95% L	.CL	95% UCL	Min	Max	Std Er	Std Dev	CV%	QA Coun		
0	N	2	6.5	5.229		7.771	6.4	6.6	0.0707	1 0.1414	2.18%	0		
6.25		2	6.45	5.815		7.085	6.4	6.5	0.0353	6 0.07072	1.10%	0		
12.5		2	6.45	5.815		7.085	6.4	6.5	0.0353	6 0.07072	1.10%	0		
25		2	6.4	6.384	1	6.416	6.4	6.4	0	0	0.00%	0		
50		2	6.4	6.384	4	6.416	6.4	6.4	0	0	0.00%	0		
100		2	6.2	6.187		6.213	6.2	6.2	0	0	0.00%	0		
Overall		12	6.4	6.328	4	6.472	6.2	6.6	0.0325	7 0.1128	1.76%	0 (0%)		
pH-Units														
Conc-%	Code	Count	Mean	95% L	CL :	95% UCL	Min	Max	Std Er	Std Dev	CV%	QA Coun		
0	N	2	8.2	8.187		8.213	8.2	8.2	0	0	0.00%	0		
6.25		2	8	8		8	8	8	0	0	0.00%	0		
12.5		2	8.1	8.082		8.118	8.1	8.1	0	0	0.00%	0		
25		2	8.1	8.082		8.118	8.1	8.1	0	0	0.00%	0		
50		2	8.1	8.082		8.118	8.1	8.1	0	0	0.00%	0		
100		2	8.1	8.082		8.118	8.1	8.1	0	0	0.00%	0		
Overall		12	8.1	8.062		8.138	8	8.2	0.0174	1 0.0603	0.74%	0 (0%)		
Salinity-ppt														
Conc-%	Code	Count				95% UCL		Max	Std Eri		CV%	QA Coun		
0	N	2	34	34		34	34	34	0	0	0.00%	0		
6.25		2	2.4	2.4			2.4			0	0.00%	0		
		2	34	34		34	34	34	0	J				
		2	34	34	;	34	34	34 34	0 0	0	0.00%	0		
12.5 25					;				-			0 0		
		2	34	34	;	34	34	34	0	0	0.00%			
25 50		2	34 34	34 34	;	34 34	34 34	34 34	0	0 0	0.00% 0.00%	0		
25		2 2 2	34 34 34	34 34 34	;	34 34 34	34 34 34	34 34 34	0 0 0	0 0 0	0.00% 0.00% 0.00%	0 0		
25 50 100 Overall Temperature-°C		2 2 2 2 12	34 34 34 34 34	34 34 34 34 34	;	34 34 34 34 34	34 34 34 34 34	34 34 34 34 34	0 0 0 0	0 0 0 0	0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%)		
25 50 100 Overall Temperature-°C Conc-%	Code	2 2 2 2 12	34 34 34 34 34 Mean	34 34 34 34 34 95% L	CL S	34 34 34 34 34 34	34 34 34 34 34 Min	34 34 34 34 34 Max	0 0 0 0 0	0 0 0 0 0	0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%)		
25 50 100 Overall Temperature-°C Conc-%		2 2 2 2 12 Count	34 34 34 34 34 Mean 15.6	34 34 34 34 34 95% L	CL S	34 34 34 34 34 39 95% UCL 15.63	34 34 34 34 34 Min 15.6	34 34 34 34 34 Max 15.6	0 0 0 0	0 0 0 0	0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%)		
25 50 100 Overall Temperature-°C Conc-% 0 6.25	Code	2 2 2 2 12 Count 2 2	34 34 34 34 34 Mean 15.6 15.6	34 34 34 34 34 95% L 15.57 15.57	CL S	34 34 34 34 34 34	34 34 34 34 34 34 Min 15.6 15.6	34 34 34 34 34 Max	0 0 0 0 0	0 0 0 0 0	0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%)		
25 50 100 Overall Temperature-°C Conc-% 0 6.25 12.5	Code	2 2 2 2 12 Count	34 34 34 34 34 Mean 15.6	34 34 34 34 34 95% L	CL S	34 34 34 34 34 39 95% UCL 15.63	34 34 34 34 34 Min 15.6	34 34 34 34 34 Max 15.6	0 0 0 0 0	0 0 0 0 0	0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%)		
25 50 100 Overall Temperature-°C Conc-% 0 6.25	Code	2 2 2 2 12 Count 2 2	34 34 34 34 34 Mean 15.6 15.6	34 34 34 34 34 95% L 15.57 15.57	CL S	34 34 34 34 34 34 95% UCL 15.63 15.63	34 34 34 34 34 34 Min 15.6 15.6	34 34 34 34 34 Max 15.6 15.6	0 0 0 0 0 0 0 Std Err	0 0 0 0 0 0 Std Dev	0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%) QA Coun 0		
25 50 100 Overall Temperature-°C Conc-% 0 6.25 12.5	Code	2 2 2 12 Count 2 2 2	34 34 34 34 34 Mean 15.6 15.6	34 34 34 34 34 95% L 15.57 15.57	CL S	34 34 34 34 34 95% UCL 15.63 15.63	34 34 34 34 34 Min 15.6 15.6	34 34 34 34 34 Max 15.6 15.6	0 0 0 0 0 0 0 Std Err 0 0	0 0 0 0 0 - Std Dev	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%) QA Coun 0 0		
25 50 100 Overall Temperature-°C Conc-% 0 6.25 12.5 25	Code	2 2 2 12 Count 2 2 2 2	34 34 34 34 34 Mean 15.6 15.6 15.6	34 34 34 34 34 95% L 15.57 15.57 15.57	CL 9	34 34 34 34 34 95% UCL 15.63 15.63 15.63	34 34 34 34 34 Min 15.6 15.6 15.6	34 34 34 34 34 Max 15.6 15.6 15.6	0 0 0 0 0 0 Std Err 0 0	0 0 0 0 0 0 - Std Dev 0 0 0	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0 0 0 0 (0%) QA Coun 0 0		



Report Date:

12 Jan-22 15:04 (p 2 of 3)

Test Code/ID:

Purple Sea Urc			zation 103						Aquatic Bioassay & Consulting Labs
Dissolved Oxyg	gen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		6.6				•	
6.25				6.4					
12.5				6.5					
25				6.4					
50				6.4					
100				6.2					
0	N	2		6.4					
6.25		_		6.5					
12.5				6.4					
25				6.4					
50				6.4					
100				6.2					
				0.2					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2					
6.25				8					
12.5				8.1					
25				8.1					
50				8.1					
100				8.1					
0	N	2		8.2					
6.25				8					
12.5				8.1					
25				8.1					
50				8.1					
100				8.1					
Salinity-ppt									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		34					
6.25				34					
12.5				34					
25				34					
50				34					
100				34					
)	N	2		34					
6.25				34					
12.5				34					
25				34					
50				34					
100				34					

CETIS Measurement Report

Report Date:

12 Jan-22 15:04 (p 3 of 3)

Test Code/ID:

Purple Sea Urchir	Sperm (Cell Fertili	zation Test						Aquatic Bioassay & Consulting Labs, Inc.
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	inst ID	Analyst	Notes
0	N	1		15.6					
6.25				15.6					
12.5				15.6					
25			10	15.6					
50				15.6					
100				15.6					
0	N	2		15.6					
6.25				15.6					
12.5				15.6					
25				15.6					
50				15.6					
100				15.6					



Toxicity Report for Ventura County Watershed Protection District

Most Sensitive Species Testing

PROJECT: 2021/22-3 (Wet)

CONTRACT: AE20-007

CLIENT: Ms. Kelly Hahs

VCWPD

800 South Victoria Avenue, L#1670

Ventura, CA 93003-1670

SAMPLE I.D.: ME-CC, ME-VR2, ME-SCR

DATE RECEIVED: 3/28/2022

DATE REPORTED: 4/27/2022 Preliminary Results, 5/5/2022 Final Report

ABC LAB NO.: VCF0322.207, .208, .210

29 North Olive Street Ventura, California 93001 (805) 643-5621

INTRODUCTION

Toxicity tests using fathead (*P. promelas*), Ceriodaphnia (*C. dubia*), midge (*C. dilutus*), and Hyalella (*H. azteca*) were performed on freshwater samples ME-CC and ME-VR2. Toxicity tests using purple urchin (*S. purpuratus*), giant kelp (*M. pyrifera*), and Topsmelt (*A. affinis*) were performed on marine sample ME-SCR to evaluate the quality of samples for Ventura County Watershed Protection District. The samples were collected on March 28th, 2022 and delivered the same day. Testing was conducted at Aquatic Bioassay and Consulting Labs, Inc. in Ventura California from March 28th, through April 21st, 2022.

MATERIALS AND METHODS

Test Material

Test material consisted of 3 grab samples collected by Ventura County Watershed Protection District (VCWPD) sample water sites. Sample collection was performed by VCWPD personnel under the direction of Ms. Kelly Hahs. The samples were collected in 5-gallon low-density polyethylene buckets and were delivered to Aquatic Bioassay in immediately after sampling. Sample temperature was recorded upon acceptance at Aquatic Bioassay Laboratories and is included in the report for each station.

Samples were stored at 4°C. Upon arrival at Aquatic Bioassay, an aliquot of each sample was drawn and water quality parameters of pH, dissolved oxygen (DO), conductivity, temperature, salinity, alkalinity, and hardness were measured and recorded.

Bioassay Testing

The study was performed in accordance with the United States Environmental Protection Agency (USEPA) protocols:

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002, US EPA-821-R-02-013.

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002, US EPA-821-R-02-014.

Summary of results for 100% sample concentration:

Sample ID	Test	Endpoint	Control	100% Sample	Statistically Different From Control	TST Result	*Percent Effect
ME-CC	Chronic Fathead	Survival (%)	100.00	96.67	No	Pass	3.33
		Biomass (mg)	0.3398	0.3243	No	Pass	<mark>4.56</mark>
ME-CC	Chronic Ceriodaphnia	Survival (%)	100.00	100.00	No	Pass	0.00
	Сеповарина	Reproduc tion #-	26.30	30.20	No	Pass	-14.83
ME-CC	Acute Hyalella	Survival (%)	100.00	100.00	No	Pass	0.00
ME-CC	Acute Chironomus	Survival (%)	100.00	100.00	No	Pass	0.00
ME-VR2	Chronic Fathead	Survival (%)	100.00	100.00	No	Pass	0.00
		Biomass (mg)	0.3398	0.3423	No	Pass	-0.74
ME-VR2	Chronic Ceriodaphnia	Survival (%)	100.00	100.00	No	Pass	0.00
	Corrodupmiu	Reproduction #-Neonates	25.70	31.90	No	Pass	-24.12
ME-VR2	Acute Hyalella	Survival (%)	100.00	100.00	No	Pass	0.00
ME-VR2	Acute Chironomus	Survival (%)	100.00	100.00	No	Pass	0.00
ME-SCR	Chronic Topsmelt	Survival (%)	100.00	100.00	No	Pass	0.00
		Biomass (mg)	1.427	1.417	No	Pass	<mark>0.67</mark>

^{*}Percent Effect at IWC = (Mean Control Response - Mean IWC Response) * 100 / Mean Control Response.

Summary of results for 100% sample concentration: (Cont.)

Sample ID	Test	Endpoint	Control	100% Sample	Statistically Different From Control	TST Result	*Percent Effect
ME-SCR		Germination (%)	93.80	94.60	No	Pass	-0.85
	Chronic Kelp	Tube Length	13.16	13.20	No	Pass	-0.30
ME-SCR	Chronic Urchin	Fertilization (%)	94.50	95.00	No	Pass	-0.79

^{*}Percent Effect at IWC = (Mean Control Response – Mean IWC Response) * 100 / Mean Control Response.

Quality Assurance

All samples were received in good condition at the appropriate temperatures, and all tests were initiated within 72 hours of sample collection. The negative controls met the minimum test acceptability criterion of 80 percent mean survival. Variability among replicates was minimal, and the ability to detect a statistical difference was deemed appropriate.

Survival counts were recorded daily to ensure tests were progressing as expected. Counts were conducted daily on the control replicates. The temperatures in samples were within the recommended range for the entire test duration.

Reference Toxicant Test

A concurrent reference toxicant test using copper chloride was conducted to assess the health of the test organisms. Mean control survival met the test acceptability criterion. The median lethal concentration (LC50) calculated for this test was within two standard deviations of the internal control chart mean, indicating test organism sensitivity was typical. Reference toxicant test results are summarized in the report.

Results and Discussion

Mean survival and statistical differences from control for the tests, error bars, results summaries including individual replicate data, statistical summaries, and raw datasheets are located in in the appendix. Appropriate chain-of-custody (COC) procedures were followed during all phases of this study, and copies of the COC forms are provided in the appendix.

Results of the species sensitivity screen are as follows: ME-CC most sensitive species is chronic fathead minnow with a percent effect of 3.33 for survival and 4.56 for biomass. ME-VR2 most sensitive species is inconclusive as no test yielded a positive result. ME-SCR most sensitive species is Topsmelt with percent effect of 0.00 for survival and 0.67 for biomass. The most sensitive species for each site is highlighted in the table above.

Data Analysis and Reporting

The response observed in this test includes survival of the test organism. Two statistical methods were employed to determine whether there was an effect between the control and test sample: 1) A standard t-test approach following the statistical analysis decision tree in EPA 2002; and 2) A more recent EPA-recommended Test of Significant Toxicity (TST) approach (EPA 2010).

References:

United States Environmental Protection Agency, 1995. Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136.

United States Environmental Protection Agency, 2002. Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/821/R-02-014.

United States Environmental Protection Agency, 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA/821/R-02/012.

United States Environmental Protection Agency, 2010. National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document. Office of Wastewater Management. EPA 833-R-10-003.



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-VR2
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.207

CHRONIC FATHEAD MINNOW SURVIVAL & GROWTH BIOASSAY

>100.00 %

SURVIVAL 100.00 % NOEC = TUc =1.00 EC25 =>100.00 % EC50 =>100.00 % **BIOMASS** NOEC =100.00 % TUc =1.00 IC25 =>100.00 %

IC50 =

Yours very truly,

M Scott Johnson

Laboratory Director

Report Date: Test Code/ID: 20 Apr-22 15:52 (p 1 of 2)

VCF0322.207fml / 08-2692-8719

Fathead Minn	iow 7-d Larval	Surviva	l and Growt	h Test			Aquatic Bioassay & Consulting Labs, Inc								
_			Protocol: Species:	Growth-Surviv EPA/821/R-02 Pimephales pr	-013 (2002)			Analyst: Diluent: Brine:	Not A	ratory Wate					
Test Length:	7d 1h		Taxon:	Actinopterygii				Source:	Aqua	tic Biosyste	ems, CO	Age:	<24		
Receipt Date:	ding Date: 05 Apr-22 13:12 st Length: 7d 1h mple ID: 12-9293-9179 mple Date: 28 Mar-22 13:10 ceipt Date: 28 Mar-22 13:40 mple Age: 23h (14.5 °C) litiple Comparison Summary alysis ID Endpoint -6949-8803 7d Survival Rate -2865-7309 Mean Dry Biomass int Estimate Summary		Code: Material: CAS (PC):	VCF0322.207f Sample Water				Project: Source: Station:	NPDES Stormwater Wet S Bioassay Report ME-VR2			ason ((Con		
Sample Age:	23h (14.5 °C)		Client:	Ventura Count	y Watershed	l Protection	n Distri								
Multiple Com	parison Summ	ary													
Analysis ID				arison Method			/ NO			TOEL	PMSD	TU			
				Many-One Ran			100	>100)			1	- 3		
03-2865-7309	Mean Dry Bion	nass-mg	Steel	Many-One Ran	k Sum Test		100	>100)	-	3.73%	1	- 1		
Point Estimat	e Summary														
Analysis ID	Endpoint		Point	Estimate Meth	od		/ Lev	rel %		95% LCL	95% UCL	ΤU	5		
04-9118-8328	7d Survival Ra	te	Linear	Interpolation (I	CPIN)		/ EC			***	***	<1			
							/ EC)	***	444	<1			
							/ EC					<1			
							/ EC			***	•••	<1			
							/ EC			***	***	<1			
14-2233-1971	Mean Dry Bion	nass-mg	Linear	Interpolation (I	CPIN)		/ IC1				***	<1	3		
							/ IC2			***		<1			
							/ IC2			***		<1			
							/ IC4				***	<1			
							/ IC5	0 >100)		***	<1			
Test Acceptab	oility					TAC	Limits								
Analysis ID	Endpoint		Attrib	ute	Test Stat	Lower	Up	per Ove	rlap	Decision					
04-9118-8328	7d Survival Ra	te		ol Resp	1	8.0	<<	Yes		Passes Cr	iteria				
	7d Survival Ra			ol Resp	1	8.0	<<	Yes		Passes Cr	iteria				
	Mean Dry Bion	_		ol Resp	0.3398	0.25	<<	Yes		Passes Cr					
	Mean Dry Bion			ol Resp	0.3398	0.25	<<	Yes		Passes Cr					
03-2865-7309	Mean Dry Bion	nass-mg	PMSC)	0.03728	0.12	0.3	Yes		Below Crit	eria				
7d Survival R	ate Summary														
Conc-%	Code	Coun			95% UCL	Min	Ma			Std Dev	CV%	%Eff			
0	N	4	1.0000		1.0000	1.0000	1.0			0.0000	0.00%	0.00			
6.25		4	1.0000		1.0000	1.0000	1.0			0.0000	0.00%	0.00			
12.5		4	1.0000		1.0000	1.0000	1.0			0.0000	0.00%	0.00			
25		4	1.0000		1.0000	1.0000	1.0			0.0000	0.00%	0.00			
50		4 4	1.0000		1.0000	1.0000	1.0			0.0000	0.00%	0.00			
100			1.0000	1.0000	1.0000	1.0000	1.0	0.00	00	0.0000	0.00%	0.00	70		
•	mass-mg Sum	•	. M	059/ 1.01	059/ 1101	841	Mar	. 644		Std Davi	C)/9/	0/ 54	A		
Conc-%	Code	Coun		95% LCL			Ma			Std Dev	CV%	%Eff			
0	N	4	0.3398		0.3457	0.3353	0.3			0.003707	1.09%	0.009			
6.25		4	0.3472		0.3617	0.3407	0.3		4557 1705	0.009114	2.63%	-2.16			
12.5 25		4	0.3407 0.3400		0.3463	0.3353 0.338	0.3		1785 1139	0.003569 0.002277	1.05% 0.67%	-0.25			
25 50		4	0.340		0.344 0.3684	0.3353	0.3		7104	0.002277	4.11%	-0.15 -1.77			
JU						0.0000							/0		
100		4	0.3423	3 0.336	0.3487	0.3367	0.34	46 0.00	1001	0.003981	1.16%	-0.74	0/		



CETIS Summary Report

Report Date:

20 Apr-22 15:52 (p 2 of 2)

Test Code/ID:

VCF0322.207fml / 08-2692-8719

						rest code/ib.
Fathead Minn	ow 7-d Larval	Survival an	d Growth T	est		Aquatic Bioassay & Consulting Labs, Inc.
7d Survival R	ate Detail					MD5: 68E117461239090AA7E1427F0F536296
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.0000	1.0000	1.0000	1.0000	
6.25		1.0000	1.0000	1.0000	1.0000	
12.5		1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	
50		1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	
Mean Dry Bio	mass-mg Deta	il				MD5: 0183935EDC45CEAF0B96C194EE25AC99
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	0.3353	0.3413	0.3387	0.344	
6.25		0.3407	0.3473	0.3407	0.36	
12.5		0.3427	0.3427	0.3353	0.342	
25		0.3433	0.338	0.3393	0.3407	
50		0.3353	0.3667	0.3427	0.3387	
100		0.3433	0.346	0.3367	0.3433	
7d Survival R	ate Binomials					
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	15/15	15/15	15/15	15/15	
6.25		15/15	15/15	15/15	15/15	
12.5		15/15	15/15	15/15	15/15	
25		15/15	15/15	15/15	15/15	
50		15/15	15/15	15/15	15/15	
100		15/15	15/15	15/15	15/15	

Report Date:

20 Apr-22 15:52 (p 1 of 4)

Test Code/ID: VCF0322.207fml / 08-2692-8719

Maniputage 20 Apr 22 15-50 Analysis Selection 10 Selectio	Fathead Minn	ow '	7-d Larval S	urvival	and	Growtl	h Te	st					Aquat	tic Bi	oassay &	Consultin	g Labs, Inc
March Marc	Analysis ID:	06-	6949-8803		End	ooint:	7d S	Survival Rat	e			CETI	S Vers	ion:	CETISV	2.1.1	
Mary	_		•					•			296			l:		-000-3	
Start Date 28 Mar-22 11:145 Protocol: FA-102 11:00 Species Proventing to pate Species Proventing to pate Species Proventing to pate Species S	Batch ID:	06-	2867-8540		Test	Type:	Gro	wth-Surviva	I (7d)			Anal	yst:				
Case Langth 7d 1h	Start Date:	29 1	Mar-22 11:45	;	Prote	ocol:	EP/	A/821/R-02-	013 (2002)					Labo	ratory Wat	er	
Canaliga	Ending Date:	05 /	Apr-22 13:12		Spec	ies:	Pim	ephales pro	melas			Brine	e:		•		
Sample Date: 28 Mar-22 13:10	-		•		Taxo	n:						Sour				tems, CO	Age: <2
Case	Sample ID:	12-	9293-9179		Code	ə:	VCF	-0322.207fn	nl			Proje	ect:	NPD	ES Stormy	vater Wet	
	Sample Date:	28 [Mar-22 13:10)	Mate	rial:	San	nple Water				Sour	ce:	Bioas	ssay Repo	rt	
NOBL LOBE	Receipt Date:	28 [Mar-22 13:40)	CAS	(PC):						Stati	on:	ME-\	/R2		
Steel Many-One Rank Sum Test 100 >100	Sample Age:	23h	(14.5 °C)		Clier	nt:	Ven	itura County	Watershed	Protection	Distri						
Steel Many-One Rank Sum Test Sum Non-Significant Effect	Data Transfor	m		Alt H	ур					NOEL	LOE	L	TOEL		TU		
	Angular (Corre	cted)	C > T						100	>100)	***		1		
Regative Control 6.25	Steel Many-Or	ne R	ank Sum Te	est													
12.5	Control	vs	Conc-%		df	Test S	Stat	Critical	Ties	P-Type	P-Va	alue	Decis	ion(d	x:5%)		
25	Negative Contr	ol lo	6.25		6	18		10	1	CDF	0.83	33	Non-S	Signifi	cant Effec	t	
Test Acceptability Criteria Tac Limits Test Lower Upper Overlap Decision Overlap Decision Overlap Overla			12.5		6	18		10	1	CDF	0.83	33	Non-S	Signifi	cant Effec	t	
Test State			25		6	18		10	1	CDF	0.83	33	Non-S	Signifi	cant Effec	t	
Tack Lower Lower Lower Lower Upper Overlap Decision			50		6	18		10	1	CDF	0.83	33		-			
Test Stat Lower Upper Overlap Decision			100		6	18		10	1	CDF	0.83	33	Non-S	Signifi	cant Effec	t	
Notice Sum Square Mean Square DF F Stat P-Value Decision(α:5%) Indeterminate Sum Square DF Stat P-Value Decision(α:5%) Stat P-Value Decision(α:1%) Stat P-Value Decision(α:1	Test Acceptab	ility	Criteria	TA	AC Li	mits											
NOVA Table Source Sum Squares Mean Square DF F Stat P-Value Decision(α:5%)	Attribute		Test Stat	Lowe	r	Upper	r	Overlap	Decision								
Source Sum Squares Mean Square DF F Stat P-Value Decision(α:5%)	Control Resp		1	8.0		<<		Yes	Passes Ci	riteria							
Indeterminate Indeterminat	ANOVA Table																
Indeterminate Indeterminat	Source		Sum Squa	ares		Mean	Squ	are	DF	F Stat	P-Va	alue	Decis	ion(c	x:5%)		
Note Provide	Between		0			0			5				Indete	ermin	ate		
Nova Test	Error		0			0			18								
Test State P-Value Decision(a:1%)	Total		0						23	7							
Rariance Bartlett Equality of Variance Test Shapiro-Wilk W Normality Test Indeterminate Indeterminat	ANOVA Assun	npti	ons Tests														
Indeterminate Indeterminat	Attribute		Test						Test Stat	Critical	P-Va	alue	Decis	ion(c	x:1%)		
Conc-% Code Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %Efformation	Variance		Bartlett Eq	uality o	f Var	iance T	est						Indete	ermin	ate		
Conc-% Code Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %Effe 0 N 4 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000	Distribution		Shapiro-W	ilk W N	lorma	ality Tes	st						Indete	ermin	ate		
N 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000 0.0000 0.000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.00000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.	7d Survival Ra	ate S	Summary														
1,0000	Conc-%		Code	Count	t	Mean		95% LCL	95% UCL	Median	Min		Max		Std Err	CV%	%Effect
1.000	0		N	4		1.0000)	1.0000	1.0000	1.0000	1.00	00	1.000	0	0.0000	0.00%	0.00%
4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 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 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00	6.25			4		1.0000	C	1.0000	1.0000	1.0000	1.00	00	1.000	0	0.0000	0.00%	0.00%
4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 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 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0	12.5			4		1.0000	C	1.0000	1.0000	1.0000	1.00	00	1.000	0	0.0000	0.00%	0.00%
Angular (Corrected) Transformed Summary Conc-% Code Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %Effe 5. N 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 6.25 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 6.25 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 6.25 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 6.25 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 6.26 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 6.50 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00%	25			4		1.0000	0	1.0000	1.0000	1.0000	1.00	00	1.000	0	0.0000	0.00%	0.00%
Angular (Corrected) Transformed Summary Conc-% Code Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %Efformation N 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 0.00% 0.25 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 0.25 5.5 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.	50			4		1.0000	0	1.0000	1.0000	1.0000	1.00	00	1.000	0	0.0000	0.00%	0.00%
Conc-% Code Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %Effection 0 N 4 1.4410 1.4410 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 3.25 4 1.4410 1.4410 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 2.5 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 2.5 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 2.5 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 2.5 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 2.5 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00	100			4		1.0000	0	1.0000	1.0000	1.0000	1.00	00	1.000	0	0.0000	0.00%	0.00%
N 4 1.4410 1.4410 1.4420 1.4410 1.4410 0.0000 0.00% 0.	Angular (Corre	ecte	d) Transfori	med Su	ımma	ary											
N 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 0.00% 0.00% 0.25 4 1.4410 1.4410 1.4410 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 0.00% 0.25 4 1.4410 1.4410 1.4410 1.4410 1.4410 0.0000 0.00% 0.00	Conc-%							95% LCL	95% UCL	Median	Min		Max		Std Err	CV%	%Effect
2.5 4 1.4410 1.4410 1.4420 1.4410 1.4410 0.0000 0.00% 0.00% 2.5 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 50 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00%	0		N			1.4410)	1.4410	1.4420	1.4410	1.44	10	1.441	0	0.0000	0.00%	0.00%
2.5 4 1.4410 1.4410 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 25 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00% 50 4 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00%	6.25			4		1.4410)	1.4410	1.4420	1.4410	1.44	10	1.441	0	0.0000	0.00%	0.00%
25 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00%	12.5			4		1.4410)				1.44	10	1.441	0	0.0000	0.00%	0.00%
50 4 1.4410 1.4410 1.4420 1.4410 1.4410 1.4410 0.0000 0.00% 0.00%	25			4		1.4410)	1.4410	1.4420		1.44	10	1.441	0	0.0000	0.00%	0.00%
	50			4		1.4410)			1.4410	1.44	10	1.441	0	0.0000	0.00%	0.00%
	100			4		1.4410)	1.4410	1.4420	1.4410	1.44	10	1.441	0	0.0000	0.00%	0.00%



Report Date:

20 Apr-22 15:52 (p 2 of 4)

Test Code/ID: VCF0322.207fml / 08-2692-8719

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 06-6949-8803 Endpoint: 7d Survival Rate

Analyzed: 20 Apr-22 15:50 **Edit Date:** 20 Apr-22 15:44 Analysis: Nonparametric-Control vs Treatments MD5 Hash: 68E117461239090AA7E1427F0F536296 **CETIS Version:** Status Level:

Editor ID:

008-463-000-3

CETISv2.1.1

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	Ν	1.0000	1.0000	1.0000	1.0000	
6.25		1.0000	1.0000	1.0000	1.0000	
12.5		1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	
50		1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	

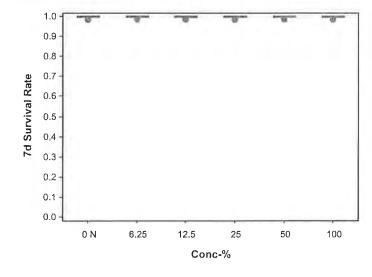
Angular (Corrected) Transformed Detail

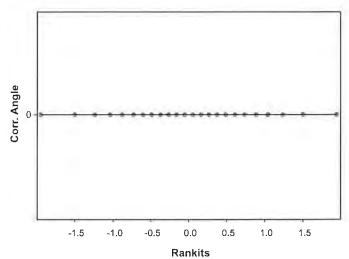
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.4410	1.4410	1.4410	1.4410	
6.25		1.4410	1.4410	1.4410	1.4410	
12.5		1.4410	1.4410	1.4410	1.4410	
25		1.4410	1.4410	1.4410	1.4410	
50		1.4410	1.4410	1.4410	1.4410	
100		1.4410	1.4410	1.4410	1.4410	

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	15/15	15/15	15/15	15/15	
6.25		15/15	15/15	15/15	15/15	
12.5		15/15	15/15	15/15	15/15	
25		15/15	15/15	15/15	15/15	
50		15/15	15/15	15/15	15/15	
100		15/15	15/15	15/15	15/15	

Graphics





Report Date: Test Code/ID: 20 Apr-22 15:52 (p 3 of 4)

VCF0322.207fml / 08-2692-8719

Fathead Minno	w 7-d Lar	val Sui	rvival and	Growth	n Test						Aquatic	Bioassay & 0	Consulting	Labs, Inc
Analyzed: 2	3-2865-7: 0 Apr-22	15:50	Ana	lysis:	Nonpa		nass-mg -Control vs 1 5CEAF0B96		A C 0 0	Statu	S Version	1		
	0 Apr-22							C194EE25	AC99	Edito	or ID:	008-463-	000-3	
	6-2867-8					th-Surviva				Analy				
	9 Mar-22			tocol:			013 (2002)			Dilue		boratory Wate	er	
Ending Date: 0	•	13:12		cies:		phales pro	omelas			Brine		ot Applicable		
Test Length: 7	d 1h		Tax	on:	Actino	opterygii				Sour	ce: Ad	quatic Biosyste	ems, CO	Age: <2
Sample ID: 1	2-9293-9 ⁻	179	Cod	le:	VCF0	322.207fr	ml			Proje	ct: NF	DES Stormw	ater Wet S	eason (Co
Sample Date: 2	8 Mar-22	13:10	Mat	erial:	Samp	le Water				Sour	ce: Bi	oassay Repor	t	
Receipt Date: 2				(PC):						Statio	on: M	E-VR2		
Sample Age: 2	3h (14.5 °	,C)	Clie	nt:	Ventu	ira County	/ Watershed	Protection	Distri					
Data Transform			Alt Hyp					NOEL	LOE	L	TOEL	TU	MSDu	PMSD
Untransformed			C > T					100	>100)	***	1	0.01267	3.73%
Steel Many-One	Rank Su	ım Tes	t											
Control v	s Conc	-%	df	Test S	Stat C	Critical	Ties	P-Type	P-Va	alue	Decisio	n(α:5%)		
Negative Contro	l 6.25		6	22	1	10	0	CDF	0.99	08	Non-Sig	nificant Effect		
	12.5		6	19.5	1	10	1	CDF	0.93	15	Non-Sig	nificant Effect		
	25		6	18	1	10	0	CDF	0.83	33	Non-Sig	nificant Effect		
	50		6	19		10	2	CDF	0.90		_	nificant Effect		
	100		6	21	1	10	0	CDF	0.97	78	Non-Sig	nificant Effect		
Test Acceptabil	ity Criter	ia	TAC L	imits										
Attribute	Test	Stat	Lower	Upper	. (Overlap	Decision							
Control Resp	0.33	98	0.25	<<	١	r'es	Passes Ci	riteria						
PMSD	0.03	728	0.12	0.3	Υ	r'es	Below Crit	eria						
ANOVA Table														
Source	Sum	Squar	es	Mean	Squar	re	DF	F Stat	P-Va	alue	Decisio	n(α:5%)		
Between	0.00	01914		3.829E	E-05		5	0.6909	0.63	68	Non-Sig	nificant Effect		
Error	0.00	09974		5.541E	E-05		18							
Total	0.00	11889					23							
ANOVA Assum	otions Te	sts												
Attribute	Test						Test Stat	Critical	P-Va	alue	Decisio	n(a:1%)		
Variance	Bartl	ett Equa	ality of Va	riance T	est		12.71	15.09	0.02	62	Equal V	ariances		
			ality of Va				2.772	4.248	0.05		Equal V	ariances		
	Mod	Levene	Equality	of Variar	тсе Те	st	1.04	4.248	0.42	45	Equal V	ariances		
Distribution	Ande	erson-D	arling A2	Test			1.007	3.878	0.01	20		Distribution		
			Kurtosis T				2.528	2.576	0.01			Distribution		
	_		Skewness		_		2.815	2.576	0.00			mal Distribution		
	_		Pearson K		ous le	est	14.31	9.21	0.00			mal Distributio	on	
		-	-Smirnov k W Norm		.+		0.1801 0.878	0.2056 0.884	0.04			Distribution mal Distributio	20	
		-		anty res	٥L		0.076	0.004	0.00	70	11011-1101	mai Distributio	110	
Mean Dry Biom	_		•									-		0.1 =
Conc-%	Code		Count	Mean		5% LCL	95% UCL	Median	Min	F0	Max	Std Err	CV%	%Effect
0	N		4	0.3398		0.3339	0.3457	0.34	0.33		0.344	0.001853	1.09%	0.00%
6.25			4	0.3472).3327	0.3617	0.3429	0.34		0.36	0.004557	2.63%	-2.16%
12.5			4	0.3407).335	0.3463	0.3424	0.33		0.3427	0.001785	1.05%	-0.25%
25			4 4	0.3403		0.3367	0.344	0.34	0.33		0.3433 0.3667	0.001139 0.007104	0.67% 4.11%	-0.15% -1.77%
50			4	0.3458).3232	0.3684	0.3407						
100		4	4	0.3423	, ().336	0.3487	0.3433	0.33	υı	0.346	0.001991	1.16%	-0.74%



Report Date:

20 Apr-22 15:52 (p 4 of 4) VCF0322.207fml / 08-2692-8719

Test Code/ID:

Aquatic Bioassay & Consulting Labs, Inc.

Fathead Minnow 7-d Larval Survival and Growth Test

03-2865-7309

Endpoint: Mean Dry Biomass-mg CETIS Version: CETISv2.1.1

Analyzed: 20 Apr-22 15:50 Analysis: Nonparametric-Control vs Treatments Status Level:

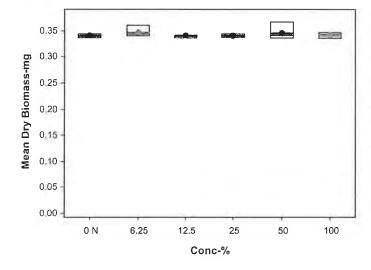
Edit Date: 20 Apr-22 15:44 MD5 Hash: 0183935EDC45CEAF0B96C194EE25AC99 Editor ID: 008-463-000-3

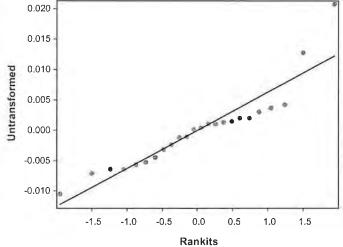
Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	0.3353	0.3413	0.3387	0.344	
6.25		0.3407	0.3473	0.3407	0.36	
12.5		0.3427	0.3427	0.3353	0.342	
25		0.3433	0.338	0.3393	0.3407	
50		0.3353	0.3667	0.3427	0.3387	
100		0.3433	0.346	0.3367	0.3433	

Graphics

Analysis ID:





Report Date:

20 Apr-22 15:52 (p 1 of 4)

Test Code/ID:

VCF0322.207fml / 08-2692-8719

	d Minn	ow 7-d Larval St	urvival and	Growt	h Test				Aqu	atic Bi	ioassay &	Consultin	g Labs, Inc.
Analysi Analyzo Edit Da	ed:	04-9118-8328 20 Apr-22 15:50 20 Apr-22 15:44	Ana	lysis:	7d Survival Rat Linear Interpola 68E117461239	ation (ICPIN	•	296	CETIS Ver Status Ler Editor ID:		CETISV 1 008-463		
Batch I	ID:	06-2867-8540	Test	Type:	Growth-Surviva	ıl (7d)			Analyst:				
Start D	ate:	29 Mar-22 11:45		ocol:	EPA/821/R-02-	. ,			Diluent:	Labo	ratory Wa	ater	
Ending	Date:	05 Apr-22 13:12	Spe	cies:	Pimephales pro	, ,			Brine:		Applicable		
Test Le	ength:	7d 1h	Tax	on:	Actinopterygii				Source:			stems, CO	Age: <24
Sample	e ID:	12-9293-9179	Cod	e:	VCF0322.207fr	nl			Project:	NPD	ES Storm	water Wet S	Season (Co
Sample	e Date:	28 Mar-22 13:10		erial:	Sample Water				Source:	Bioa	ssay Repo	ort	
Receip	t Date:	28 Mar-22 13:40	CAS	(PC):					Station:	ME-	VR2		
Sample	e Age:	23h (14.5 °C)	Clie	nt:	Ventura County	/ Watershed	d Protection	Distri					
Linear	Interpo	lation Options											
X Trans	sform	Y Transform		d	Resamples	Exp 95%							
Linear		Linear	0		280	Yes	Two	-Point	Interpolation	n			
Test Ac	cceptab	oility Criteria	TAC L	imits									
Attribu	te	Test Stat	Lower	Uppei	r Overlap	Decision							
Control	Resp	1	0.8	<<	Yes	Passes C	riteria						
Point E	stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
EC15	>100	***		<1	***	. ***							
EC20	>100			<1	***	1777							
EC25	>100			<1	***	***							
EC40	>100			<1		1							
EC50	>100	***	1446	<1		/444				_			
		_						ato/Δ/F	(1			Isoto	nic Variate
		ate Summary					ılated Varia						
Conc-%		Code	Count	Mean	Median	Min	Max	CV%	% %E	ffect	A/B	Mean	%Effect
Conc- %		-	4	1.0000	1.0000	Min 1.0000	Max 1.0000	CV %	% %E)%	60/60	Mean 1.0000	%Effect 0.00%
Conc- % 0 6.25		Code	4	1.0000	1.0000 1.0000	Min 1.0000 1.0000	Max 1.0000 1.0000	0.00 0.00	% 0.00 % 0.00)%)%	60/60 60/60	Mean 1.0000 1.0000	%Effect 0.00% 0.00%
Conc- % 0 6.25 12.5		Code	4 4 4	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000	0.00 0.00 0.00	% %E- 1% 0.00 1% 0.00 1% 0.00)%)%)%	60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00%
Conc- % 0 6.25 12.5 25		Code	4 4 4 4	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25		Code	4 4 4	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000	0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50	<u>/a</u>	Code	4 4 4 4	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Sur	√s	Code N	4 4 4 4 4 4	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Sur	√s	Code N	4 4 4 4	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	Min 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Sur Conc-%	√s	Code N ate Detail	4 4 4 4 4 4 Rep 1	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 0 6.25	√s	Code N ate Detail	4 4 4 4 4 4 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 0 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surr Conc-% 0 6.25 12.5	√s	Code N ate Detail	4 4 4 4 4 4 4 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 0 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surv Conc-% 0 6.25 12.5	√s	Code N ate Detail	4 4 4 4 4 4 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Rep 3 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surv Conc-% 0 6.25 12.5 25 50	√s	Code N ate Detail	Rep 1 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 3 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surv Conc-% 0 6.25 12.5 50 100	vival Ra	Code N ate Detail	Rep 1 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 3 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surv 6.25 12.5 25 50 100 7d Surv	vival Ra	Code N ate Detail Code N	Rep 1 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 3 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100 7d Surv	vival Ra	Code N ate Detail Code N	Rep 1 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 3 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100 7d Surv Conc-% 0	vival Ra	Code N ate Detail Code N ate Binomials Code	4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2	Rep 3 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 Rep 3	Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Conc-% 0 6.25 12.5 25 50 100 7d Surv Conc-% 0 6.25	vival Ra	Code N ate Detail Code N ate Binomials Code	Rep 1 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 3 1.0000 Rep 3 1.0000 1.0000 Rep 3 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 Rep 3	Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surv 0 6.25 12.5 50 100 7d Surv Conc-% 0 6.25 12.5	vival Ra	Code N ate Detail Code N ate Binomials Code	Rep 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.01000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5/15	Rep 3 1.0000 Rep 3 1.0000 1.0000 Rep 3 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000	Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Surv Conc-% 0 6.25 12.5 50 100	vival Ra	Code N ate Detail Code N ate Binomials Code	Rep 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.5/15 15/15	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5/15 15/15	Rep 3 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	Min 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 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010 1.0010	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% 0.00 % 0.00 % 0.00 % 0.00 % 0.00)%)%)%)%)%	60/60 60/60 60/60 60/60	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%

Report Date:

20 Apr-22 15:52 (p 2 of 4)

Test Code/ID:

Editor ID:

VCF0322.207fml / 08-2692-8719

Fathead Minnow 7-d Larval Survival and Growth Test

20 Apr-22 15:44

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 04-9118-8328 Analyzed:

20 Apr-22 15:50

Endpoint: 7d Survival Rate Analysis: Linear Interpolation (ICPIN)

MD5 Hash: 68E117461239090AA7E1427F0F536296

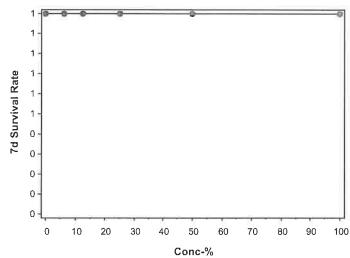
CETIS Version: CETISv2.1.1

Status Level:

008-463-000-3

Graphics

Edit Date:



Report Date: Test Code/ID: 20 Apr-22 15:52 (p 3 of 4)

VCF0322.207fml / 08-2692-8719

Fathead Minnow 7-d Larval Survival and Growth Test Aquatic Bioassay & Consulting Labs, Inc. 14-2233-1971 Analysis ID: Mean Dry Biomass-mg Endpoint: **CETIS Version:** CETISv2.1.1 Analyzed: 20 Apr-22 15:50 Analysis: Linear Interpolation (ICPIN) Status Level: MD5 Hash: 0183935EDC45CEAF0B96C194EE25AC99 **Edit Date:** 20 Apr-22 15:44 Editor ID: 008-463-000-3 Batch ID: 06-2867-8540 Test Type: Growth-Survival (7d) Analyst: 29 Mar-22 11:45 Start Date: EPA/821/R-02-013 (2002) Protocol: Diluent: Laboratory Water Ending Date: 05 Apr-22 13:12 Species: Pimephales promelas Brine: Not Applicable Test Length: 7d 1h Taxon: Actinopterygii Source: Aquatic Biosystems, CO Age: <24 12-9293-9179 Sample ID: Code: VCF0322.207fml Project: NPDES Stormwater Wet Season (Con Sample Date: 28 Mar-22 13:10 Material: Sample Water Source: Bioassay Report Receipt Date: 28 Mar-22 13:40 CAS (PC): Station: ME-VR2 Sample Age: 23h (14.5 °C) Client: Ventura County Watershed Protection Distri **Linear Interpolation Options** X Transform Y Transform Seed Resamples Exp 95% CL Method 1286319 Linear Linear 280 Yes Two-Point Interpolation **Test Acceptability Criteria TAC Limits Attribute** Test Stat Lower Upper Overlap Decision Control Resp 0.3398 0.25 Yes Passes Criteria **Point Estimates** Level 95% LCL 95% UCL TU 95% LCL 95% UCL % IC15 >100 <1 IC20 >100 <1 IC25 >100 <1 IC40 >100 <1 IC50 >100 <1 ------Calculated Variate Mean Dry Biomass-mg Summary Isotonic Variate Conc-% Code Count Mean Median Min Max CV% %Effect Mean %Effect 0 N 4 0.34 0.3353 0.3398 0.344 1.09% 0.00% 0.3435 0.00% 6.25 4 0.3472 0.3429 0.3407 0.36 2.63% -2.16% 0.3435 0.00% 12.5 4 0.3407 0.3424 0.3353 0.3427 1.05% -0.25% 0.3423 0.35%

Mean Dry	Biomass-mg	Detail
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25

50

100

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	0.3353	0.3413	0.3387	0.344	
6.25		0.3407	0.3473	0.3407	0.36	
12.5		0.3427	0.3427	0.3353	0.342	
25		0.3433	0.338	0.3393	0.3407	
50		0.3353	0.3667	0.3427	0.3387	
100		0.3433	0.346	0.3367	0.3433	

0.3403

0.3458

0.3423

0.34

0.3407

0.3433

0.338

0.3353

0.3367

0.3433

0.3667

0.346

0.67%

4.11%

1.16%

-0.15%

-1.77%

-0.74%

4

4

4



0.3423

0.3423

0.3423

0.35%

0.35%

0.35%

Report Date:

20 Apr-22 15:52 (p 4 of 4)

Test Code/ID:

VCF0322.207fml / 08-2692-8719

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 14-2233-1971 Analyzed:

20 Apr-22 15:50

Endpoint: Mean Dry Biomass-mg Analysis: Linear Interpolation (ICPIN) **CETIS Version:**

CETISv2.1.1

Status Level:

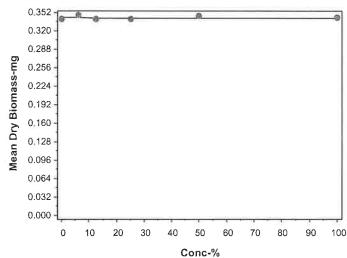
008-463-000-3

Edit Date:

20 Apr-22 15:44

MD5 Hash: 0183935EDC45CEAF0B96C194EE25AC99 Editor ID:

Graphics



20 Apr-22 15:52 (p 1 of 2)

Test Code/ID:

VCF0322.207fm1 / 08-2692-8719

Fathead Minn	ow 7-d Larval S	urvival	and Growt	h Test				Aquatic Bioassay & Consulting Labs, Inc					
Batch ID: Start Date: Ending Date: Test Length:	06-2867-8540 29 Mar-22 11:4: 05 Apr-22 13:12 7d 1h	2	Test Type: Protocol: Species: Taxon:	Growth-Surviv EPA/821/R-02 Pimephales pr Actinopterygii	-013 (2002)			Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age: <24		
•	12-9293-9179 28 Mar-22 13:10 28 Mar-22 13:40		Code: Material: CAS (PC): Client:	VCF0322.207f Sample Water Ventura Count		d Protocti	ion Dietri	Project: Source: Station:	NPDES Storm Bioassay Repo ME-VR2		Season (Con		
			Olletti.	ventura Count	y vvalersile	u Fiolecti	ION DISTIN						
Alkalinity (Ca	, .												
Conc-%	Code	Count		95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count		
0	N	8	60	60	60	60	60	0	0	0.00%	0		
100		8	96	96	96	96	96	0	0	0.00%	0		
Overall		16	78	68.09	87.91	60	96	4.648	18.59	23.83%	0 (0%)		
Conductivity-	µmhos												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count		
0	N	8	364.1	362.2	366.1	360	367	0.294	3 2.357	0.65%	0		
6.25		8	440	433.3	446.7	430	450	0.995	7.964	1.81%	0		
12.5		8	475.6	469.7	481.6	469	490	0.891	3 7.13	1.50%	0		
25		8	552.3	543.7	560.8	531	565	1.274	10.19	1.85%	0		
50		8	717.8	710.9	724.6	710	730	1.028	8.225	1.15%	0		
100		8	1054	1047	1060	1040	1062	0.949	7.592	0.72%	0		
Overall		48	600.6	532.9	668.2	360	1062	33.64	233	38.80%	0 (0%)		
Dissolved Ox	ygen-mg/L												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count		
0	N	8	7.588	7.443	7.732	7.4	7.8	0.021	59 0.1727	2.28%	0		
6.25		8	7.675	7.559	7.791	7.5	7.9	0.017	36 0.1389	1.81%	0		
12.5		8	7.65	7.561	7.739	7.5	7.8	0.013	36 0.1069	1.40%	0		
25		8	7.65	7.55	7.75	7.5	7.9	0.014	94 0.1195	1.56%	0		
50		8	7.637	7.52	7.755	7.4	7.9	0.017	0.1408	1.84%	0		
100		8	7.637	7.52	7.755	7.4	7.9	0.017	0.1408	1.84%	0		
Overall		48	7.64	7.601	7.678	7.4	7.9	0.019	24 0.1333	1.74%	0 (0%)		
Hardness (Ca	CO3)-mg/L												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count		
0	N	8	83	83	83	83	83	0	0	0.00%	0		
100		8	340	340	340	340	340	0	0	0.00%	0		
Overall		16	211.5	140.8	282.2	83	340	33.18	132.7	62.75%	0 (0%)		
pH-Units													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count		
0	N	8	8.05	7.973	8.127	8	8.2	0.011		1.15%	0		
6.25		8	7.913	7.808	8.017	7.7	8	0.015		1.58%	0		
12.5		8	7.9	7.8	8	7.7	8	0.014		1.51%	0		
25		8	7.888	7.766	8.009	7.6	8	0.018	22 0.1458	1.85%	0		
50		8	7.838	7.729	7.946	7.6	8	0.016	28 0.1302	1.66%	0		
100		8	7.838	7.729	7.946	7.6	8	0.0162	28 0.1302	1.66%	0		

1.75%

0 (0%)

7.6

8.2

0.01996

0.1383

7.944

48

Overall

7.904

7.864

CETIS Measurement Report

Report Date:

20 Apr-22 15:52 (p 2 of 2)

Test Code/ID:

VCF0322.207fml / 08-2692-8719

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay &	Consulting	Labs,	Inc.
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Temperature-°C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.1	24.01	24.19	24	24.2	0.01336	0.1068	0.44%	0
12.5		8	24.09	24	24.17	24	24.2	0.01238	0.09904	0.41%	0
25		8	24.09	23.99	24.18	24	24.3	0.01407	0.1126	0.47%	0
50		8	24.11	24	24.23	24	24.4	0.01695	0.1356	0.56%	0
100		8	24.15	24.02	24.28	24	24.5	0.02004	0.1603	0.66%	0
Overall		48	24.09	24.06	24.12	24	24.5	0.01691	0.1171	0.49%	0 (0%)



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-VR2
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.207

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL NOEC = 100.00 %TUc = 1.00

EC25 = >100.00 % EC50 = >100.00 %

REPRODUCTION NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 % IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

20 Apr-22 15:56 (p 1 of 2)

Test Code/ID: VCF0322.207cer / 02-3953-8630

						_		ode/ID:				-3953-	-
Ceriodaphnia	7-d Survival and	d Reproduction T	est					Aqua	tic Bi	oassay & C	Consulting	Labs,	lnc.
Batch ID: Start Date: Ending Date: Test Length:	04-1449-1933 29 Mar-22 11:45 05 Apr-22 13:12 7d 1h	Test Type; Protocol: Species: Taxon:	Reproduction-S EPA/821/R-02 Ceriodaphnia o Branchiopoda	-013 (2002)			Ana Dilu Brin Sou	ent:	Not A	ratory Wate Applicable itic Biosyste		Age:	<24
Receipt Date:	11-8531-0488 : 28 Mar-22 13:10 : 28 Mar-22 13:40	Code: Material: CAS (PC):	VCF0322.2070 Sample Water	er				ect: rce: ion:		ssay Report	ater Wet Se	ason (Cor
Sample Age:	23h (14.5 °C)	Client:	Ventura Count	y Watershed	Protectio	n [Distri						
Multiple Com	parison Summar	у											
Analysis ID	Endpoint	Com	parison Method			✓	NOEL	LOEL	-	TOEL	PMSD	TU	
02-4357 - 9826	7d Survival Rate		er Exact/Bonferro				100	>100			***	1	
19-9458-3947	Reproduction	Dunn	ett Multiple Com	parison Test	t		100	>100			12.0%	1	
Point Estimat	te Summary												
Analysis ID	Endpoint	Poin	t Estimate Meth	od		✓	Level	%		95% LCL	95% UCL	TU	
19-4795-2575	7d Survival Rate	Linea	ır Interpolation (I	CPIN)			EC15	>100			***	<1	
							EC20	>100			***	<1	
						√.	EC25	>100		***		<1	
							EC40	>100		***		<1	
10 0000 0700	5 1 1		1.4 1.11 /1	00111			EC50	>100		***		<1	_
10-2388-6769	Reproduction	Linea	r Interpolation (I	CPIN)			IC15	>100		***		<1	
							IC20	>100				<1 <1	
						√ √	IC25 IC40	>100 >100				<1	
							IC50	>100				<1	
Test Acceptal	bility				TAC		mito						
Analysis ID	Endpoint	Attrik	oute	Test Stat	Lower	LI	Upper	Over	ар	Decision			
02-4357-9826	7d Survival Rate	Conti	ol Resp	1	0.8		<<	Yes		Passes Cr	iteria		
19-4795-2575	7d Survival Rate	Conti	ol Resp	1	8.0		<<	Yes		Passes Cr	iteria		
	Reproduction	Conti	rol Resp	25.7	15		<<	Yes		Passes Cr	iteria		
19-9458-3947	Reproduction	Conti	ol Resp	25.7	15		<<	Yes		Passes Cr	iteria		
19-9458-3947	Reproduction	PMS	D	0.1195	0.13		0.47	Yes		Below Crit	eria		
7d Survival R	late Summary												
Conc-%	Code	Count Mean	95% LCL	95% UCL	Min		Max	Std E	rr	Std Dev	CV%	%Eff	
0	N	10 1.000	1.0000	1.0000	4 0000		1.0000	0.000	0	0.0000	0.00%	0.00	
					1.0000						0.00%	0.00	
		10 1.000		1.0000	1.0000		1.0000	0.000		0.0000			
12.5		10 1.000	00 1.0000	1.0000 1.0000	1.0000 1.0000		1.0000	0.000	0	0.0000	0.00%	0.00	
12.5 25		10 1.000 10 1.000	1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000		1.0000 1.0000	0.000	0	0.0000 0.0000	0.00% 0.00%	0.00	%
12.5 25 50		10 1.000 10 1.000 10 1.000	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	0.000 0.000 0.000	0 0 0	0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.000	% %
12.5 25 50 100	a Summary	10 1.000 10 1.000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000		1.0000 1.0000	0.000	0 0 0	0.0000 0.0000	0.00% 0.00%	0.00	% %
12.5 25 50 100 Reproductio n	n Summary Code	10 1.000 10 1.000 10 1.000 10 1.000	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	0.000 0.000 0.000 0.000	0 0 0 0	0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00%	0.000	% % %
12.5 25 50 100 Reproduction Conc-%	Code	10 1.000 10 1.000 10 1.000 10 1.000 Count Mean	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	0.000 0.000 0.000 0.000	0 0 0 0	0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00%	0.000	% % %
12.5 25 50 100 Reproduction Conc-%	•	10 1.000 10 1.000 10 1.000 10 1.000	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	0.000 0.000 0.000 0.000	0 0 0 0	0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00%	0.00° 0.00° 0.00°	% % % ec
12.5 25 50 100 Reproduction Conc-% 0 6.25	Code	10 1.000 10 1.000 10 1.000 10 1.000 Count Mear 10 25.7	1.0000 1.0000 00 1.0000 00 1.0000 1.0000 1 95% LCL 24.31	1.0000 1.0000 1.0000 1.0000 1.0000 95% UCL 27.09	1.0000 1.0000 1.0000 1.0000 1.0000 Min		1.0000 1.0000 1.0000 1.0000 Max 29	0.000 0.000 0.000 0.000 Std E	0 0 0 0 5 5	0.0000 0.0000 0.0000 0.0000 Std Dev	0.00% 0.00% 0.00% 0.00% CV%	0.00° 0.00° 0.00° %Eff	% % % ec t
12.5 25 50 100 Reproduction Conc-% 0 6.25 12.5	Code	10 1.000 10 1.000 10 1.000 10 1.000 Count Mear 10 25.7 10 26	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 24.31 24.31	1.0000 1.0000 1.0000 1.0000 1.0000 95% UCL 27.09 27.85	1.0000 1.0000 1.0000 1.0000 1.0000 Min 23 22		1.0000 1.0000 1.0000 1.0000 Max 29 29	0.000 0.000 0.000 0.000 Std E 0.615 0.816	0 0 0 0 5 5 5	0.0000 0.0000 0.0000 0.0000 Std Dev 1.947 2.582	0.00% 0.00% 0.00% 0.00% CV% 7.57% 9.93%	0.00° 0.00° 0.00° 0.00° %Eff 0.00° -1.17	% *** ** ** ** ** ** ** ** ** ** ** ** *
6.25 12.5 25 50 100 Reproduction Conc-% 0 6.25 12.5 25	Code	10 1.000 10 1.000 10 1.000 10 1.000 Count Mear 10 25.7 10 26 10 28.4	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 24.31 24.15 26.29	1.0000 1.0000 1.0000 1.0000 1.0000 95% UCL 27.09 27.85 30.51	1.0000 1.0000 1.0000 1.0000 1.0000 Min 23 22 23		1.0000 1.0000 1.0000 1.0000 Max 29 29 32	0.000 0.000 0.000 0.000 Std E 0.615 0.816 0.933	0 0 0 0 5 5 3	0.0000 0.0000 0.0000 0.0000 Std Dev 1.947 2.582 2.951	0.00% 0.00% 0.00% 0.00% CV% 7.57% 9.93% 10.39%	0.00° 0.00° 0.00° 0.00° %Eff 0.00° -1.17 -10.5	% % fect % 59%



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Test Code/ID: VCF0322.207cer / 02-3953-8630

Ceriodaphnia	7-d	Survival	and	Reproduction	Test
Ochloadpinna		Carvida	4110	. topi oddotion	

7d Survival Ra	ate Detail						MD	5: 521A0D	F2AE1E590	72392DBA	BE0C7AEFC
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Reproduction	Reproduction Detail MD5: 7B5326ECBBC909D8EEE263A80005C974												
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10		
0	N	26	27	24	26	29	28	24	24	26	23		
6.25		23	28	29	22	26	27	28	24	29	24		
12.5		30	28	23	24	30	30	27	31	29	32		
25		31	30	26	30	24	26	32	31	28	37		
50		29	34	29	26	28	27	34	30	29	37		
100		31	31	37	31	31	30	37	33	29	29		

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Report Date: Test Code/ID: 20 Apr-22 15:56 (p 1 of 2)

VCF0322.207cer / 02-3953-8630

Ceriodaphnia	7-d Surviv	al and	Repro	oduc	tion Test					Aqu	atic B	ioassay &	Consulting	g Labs, Inc.
Analyzed:	19-9458-39 20 Apr-22 20 Apr-22	15:55		Anal	ysis: Pa	Parametric-Control vs Treatments					CETIS Version: CETISv2.1.1 Status Level: 1 Editor ID: 008-463-000-3			
		11:45			ocol: El	eproduction-s PA/821/R-02- eriodaphnia c ranchiopoda	-013 (2002)		Di Br	alyst: luent: ine: urce:	Not /	oratory Wat Applicable atic Biosyst		Age: <24
Sample ID: Sample Date: Receipt Date: Sample Age:	28 Mar-22	13:10 13:40		Code Mate CAS Clier	rial: Sa (PC):	CF0322.207c ample Water entura Count		l Protection	Sc St	oject: eurce: ation:		ssay Repo		Season (Con
Data Transfor	m		Alt H	yp				NOEL	LOEL	TOE	EL	TU	MSDu	PMSD
Untransformed			C > T	1.0				100	>100	***		1.	3.071	11.95%
Dunnett Multip			Test											
	vs Conc	-%				t Critical	MSD	P-Type	P-Value		ision(
Negative Contr					-0.2236	2.289	3.071	CDF	0.8913			icant Effec		
	12.5				-2.012	2.289	3.071	CDF	0.9995		_	icant Effec		
	25				-2.832	2.289	3.071	CDF	1.0000		-	icant Effec		
	50				-3.429	2.289	3.071	CDF	1.0000		_	icant Effec		
	100			10	-4.621	2.289	3.071	CDF	1.0000	NON	-Signii	icant Effec	L	
Test Acceptab	ility Criteri	ia	TA	C Li	mits									
Attribute	Test	Stat	Lowe	Г	Upper	Overlap	Decision							
Control Resp	25.7		15		<<	Yes	Passes C	riteria						
PMSD	0.119	95	0.13		0.47	Yes	Below Crit	teria						
ANOVA Table												+		
Source	Sum	Squa	res		Mean So	uare	DF	F Stat	P-Value	Dec	ision(a:5%)		_
Between	297.9	933			59.5867		5	6.621	7.1E-05	Sigr	nificant	Effect		
Error	486				9		54	3						
Total	783.9	933					59							
ANOVA Assum	nptions Te	sts												
Attribute	Test						Test Stat	Critical	P-Value	Dec	ision(α:1%)		
Variance	Bartle	ett Equ	ality o	f Vari	ance Tes	t	4.271	15.09	0.5111	Equ	al Vari	ances		
	Leve	ne Equ	uality o	f Var	iance Tes	t	0.7723	3.377	0.5739	Equ	al Vari	ances		
	Mod	Leven	e Equa	lity o	f Variance	e Test	0.4141	3.377	0.8369	Equ	al Vari	ances		
Distribution	Ande	rson-E	Darling	A2 T	est		0.247	3.878	0.7811	Nor	mal Dis	stribution		
	D'Ag	ostino	Kurtos	is Te	st		0.04188	2.576	0.9666	Nori	mal Dis	stribution		
					_									

-											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	25.7	24.31	27.09	26	23	29	0.6155	7.57%	0.00%
6.25		10	26	24.15	27.85	26.5	22	29	0.8165	9.93%	-1.17%
12.5		10	28.4	26.29	30.51	29.75	23	32	0.9333	10.39%	-10.51%
25		10	29.5	26.84	32.16	30	24	37	1.176	12.61%	-14.79%
50		10	30.3	27.78	32.82	29	26	37	1.116	11.65%	-17.90%
100		10	31.9	29.81	33.99	31	29	37	0.9244	9.16%	-24.12%

1.173

1.377

0.08975

0.9848

2.576

9.21

0.1331

0.9459

0.2409

0.5024

0.2506

0.6620

Normal Distribution

Normal Distribution

Normal Distribution

Normal Distribution



Reproduction Summary

D'Agostino Skewness Test

Kolmogorov-Smirnov D Test

Shapiro-Wilk W Normality Test

D'Agostino-Pearson K2 Omnibus Test

Report Date: Test Code/ID: 20 Apr-22 15:56 (p 2 of 2)

VCF0322.207cer / 02-3953-8630

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 19-9458-3947

20 Apr-22 15:55

Endpoint: Reproduction

Analysis: Parametric-Control vs Treatments

CETIS Version: Status Level:

CETISv2.1.1

Edit Date: 20 Apr-22 15:54 MD5 Hash: 7B5326ECBBC909D8EEE263A80005C974

Editor ID:

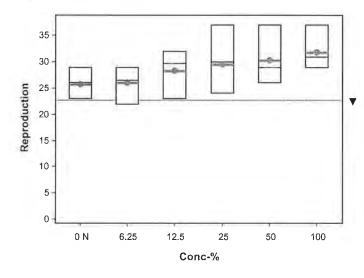
008-463-000-3

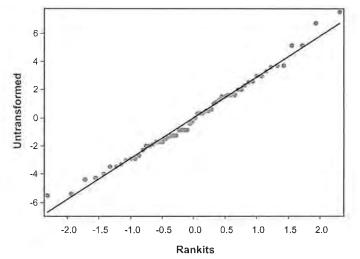
Reproduction Detail

Analyzed:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	26	27	24	26	29	28	24	24	26	23
6.25		23	28	29	22	26	27	28	24	29	24
12.5		30	28	23	24	30	30	27	31	29	32
25		31	30	26	30	24	26	32	31	28	37
50		29	34	29	26	28	27	34	30	29	37
100		31	31	37	31	31	30	37	33	29	29

Graphics





20 Apr-22 15:56 (p 1 of 4)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

Ceriod	aphnia	7-d Survival and	d Reprodu	ction T	est				Aqu	uatic Bi	ioassay &	Consulting	g Labs, Inc
Analys Analyz Edit Da	ed:	19-4795-2575 20 Apr-22 15:55 20 Apr-22 15:54	Ana	lysis:	7d Survival Ra Linear Interpolations 521A0DF2AE1	ation (ICPIN	•	7455	CETIS Ve Status Le Editor ID:	vel:	CETISV: 1 008-463		
							_	777			000-400	-000-0	
Batch		04-1449-1933			Reproduction-S	` '			Analyst:				
Start D		29 Mar-22 11:45		ocol:	EPA/821/R-02	. ,			Diluent:		ratory Wa	ter	
-	g Date: ength:	05 Apr-22 13:12	•	cies:	Ceriodaphnia d	ubia			Brine:		Applicable		
		7d 1n	Tax	on:	Branchiopoda				Source:	Aqua	atic Biosys	tems, CO	Age: <24
Sample		11-8531-0488	Cod		VCF0322.207				Project:			water Wet S	Beason (Co
		28 Mar-22 13:10		erial:	Sample Water				Source:		ssay Repo	ort	
		28 Mar-22 13:40		(PC):					Station:	ME-	√R2		
Sample	e Age:	23h (14.5 °C)	Clie	nt:	Ventura Count	y Watershed	Protectio	n Distri					
Linear	Interpo	olation Options											
X Tran	sform	Y Transform		d	Resamples	Exp 95%	CL Me	thod					
Linear		Linear	0		280	Yes	Tw	o-Point	Interpolatio	n			
Test A	cceptal	oility Criteria	TAC L	imits									
Attribu	te	Test Stat		Uppe	r Overlap	Decision							
Control	Resp	1	0.8	<<	Yes	Passes C	riteria						
Point E	stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
EC15	>100			<1	***								
EC20	>100			<1	***								
EC25	>100			<1	-								
EC40	>100			<1									
EC50	>100	175		<1	77	***							
7d Sur	vival R	ate Summary				Calcu	lated Var	iate(A/E	3)			Isotor	nic Variate
Conc-%	/ 6	Code	Count	Mean	Median	Min	Max	CV%	% %E	ffect	A/B	Mean	%Effect
0		N	10	1.000	0 1.0000	1.0000	1.0000	0.00	0.0	0%	10/10	1.0000	0.00%
6.25			10	1.000	0 1.0000	1.0000	1.0000	0.00	0.0	0%	10/10	1.0000	0.00%
12.5			10	1.000		1.0000	1.0000	0.00			10/10	1.0000	0.00%
25			10	1.000		1.0000	1.0000	0.00			10/10	1.0000	0.00%
50			10	1.000	0 1.0000	1.0000	1.0000	0.00			10/10	1.0000	0.00%
100			10	1.000	0 1.0000	1.0000	1.0000	0.00	0.0	0%	10/10	1.0000	0.00%
		ate Detail											
Conc-%	/o	Code	Rep 1	Rep 2		Rep 4	Rep 5	Rep			Rep 8	Rep 9	Rep 10
0		N	1.0000	1.000		1.0000	1.0000	1.00			1.0000	1.0000	1.0000
6.25			1.0000	1.000		1.0000	1.0000	1.00			1.0000	1.0000	1.0000
12.5			1.0000	1.000	0 1.0000	1.0000	1.0000	1.00	00 1.0	000	1.0000	1.0000	1.0000
25			1.0000	1.000	0 1.0000	1.0000	1.0000	1.00	00 1.0	000	1.0000	1.0000	1.0000
50			1.0000	1.000	0 1.0000	1.0000	1.0000	1.00	00 1.0	000	1.0000	1.0000	1.0000
100			1.0000	1.000	0 1.0000	1.0000	1.0000	1.00	00 1.0	000	1.0000	1.0000	1.0000
7d Sur	vival R	ate Binomials											
			5 4					-		-	Б 0		D 40



Rep 9

1/1

1/1

1/1

1/1

1/1

1/1

Rep 10

1/1

1/1

1/1

1/1

1/1

1/1

Rep 4

1/1

1/1

1/1

1/1

1/1

1/1

Rep 5

1/1

1/1

1/1

1/1

1/1

1/1

Rep 6

1/1

1/1

1/1

1/1

1/1

1/1

Rep 7

1/1

1/1

1/1

1/1

1/1

1/1

Rep 8

1/1

1/1

1/1

1/1

1/1

1/1

Code

Ν

Rep 1

1/1

1/1

1/1

1/1

1/1

1/1

Rep 2

1/1

1/1

1/1

1/1

1/1

1/1

Rep 3

1/1

1/1

1/1

1/1

1/1

1/1

Conc-%

0

6.25

12.5

25

50

100

Report Date:

20 Apr-22 15:56 (p 2 of 4)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed:

19-4795-2575 20 Apr-22 15:55 20 Apr-22 15:54

Endpoint: 7d Survival Rate

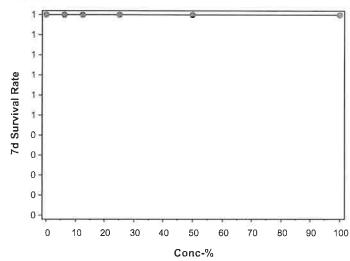
Analysis: Linear Interpolation (ICPIN) MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF

CETIS Version: Status Level: Editor ID:

CETISv2.1.1

008-463-000-3

Edit Date: Graphics



Report Date:

20 Apr-22 15:56 (p 3 of 4)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

									est Co	de/ID:	VCF032	2.207cer / ()2-3953 - 863
Ceriod	aphnia	7-d Survival an	d Reproduc	ction Te	est					Aquatic B	ioassay &	Consultin	g Labs, Inc
Analys Analyz		10-2388-6769 20 Apr-22 15:55		point: lysis:	Reproduction Linear Interpola	ation (ICDIA	1\			S Version:	CETISV	2.1.1	
Edit Da		20 Apr-22 15:54		-	7B5326ECBBC	•	•	005C974	Edito	is Level: or ID:	1 008-463	3-000-3	
Batch I	ID:	04-1449-1933	Test	Type:	Reproduction-S	Survival (7d)		Analy	yst:			
Start D	ate:	29 Mar-22 11:45	Prof	ocol:	EPA/821/R-02-	-013 (2002)			Dilue	nt: Labo	oratory Wa	ater	
Ending	Date:	05 Apr-22 13:12	Spe	cies:	Ceriodaphnia d	lubia			Brine	: Not	Applicable	:	
Test Le	ength:	7d 1h	Tax	on:	Branchiopoda				Sour	ce: Aqua	atic Biosys	stems, CO	Age: <24
Sample	e ID:	11-8531-0488	Cod	e:	VCF0322.207c	er			Proje	ct: NPD	ES Storm	water Wet	Season (Co
Sample	e Date:	28 Mar-22 13:10	Mate	erial:	Sample Water				Sour	ce: Bioa	ssay Repo	ort	
Receip	t Date:	28 Mar-22 13:40	CAS	(PC):					Statio	on: ME-	VR2		
Sample	e Age:	23h (14.5 °C)	Clie	nt:	Ventura County	y Watershe	d Protect	tion Distri					
Linear	Interpo	olation Options											
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	CL N	lethod					
Linear		Linear	1735	526	280	Yes	Т	wo-Point	Interpo	olation			
Test A	cceptal	oility Criteria	TAC L	imits									
Attribu	te	Test Stat	Lower	Uppe	r Overlap	Decision							
Control	Resp	25.7	15	<<	Yes	Passes C	Criteria						
Point E	Stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
IC15	>100	***	***	<1	***	***							
IC20	>100	***	***	<1		***							
IC25	>100		***	<1	***	***							
IC40	>100			<1	***	***							
IC50	>100		-	<1									
Reprod	duction	Summary				Ca	lculated	Variate				Isoto	nic Variate
Conc-%	%	Code	Count	Mean	Median	Min	Max	CV%	6	%Effect		Mean	%Effect
0		N	10	25.7	26	23	29	7.57		0.00%		28.63	0.00%
6.25			10	26	26.5	22	29	9.93		-1.17%		28.63	0.00%
12.5			10	28.4	29.75	23	32	10.3		-10.51%		28.63	0.00%
25			10	29.5	30	24	37	12.6		-14.79%		28.63	0.00%
50			10	30.3	29	26	37	11.6		-17.90%		28.63	0.00%
100			10	31.9	31	29	37	9.16	5%	-24.12%		28.63	0.00%
Reprod	duction	Detail											
Conc-%	6	Code	Rep 1	Rep 2		Rep 4	Rep 5		6	Rep 7	Rep 8	Rep 9	Rep 10
0		N	26	27	24	26	29	28		24	24	26	23
6.25			23	28	29	22	26	27		28	24	29	24
12.5			30	28	23	24	30	30		27	31	29	32



Report Date:

20 Apr-22 15:56 (p 4 of 4)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

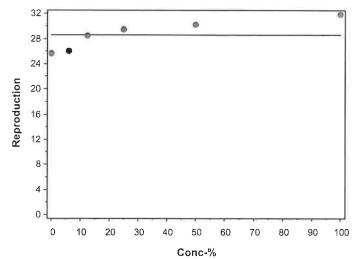
10-2388-6769 Analysis ID: Analyzed: 20 Apr-22 15:55

Endpoint: Reproduction Analysis: Linear Interpolation (ICPIN)

CETIS Version: CETISv2.1.1 Status Level:

Edit Date: 20 Apr-22 15:54 008-463-000-3

Graphics



20 Apr-22 15:56 (p 1 of 2)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

Ceriodaphnia	7-d Sı	urvival and	d Repro	duction Te	st					Aqua	tic Bio	assay &	Consultin	ıg Labs, Inc
Analysis ID:		57-9826		•	7d Survival Ra				CETIS	S Vers	ion:	CETISV	2.1.1	
Analyzed:		r-22 15:55			STP 2xK Cont				Status	s Leve	el:	1		
Edit Date:	20 Ap	r-22 15:54	N	ID5 Hash:	521A0DF2AE	1E59D72392	DBABE0C	7AEF	Edito	r ID:		008-463	3-000-3	
Batch ID:	04-14	49-1933	Т	est Type:	Reproduction-	Survival (7d)			Analy	st:				
Start Date:		r-22 11:45	Р	rotocol:	EPA/821/R-02	-013 (2002)			Dilue	nt:	Labora	atory Wa	iter	
Ending Date:	05 Ap	r-22 13:12	S	pecies:	Ceriodaphnia	dubia			Brine	:	Not Ap	plicable		
Test Length:	7d 1h		Т	axon:	Branchiopoda				Sourc	:e:	Aquati	c Biosys	stems, CO	Age: <2
Sample ID:	11-853	31-0488	С	ode:	VCF0322.207	cer			Proje	ct:	NPDE	S Storm	water Wet	Season (Co
Sample Date:	28 Ma	r-22 13:10	M	laterial:	Sample Water				Sourc	e:	Bioass	say Repo	ort	
Receipt Date:	28 Ma	r-22 13:40	С	AS (PC):					Statio	n:	ME-VF	₹2		
Sample Age:	23h (1	4.5 °C)	С	lient:	Ventura Count	y Watershed	d Protection	Distri						
Data Transfor	m		Alt Hy	0			NOEL	LOE	L	TOEL		TU		
Untransformed	Í		C > T				100	>100				1		
Fisher Exact/E	Bonfer	roni-Holm	Test											
Control	vs	Conc-%		Test S	tat P-Type	P-Value	Decision	(α:5%)						
Negative Contr	rol	6.25		1.0000	Exact	1.0000	Non-Sign	ificant E	ffect					
		12.5		1.0000	Exact	1.0000	Non-Sign	ificant E	Effect					
		25		1.0000	Exact	1.0000	Non-Sign	ificant E	Effect					
		50		1.0000	Exact	1.0000	Non-Sign	ificant E	Effect					
		100		1.0000	Exact	1.0000	Non-Sign	ificant E	Effect					
Test Acceptab	oility C	riteria	TAC	Limits										
Attribute		Test Stat	Lower	Upper	Overlap	Decision								
Control Resp		1	0.8	<<	Yes	Passes Cr	riteria							
7d Survival Ra	ate Fre	quencies												
Conc-%		Code	NR	R	NR + R	Prop NR	Prop R	%Eff	ect					
0	-	٧	10	0	10	1.0000	0.0000	0.009	%					
6.25			10	0	10	1.0000	0.0000	0.009	%					
12.5			10	0	10	1.0000	0.0000	0.009	%					
25			10	0	10	1.0000	0.0000	0.009	6					
50			10											
100				0	10	1.0000	0.0000	0.009	%					
			10	0	10 10	1.0000 1.0000								
7d Survival Ra	ate Sur	nmary					0.0000	0.009						
		nmary Code				1.0000	0.0000	0.009		Max	5	Std Err	CV%	%Effect
Conc-%	(10	0	10 95% LC L	1.0000	0.0000	0.009	%	Max 1.000		Std Err 0.0000	CV%	%Effect 0.00%
Conc-%	(Code	10 Count	0 Mean	95% LCL	1.0000 95% UCL	0.0000 0.0000 Median	0.009 0.009 Min	00		0 0			
Conc-% 0 6.25	(Code	10 Count 10	0 Mean 1.0000	95% LCL 1.0000 1.0000	1.0000 95% UCL 1.0000	0.0000 0.0000 Median 1.0000	0.009 0.009 Min 1.000	00	1.0000	0 0	0.0000	0.00%	0.00%
Conc-% 0 6.25 12.5	(Code	10 Count 10 10	0 Mean 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000	0.009 0.009 Min 1.000	00 00 00	1.0000	0 0	0.0000	0.00% 0.00%	0.00% 0.00%
Conc-% 0 3.25 12.5 25	(Code	10 Count 10 10 10	0 Mean 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000	0.009 0.009 Min 1.000 1.000	% 00 00 00	1.0000 1.0000 1.0000	0 0	0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%
Conc-% 5.25 12.5 25	(Code	10 Count 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000	% 00 00 00 00 00	1.0000 1.0000 1.0000	0 0 0 0 0 0	0.000.000.000.000.0000.0000.0000.0000.0000	0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00%
Conc-% 3.25 12.5 25 100	1	Code N	10 Count 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000 1.000	% 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000	0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 5.25 12.5 25 50 100 7d Survival Ra	(h	Code N	10 Count 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000 1.000	% 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000	0 (0 0 (0 0 (0 0 (0	0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 7d Survival Ra	(h	Code N ail	Count 10 10 10 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000 1.000	% 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 1.0000	0 C 0 C 0 C 0 C 0 C	0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 3.25 12.5 50 100 7d Survival Ra	(nate Det	Code N ail	Count 10 10 10 10 10 10 10 Rep 1	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5	0.009 0.009 1.000 1.000 1.000 1.000	% 000 000 000 000 000 000 000	1.0000 1.0000 1.0000 1.0000 1.0000 Rep 7	0 CO	0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
Conc-% 3.25 12.5 50 100 7d Survival Ra Conc-% 3.25	(nate Det	Code N ail	Count 10 10 10 10 10 10 10 10 11 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5	0.009 0.009 1.000 1.000 1.000 1.000 1.000	6 00 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 1.0000 Rep 7	0 CO	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Rep 8	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 10
Conc-% 0 6.25 12.5 25 50 100 7d Survival Ra Conc-% 0 6.25	(nate Det	Code N ail	Count 10 10 10 10 10 10 10 10 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000 1.000 1.000 1.000 1.000	6 00 00 00 00 00 00 00 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 1.0000 Rep 7 1.0000	0 CO	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Rep 8	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 9 1.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 10 1.0000
7d Survival Ra Conc-% 0 6.25 12.5 50 100 7d Survival Ra Conc-% 0 6.25 12.5	(nate Det	Code N ail	Count 10 10 10 10 10 10 10 10 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	6 00 00 00 00 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 1.0000 Rep 7 1.0000 1.0000	0 CO	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Rep 8	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 9 1.0000 1.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 10 1.0000 1.0000



Report Date:

20 Apr-22 15:56 (p 2 of 2)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

Ceriodaphnia 7-d Survival and Reproduction Test

20 Apr-22 15:54

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 02-4357-9826 Analyzed:

20 Apr-22 15:55

Endpoint: 7d Survival Rate

Analysis: STP 2xK Contingency Tables MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF

CETIS Version:

Editor ID:

Status Level:

008-463-000-3

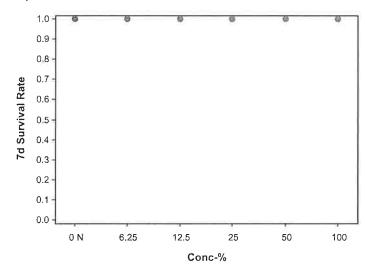
CETISv2.1.1

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics

Edit Date:



Report Date: Test Code/ID: 20 Apr-22 15:56 (p 1 of 2)

VCF0322.207cer / 02-3953-8630

Ceriodaphnia	7-d Survival a	ınd Repr	oduction Te	est				Aqua	tic Bioassay &	Consultin	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:	04-1449-1933 29 Mar-22 11: 05 Apr-22 13: 7d 1h		Test Type: Protocol: Species: Taxon:	Reproduction- EPA/821/R-02 Ceriodaphnia Branchiopoda	-013 (2002)	•		Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age: <24
	11-8531-0488 28 Mar-22 13: 28 Mar-22 13:		Code: Material: CAS (PC):	VCF0322.2070 Sample Water				Project: Source: Station:	NPDES Storm Bioassay Repo ME-VR2		Season (Con
Sample Age:	23h (14.5 °C)		Client:	Ventura Count	ty Watershe	d Protecti	on Distri				
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Count	. Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	60	60	60	60	60	0	0	0.00%	0
100		8	96	96	96	96	96	0	0	0.00%	0
Overall		16	78	68.09	87.91	60	96	4.648	18.59	23.83%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	364.1	362.2	366.1	360	367	0.2946	3 2.357	0.65%	0
6.25		8	440	433.3	446.7	430	450	0.995	7.964	1.81%	0
12.5		8	475.6	469.7	481.6	469	490	0.8913	3 7.13	1.50%	0
25		8	552.3	543.7	560.8	531	565	1.274	10.19	1.85%	0
50		8	717.8	710.9	724.6	710	730	1.028	8.225	1.15%	0
100		8	1054	1047	1060	1040	1062	0.949	7.592	0.72%	0
Overall		48	600.6	532.9	668.2	360	1062	33.64	233	38.80%	0 (0%)
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Ei	r Std Dev	CV%	QA Count
0	N	8	7.588	7.443	7.732	7.4	7.8	0.0215	59 0.1727	2.28%	0
6.25		8	7.675	7.559	7.791	7.5	7.9	0.0173	36 0.1389	1.81%	0
12.5		8	7.65	7.561	7.739	7.5	7.8	0.0133	36 0.1069	1.40%	0
25		8	7.65	7.55	7.75	7.5	7.9	0.0149	94 0.1195	1.56%	0
50		8	7.637	7.52	7.755	7.4	7.9	0.0176	0.1408	1.84%	0
100		8	7.637	7.52	7.755	7.4	7.9	0.0176	0.1408	1.84%	0
Overall		48	7.64	7.601	7.678	7.4	7.9	0.0192	24 0.1333	1.74%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	8	83	83	83	83	83	0	0	0.00%	0
100		8	340	340	340	340	340	0	0	0.00%	0
Overall		16	211.5	140.8	282.2	83	340	33.18	132.7	62.75%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	N	8	8.05	7.973	8.127	8	8.2	0.0115	0.09258	1.15%	0
6.25		8	7.913	7.808	8.017	7.7	8	0.0155	0.1246	1.58%	0
12.5		8	7.9	7.8	8	7.7	8	0.0149	0.1195	1.51%	0
25		8	7.888	7.766	8.009	7.6	8	0.0182	22 0.1458	1.85%	0
50		8	7.838	7.729	7.946	7.6	8	0.0162	28 0.1302	1.66%	0
100		8	7.838	7.729	7.946	7.6	8	0.0162	28 0.1302	1.66%	0



1.75%

0 (0%)

7.944

7.6

0.01996

0.1383

7.904

7.864

Overall

CETIS Measurement Report

Report Date:

20 Apr-22 15:56 (p 2 of 2)

Test Code/ID:

VCF0322.207cer / 02-3953-8630

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.	Aquatic	Bioassay	8	Consulting	Labs.	Inc
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Temperature-°	°C										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.1	24.01	24.19	24	24.2	0.01336	0.1068	0.44%	0
12.5		8	24.09	24	24.17	24	24.2	0.01238	0.09904	0.41%	0
25		8	24.09	23.99	24.18	24	24.3	0.01407	0.1126	0.47%	0
50		8	24.11	24	24.23	24	24.4	0.01695	0.1356	0.56%	0
100		8	24.15	24.02	24.28	24	24.5	0.02004	0.1603	0.66%	0
Overall		48	24.09	24.06	24.12	24	24.5	0.01691	0.1171	0.49%	0 (0%)



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-VR2
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.207

ACUTE 96 HOURS HYALELLA AZTECA SURVIVAL BIOASSAY

% Survival = 100 % Survival in 100% Sample

*TUa = 0.00

* TU(a) Is calculated by: log (% Mortality)/1.7

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

07 Apr-22 10:42 (p 1 of 1)

Batch ID: Start Date: Ending Date: Test Length: Sample ID: Sample Date: Receipt Date: Sample Age: Multiple Comp	03-9800-6601 28 Mar-22 13:10 28 Mar-22 13:40	Te: Pro Sp Ta: Co Ma CA	de:	Survival (96h) EPA/821/R-02 Hyalella azteca Malacostraca VCF0322.207a Sample Water	3			Ana Dilu Brin	lyst: ent:		atory Wate	onsulting l	Labs, I	lnc.
Start Date: Ending Date: Test Length: Sample ID: Sample Date: Receipt Date: Sample Age: Multiple Comp Analysis ID 19-2855-9206	29 Mar-22 11:45 03-9800-6601 28 Mar-22 13:10 28 Mar-22 13:40 23h (14.5 °C)	Pro Sp Ta: Co Ma CA	de:	EPA/821/R-02 Hyalella azteca Malacostraca VCF0322.207a	3			Dilu Brin	ent:		-	r		
Sample Date: Receipt Date: Sample Age: Multiple Comp Analysis ID 19-2855-9206	28 Mar-22 13:10 28 Mar-22 13:40 23h (14.5 °C) parison Summar	Ma CA Cli	iterial: S (PC):		ahya			Sou	rce:		ic Biosyste	ms, CO	Age:	
Receipt Date: Sample Age: Multiple Comp Analysis ID 19-2855-9206	28 Mar-22 13:40 23h (14.5 °C) parison Summar	CA	S (PC):	Sample Water				Proj	ect:	NPDE	S Stormwa	ater Wet Se	ason (Con
Sample Age: Multiple Comp Analysis ID 19-2855-9206	23h (14.5 °C) parison Summar	Cli						Sou	rce:	Bioass	say Report			
Multiple Comp Analysis ID 19-2855-9206	parison Summar							Stat	ion:	ME-VI	R2			
Analysis ID 19-2855-9206			ent:	VCWPD										
19-2855-9206	Endpoint	У												
			Comp	arison Method			√	NOEL	LOEL		TOEL	PMSD	TU	S
Point Estimate	96h Survival Rat	Э	Steel	Many-One Ranl	c Sum Test			100	>100	- 1	•••		1	1
i Onit Estimate	Summary													
Analysis ID	Endpoint		Point	Estimate Meth	od		✓	Level	%		95% LCL	95% UCL	TU	S
08-7847-5388	96h Survival Rat	Э	Linea	Interpolation (I	CPIN)			EC10	>100	- 5	***	***	<1	1
								EC15	>100			***	<1	
								EC20	>100				<1	
								EC25	>100				<1	
								EC40	>100				<1	
								EC50	>100	3	***	***	<1	
96h Survival R	Rate Summary													
Сопс-%	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std E	rr	Std Dev	CV%	%Eff	ect
0	N	4	1.000	1.0000	1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	%
6.25		4	1.000	1.0000	1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	%
12.5		4	1.000	1.0000	1.0000	1.0000		1.0000	0.000		0.0000		0.009	
25		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000	***	0.00%	
50		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.009	
100		4	1.000	1.0000	1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	<u>%</u>
96h Survival R	Rate Detail							MD	5: E887	740A70	CB88EC46	B4EC0A60	E4B8A	EB7
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	1.0000	1.000	1.0000	1.0000									
6.25		1.0000	1.000	1.0000	1.0000									
12.5		1.0000	1.000	1.0000	1.0000									
25		1.0000	1.000	1.0000	1.0000									
50		1.0000	1.000	1.0000	1.0000									
100		1.0000	1.000	1.0000	1.0000									
96h Survival R	Rate Binomials													
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	5/5	5/5	5/5	5/5									
6.25		5/5	5/5	5/5	5/5									
		5/5	5/5	5/5	5/5									
12.5		5/5	5/5	5/5	5/5									
		5/5	5/5	5/5	5/5									
12.5 25 50														

Report Date:

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Hyalella 96-h Ac	ute Survival	Test								Aquat	tic Bio	oassay &	Consultin	g Labs, Inc.
,	9-2855-9206 5 Apr-22 15:3		Endpoint: Analysis:		ırvival Ra		Ve T	reatments		TIS Versi		CETISv1	.9.7	
•	5 Apr-22 15:2		/ID5 Hash:							itor ID:	1.	000-189-	126-0	
Batch ID: 04	1-4000-8443	1	est Type:	Surviva	al (96h)				An	alyst:				
Start Date: 29	9 Mar-22 11:4	.5 F	Protocol:	EPA/82	21/R-02-0	012 (20	02)		Dil	uent:	Labor	atory Wat	er	
Ending Date:		5	Species:	Hyalell	a azteca				Bri	ne:	Not A	pplicable		
Test Length:		1	axon:	Malaco	straca				So	urce:		tic Biosyst	ems, CO	Age:
Sample ID: 03	3-9800-6601	(Code:	VCF03	22.20 7 al	nya			Pro	oject:	NPDE	S Stormv	vater Wet S	Season (Con
Sample Date: 28	3 Mar-22 13:1	0 1	/laterial:	Sample	e Water				So	urce:	Bioas	say Repo	rt	
Receipt Date: 28	3 Mar-22 13:4	0 0	CAS (PC):						Sta	ation:	ME-V	R2		
Sample Age: 23	3h (14.5 °C)	C	Client:	VCWP	D									
Data Transform		Alt Hy	'p					NOEL	LOEL	TOEL		TU		
Angular (Correcte	ed)	C > T						100	>100			1		
Steel Many-One	Rank Sum 1	est												
Control vs			Test \$		ritical	Ties		P-Type	P-Value					
Negative Control	6.25		18	10		1	6	CDF	0.8333		-	cant Effec		
	12.5		18	10)	1	6	CDF	0.8333		-	cant Effec		
	25		18	10)	1	6	CDF	0.8333		_	cant Effec		
	50		18	10)	1	6	CDF	0.8333	Non-S	Signific	cant Effec	t	
	100		18	10)	1	6	CDF	0.8333	Non-S	Signific	cant Effec	t	
ANOVA Table														
Source	Sum Squ	Jares	Mean	Square)	DF		F Stat	P-Value	Decis	ion(α	:5%)		
Between	0		0			5				Indete	ermina	ate		
Error	0		0			18								
Total	0					23								
ANOVA Assump	tions Tests													
Attribute	Test					Test S	Stat	Critical	P-Value	Decis	ion(α	:1%)		
Variance	Bartlett E	quality of	Variance T	est						Indete	ermina	ate		
Distribution	Shapiro-\	Nilk W No	ormality Te	st						Indete	ermina	ate		
96h Survival Rat	te Summary													
					5% LCL	95% L	JCL	Median	Min	Max		Std Err	CV%	%Effect
	Code	Count												0.00%
0	N Code	4	1.000) 1.	0000	1.0000		1.0000	1.0000	1.000		0.0000	0.00%	
0 3.25			1.000) 1.) 1.	0000	1.0000	C	1.0000	1.0000	1.000	0	0.0000	0.00%	0.00%
) 3.25 12.5		4	1.000) 1.) 1.	0000	1.0000	C	1.0000 1.0000	1.0000 1.0000 1.0000	1.000 1.000	0 0	0.0000 0.0000	0.00% 0.00%	0.00% 0.00%
) 3.25 12.5		4 4	1.000	0 1. 0 1. 0 1.	0000	1.0000))	1.0000	1.0000 1.0000 1.0000 1.0000	1.000 1.000 1.000	0 0 0	0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%
0 3.25 12.5 25 50		4 4 4	1.000 1.000 1.000	0 1. 0 1. 0 1. 0 1.	0000 0000 0000	1.0000 1.0000 1.0000)))	1.0000 1.0000	1.0000 1.0000 1.0000	1.000 1.000	0 0 0	0.0000 0.0000	0.00% 0.00%	0.00% 0.00% 0.00% 0.00%
0 3.25 12.5 25 50		4 4 4 4	1.000 1.000 1.000	0 1. 0 1. 0 1. 0 1.	0000 0000 0000 0000	1.0000 1.0000 1.0000))))	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.000 1.000 1.000	0 0 0 0	0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%
0 5.25 12.5 25 50 100	N	4 4 4 4 4	1.000 1.000 1.000 1.000 1.000	0 1. 0 1. 0 1. 0 1.	0000 0000 0000 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	1.000 1.000 1.000 1.000	0 0 0 0	0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00%
0 3.25 12.5 25 50 100 Angular (Correc Conc-%	N ted) Transfo Code	4 4 4 4 4 rmed Sur	1.000 1.000 1.000 1.000 1.000 1.000 mmary	0 1. 0 1. 0 1. 0 1. 0 1. 0 1. 99	0000 0000 0000 0000 0000 0000	1.0000 1.0000 1.0000 1.0000 1.0000 95% L	DCL	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.000 1.000 1.000 1.000 1.000	0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
0 3.25 12.5 25 50 100 Angular (Correc Conc-%	N ted) Transfo	4 4 4 4 4 4 rmed Sur	1.000 1.000 1.000 1.000 1.000 1.000	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	0000 0000 0000 0000 0000 0000 5% LCL	1.0000 1.0000 1.0000 1.0000 1.0000 95% L	JCL	1.0000 1.0000 1.0000 1.0000 1.0000 Median	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450	1.000 1.000 1.000 1.000 1.000 Max 1.345	0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000 Std Err	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% WEffect
0) 3.25 12.5 25 50 100 Angular (Correc Conc-%	N ted) Transfo Code	4 4 4 4 4 rmed Sur	1.000 1.000 1.000 1.000 1.000 1.000 mmary	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	0000 0000 0000 0000 0000 0000	1.0000 1.0000 1.0000 1.0000 1.0000 95% L	JCL	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.000 1.000 1.000 1.000 1.000	0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
0 5.25 12.5 50 100 Angular (Correc Conc-% 0 3.25	N ted) Transfo Code	4 4 4 4 4 2 rmed Sur Count	1.000 1.000 1.000 1.000 1.000 1.000 mmary Mean 1.345	9: 9: 0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	0000 0000 0000 0000 0000 0000 5% LCL	1.0000 1.0000 1.0000 1.0000 1.0000 95% L	JCL D	1.0000 1.0000 1.0000 1.0000 1.0000 Median	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450	1.000 1.000 1.000 1.000 1.000 Max 1.345	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000 Std Err	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% %Effect 0.00%
0 6.25 12.5 25 50 100 Angular (Correc Conc-% 0 6.25 12.5	N ted) Transfo Code	4 4 4 4 4 4 rmed Sur Count 4	1.000 1.000 1.000 1.000 1.000 1.000 mmary Mean 1.345 1.345	98 98 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0000 0000 0000 0000 0000 0000 0000 5% LCL 3450 3450	1.0000 1.0000 1.0000 1.0000 1.0000 95% L 1.3460 1.3460	DCL DCL DCC	1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450 1.3450	1.000 1.000 1.000 1.000 1.000 Max 1.345 1.345	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000 Std Err 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00% CV% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% %Effect 0.00% 0.00%
Conc-% 0 6.25 12.5 25 50 100 Angular (Correction Conc-% 0 6.25 12.5 25 50	N ted) Transfo Code	4 4 4 4 4 7 7 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1.000 1.000 1.000 1.000 1.000 1.000 mmary Mean 1.345 1.345	9: 9: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0000 0000 0000 0000 0000 0000 0000 5% LCL 3450 3450 3450	1.0000 1.0000 1.0000 1.0000 1.0000 95% L 1.3460 1.3460	DCL DCL DCC	1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450 1.3450 1.3450	1.000 1.000 1.000 1.000 1.000 Max 1.345 1.345	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000 Std Err 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% %Effect 0.00% 0.00%



Report Date: Test Code/ID: 07 Apr-22 10:42 (p 2 of 2)

D: VCF0322.207ahya / 20-6840-9102

Hyalella 96-h Acute Survival Test

05 Apr-22 15:29

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 19-2855-9206 **Analyzed:** 05 Apr-22 15:30

2855-9206 Endpoint: 96h Survival Rate

Analysis: Nonparametric-Control vs Treatments
MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

CETIS Version: Status Level:

Status Level: Editor ID:

000-189-126-0

CETISv1.9.7

96h Survival Rate Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000

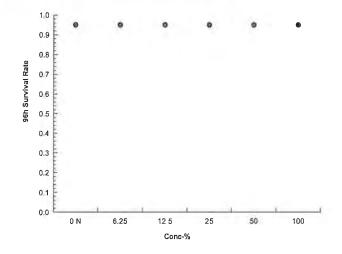
Angular (Corrected) Transformed Detail

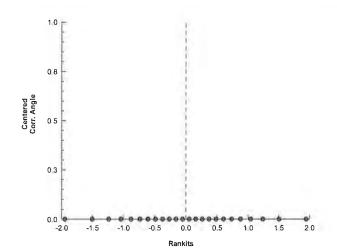
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	1.3450	1.3450	1.3450	1.3450		
6.25		1.3450	1.3450	1.3450	1.3450		
12.5		1.3450	1.3450	1.3450	1.3450		
25		1.3450	1.3450	1.3450	1.3450		
50		1.3450	1.3450	1.3450	1.3450		
100		1.3450	1.3450	1.3450	1.3450		

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	5/5	5/5	5/5	5/5
6.25		5/5	5/5	5/5	5/5
12.5		5/5	5/5	5/5	5/5
25		5/5	5/5	5/5	5/5
50		5/5	5/5	5/5	5/5
100		5/5	5/5	5/5	5/5

Graphics





Report Date:

07 Apr-22 10:42 (p 1 of 2)

Hvalell	a 96-h	Acute Survival T	est							Aguati	c Bi	กลรรลบ &	Consulting	Labs Inc
	_	08-7847-5388		noint	96h Survival Ra	ato.			CETI					Lubs, IIIo
Analys Analyz		05 Apr-22 15:30		-	Linear Interpola		\			S Versions S Level		CETISv ²	1.9.7	
Edit Da		05 Apr-22 15:29		-	E88740A7CB8			38AEB	Edito			000-189	-126-0	
Batch I	D.	04-4000-8443	Tost	Type	Survival (96h)				Analy	uc. 6 .				
Start D		29 Mar-22 11:45			EPA/821/R-02-	012 (2002)			Dilue		aho	ratory Wa	tor	
Ending		20 10101 22 11.40		cies:	Hyalella azteca	` '			Brine			pplicable	(CI	
Test Le			Taxo		Malacostraca				Sour			tic Biosys	tems. CO	Age:
Sample		03-9800-6601 28 Mar-22 13:10	Cod		VCF0322.207a Sample Water	nya			Proje				water Wet S	eason (Co
-		28 Mar-22 13:40		(PC):	Sample Water				Sour Static		лоаs ИЕ-V	say Repo	II L	
•		23h (14.5 °C)	Clie	• •	VCWPD				Stati	011.	vi∟- v	112		
		lation Options												
X Trans		Y Transform	Seed	4	Resamples	Exp 95%	CI Ma	thod						
Linear	3101111	Linear	0		280	Yes		o-Point I	Interpo	olation				
									, into p					
Point E			0.50/ 11.51		250/ 1 21	0.50/ 1161								
EC10	% >100	95% LCL	95% UCL	TU	95% LCL				-		_			
EC15	>100			<1										
EC20	>100			<1										
EC25	>100			<1										
EC40	>100		***	<1	-44									
_0.0														
EC50	>100	224		<1										
EC50		Rate Summary	***	<1	-		lated Var	iate(A/B	4)				Isotor	ic Variate
EC50	rvival F		Count	<1 Mean	 Median		lated Var	iate(A/B	•	%Effe	et	A/B	Isotor Mean	ic Variate %Effect
EC50 96h Su	rvival F	Rate Summary			Median	Calcu		<u> </u>	6	%Effe	et	A/B 20/20	-	
96h Su Conc-% 0 6.25	rvival F	Rate Summary Code	Count 4 4	Mean 1.0000	Median 1.0000 1.0000	Calcu Min 1.0000 1.0000	Max 1.0000 1.0000	0.00 0.00	% %	0.00% 0.00%	ct	20/20 20/20	Mean 1.0000 1.0000	%Effect 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5	rvival F	Rate Summary Code	Count 4 4	Mean 1.0000 1.0000	Median 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000	0.00 0.00 0.00	% % %	0.00% 0.00% 0.00%	ct	20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25	rvival F	Rate Summary Code	Count 4 4 4 4 4	Mean 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00	% % % %	0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50	rvival F	Rate Summary Code	Count 4 4 4 4 4 4 4	Mean 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100	rvival F	Rate Summary Code N	Count 4 4 4 4 4	Mean 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100	rvival F	Rate Summary Code	Count 4 4 4 4 4 4 4	Mean 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-%	rvival f 6 rvival f	Code N Rate Detail Code	Count 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et _	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-%	rvival f 6 rvival f	Code N	Count 4 4 4 4 4 4 4 1 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25	rvival f 6 rvival f	Code N Rate Detail Code	Count 4 4 4 4 4 4 1 1.0000 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5	rvival f 6 rvival f	Code N Rate Detail Code	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25	rvival f 6 rvival f	Code N Rate Detail Code	Count 4 4 4 4 4 1 1.0000 1.0000 1.0000 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50	rvival f 6 rvival f	Code N Rate Detail Code	Count 4 4 4 4 4 4 1 1.0000 1.0000 1.0000 1.0000 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100	rvival F	Code N Rate Detail Code N	Count 4 4 4 4 4 1 1.0000 1.0000 1.0000 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su	rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 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	Calcu Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100	rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 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	Calcu Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 1 5/5	Mean 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	Median 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	Calcu Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	ct	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effec 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25	rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5/5 5/5	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5555555555	Median 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	Calcu Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effec 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5	rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 1 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5/5 5/5 5/5	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 2 5/5 5/5 5/5	Median 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	Calcu Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effec 0.00% 0.00% 0.00% 0.00% 0.00%
96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25 12.5 25 50 100 96h Su Conc-% 0 6.25	rvival F	Rate Summary Code N Rate Detail Code N	Count 4 4 4 4 4 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5/5 5/5	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.5555555555	Median 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	Calcu Min 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	Max 1.0000 1.0000 1.0000 1.0000 1.0000	0.00 0.00 0.00 0.00 0.00	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00%	et	20/20 20/20 20/20 20/20 20/20	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	%Effect 0.00% 0.00% 0.00% 0.00% 0.00%



Report Date:

07 Apr-22 10:42 (p 2 of 2)

Test Code/ID:

VCF0322.207ahya / 20-6840-9102

Hyalella 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed:

: 08-7847-5388 05 Apr-22 15:30

05 Apr-22 15:29

Endpoint: Analysis:

Endpoint: 96h Survival Rate

Linear Interpolation (ICPIN)

MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

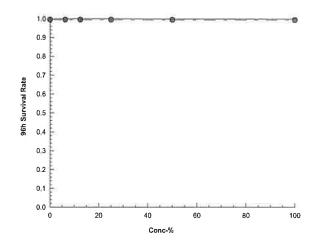
CETIS Version: Status Level:

Editor ID:

: CETISv1.9.7

1 000-189-126-0

Edit Date: Graphics



Hyalella 96-h Acute Survival Test

Report Date:

07 Apr-22 10:42 (p 1 of 4)

Test Code/ID: VCF0322.207ahya / 20-6840-9102

Aquatic Bioassay & Consulting Labs, Inc.

		bioassay &									
			nalyst:				Survival (96h)			04-4000-8443	Batch ID:
	ter	ooratory Wat	luent: Lat	D		, ,	EPA/821/R-02	Protocol:	15	29 Mar-22 11:4	Start Date:
		t Applicable	rine: Not	В		3	Hyalella azteca	Species:			Ending Date:
Age:	tems, CO	uatic Biosyst	ource: Aqı	S			Malacostraca	Taxon:			Test Length:
Season (Co	water Wet S	DES Stormw	oject: NP	Р		ıhya	VCF0322.207a	Code:		03-9800-6601	Sample ID:
	rt	assay Repor	ource: Bio	S			Sample Water	Material:	10	28 Mar-22 13:1	Sample Date
		-VR2		S				CAS (PC):	10	28 Mar-22 13:4	Receipt Date
							VCWPD	Client:		23h (14.5 °C)	Sample Age:
										CO3)-mg/L	Alkalinity (Ca
QA Cour	CV%	Std Dev	Std Err	Max	Min	95% UCL	95% LCL	Mean	Count	Code	Conc-%
0	0.00%	0	0	60	60	60	60	60	3	N	0
0	0.00%	0	0	96	96	96	96	96	3		100
0 (0%)	25.28%	19.72	8.05	96	60	98.69	57.31	78	6		Overall
										µmhos	Conductivity
QA Cour	CV%	Std Dev	Std Err	Max	Min	95% UCL	95% LCL	Mean	Count	Code	Conc-%
0	0.79%	2.887	0.9623	369	364	372.8	358.5	365.7	3	N	0
0	0.58%	2.517	0.8389	435	430	438.9	426.4	432.7	3		6.25
0	1.04%	4.933	1.644	478	469	486.9	462.4	474.7	3		12.5
0	1.97%	10.69	3.564	550	531	569.9	516.8	543.3	3		25
0	1.01%	7.234	2.411	725	712	734.6	698.7	716.7	3		50
0	1.40%	14.74	4.914	1068	1040	1093	1020	1057	3		100
0 (0%)	39.98%	239.2	56.38	1068	364	717.2	479.3	598.3	18		Overall
										ygen-mg/L	Dissolved Ox
QA Coun	CV%	Std Dev	Std Err	Max	Min	95% UCL	95% LCL	Mean	Count	Code	Conc-%
0	3.09%	0.2309	0.07698	7.6	7.2	8.04	6.893	7.467	3	N	0
0	5.50%	0.4163	0.1388	7.9	7.1	8.601	6.532	7.567	3		6.25
0	5.41%	0.4041	0.1347	7.7	7	8.471	6.463	7.467	3		12.5
0	4.31%	0.3215	0.1072	7.7	7.1	8.265	6.668	7.467	3		25
0	4.31%	0.3215	0.1072	7.7	7.1	8.265	6.668	7.467	3		50
0	4.31%	0.3215	0.1072	7.7	7.1	8.265	6.668	7.467	3		100
0 (0%)	3.87%	0.2895	0.06824	7.9	7	7.627	7.339	7.483	18		Overall
										CO3)-mg/L	Hardness (Ca
QA Coun	CV%	Std Dev	Std Err	Max	Min	95% UCL	95% LCL	Mean	Count	Code	Conc-%
0	0.00%	0	0	83	83	83	83	83	3	N	0
0	0.00%	0	0	340	340	340	340	340	3		100
0 (0%)	66.56%	140.8	57.47	340	83	359.2	63.78	211.5	6		Overall
											pH-Units
QA Coun	CV%	Std Dev	Std Err	Max	Min	95% UCL	95% LCL		Count	Code	Conc-%
0	1.42%	0.1155	0.03849	8.2	8	8.42	7.846	8.133	3	N	0
0	1.95%	0.1528	0.05092	8	7.7	8.213	7.454	7.833	3		6.25
0	1.95%	0.1528	0.05092	8	7.7	8.213	7.454	7.833	3		12.5
0	1.97%	0.1528	0.05092	7.9	7.6	8.146	7.387	7.767	3		25
0	2.22%	0.1732	0.05773	7.9	7.6	8.23	7.37	7.8	3		
0	2.22%	0.1732	0.05773	7.9	7.6	8.23	7.37	7.8	3		100
_						8.23 8.23 7.952	7.37 7.37 7.771				50 100 Overall

CETIS Measurement Report

Report Date:

07 Apr-22 10:42 (p 2 of 4)

Hyalella 96-h Acute Survival Test Aquatic Bioassay & Consulting Labs,												
Temperature-	°C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count	
0	N	3	22	22	22	22	22	0	0	0.00%	0	
6.25		3	22	22	22	22	22	0	0	0.00%	0	
12.5		3	22	22	22	22	22	0	0	0.00%	0	
25		3	22	22	22	22	22	0	0	0.00%	0	
50		3	22	22	22	22	22	0	0	0.00%	0	
100		3	22	22	22	22	22	0	0	0.00%	0	
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)	

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Hyalella 96-h	, ISULO GUI VIV	41 1031							Aquatic Bioassay & Consulting Labs, In
Alkalinity (Ca									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
)	N	1		60					
100				96					
)	N	2		60					
100				96					
ס	N	3		60					
100				96					
Conductivity-	µmhos								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
)	N	1		364				-	
6.25				433					
12.5				469					
25				531					
50				712					
100				1040					
)	N	2		364					
6.25				430					
12.5				477					
25				549					
50				713					
100				1062					
)	N	3		369					
6.25		Ü		435					
12.5				478					
25				550					
50				725					
100				1068					
Dissolved Oxy	ygen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
)	Ν	1		7.6					
3.25				7.9					
12.5				7.7					
25				7.6					
50				7.6					
100				7.6					
)	N	2		7.6					
5.25	IN	_							
				7.7					
12.5				7.7					
25				7.7					
50				7.7					
00				7.7					
	N	3		7.2					
				7.1					
0.25				7					
				7.1					
2.5									
12.5 25									
3.25 12.5 25 50 100				7.1 7.1 7.1					

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Hyalella 96-h Acu	ıte Surviva	al Test						Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaCO	3)-mg/L							
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		83				
100				340				
0	N	2		83				
100				340				
0	N	3		83				
100				340				
pH-Units								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2	/0	11.0112	randiyot	
6.25				7.7				
12.5				7.7				
25				7.6				
50				7.6				
100				7.6				
0	N	2		8.2				
6.25				7.8				
12.5				7.8				
25				7.8				
50				7.9				
100				7.9				
0	N	3		8				
6.25	11	3		8				
12.5				8				
25				7.9				
50				7.9				
100				7.9				
Temperature-°C								
Conc-%	Code	Read	Time	Measure QA	Diff-%	Inst ID	Analyst	Notes
0	Ν	1		22				
6.25				22				
12.5				22				
25				22				
50				22				
100				22				
0	N	2		22			_	
6.25		_		22				
12.5				22				
25				22				
50				22				
100				22				
0	N	3		22				
6.25				22				
12.5				22				
25				22				
50				22				
100				22				



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-VR2
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.207

ACUTE 96 HOURS CHIRONOMUS SURVIVAL BIOASSAY

% Survival = 100 % Survival in 100% Sample

*TUa = 0.00

* TU(a) Is calculated by: log (% Mortality)/1.7

Yours very truly

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

07 Apr-22 10:46 (p 1 of 1)

Test Code/ID:

VCF0322.207achi / 13-3853-0320

														002
Chironomus 9	96-Hour Acute S	urvival E	Bioassay						Aqua	tic B	ioassay & C	onsulting	Labs,	lnc.
Batch ID: Start Date: Ending Date: Test Length:	20-6330-2156 29 Mar-22 11:10 02 Apr-22 11:55 4d 1h	P S	est Type: rotocol: pecies: axon:	Survival (96h) EPA/821/R-02 Chironomus d Insecta	, ,			Dilu Brir	lyst: ent: ie: rce:	Not	oratory Wate Applicable atic Biosyste		Age:	
•	06-0897-1574 28 Mar-22 13:10 28 Mar-22 13:40	M	ode: laterial: AS (PC):	VCF0322.207 Sample Water				Sou	ject: rce: ion:	Bioa	DES Stormwassay Report		ason (Con
Sample Age:	22h (14.5 °C)	С	lient:	VCWPD										
Multiple Com	parison Summai	y												
Analysis ID	Endpoint		Comp	arison Metho	d		√	NOEL	LOEL	_	TOEL	PMSD	TU	
08-9592-5934	96h Survival Rat	е	Steel	Many-One Ran	k Sum Test			100	>100		77		1	
Point Estimat	e Summary													
Analysis ID	Endpoint		Point	Estimate Meth	ıod		√	Level	%		95% LCL	95% UCL	TU	;
00-4026-2088	96h Survival Rat	е	Linea	Interpolation (CPIN)			EC10	>100		•••		<1	
								EC15	>100		***	***	<1	
								EC20	>100		***		<1	
								EC25	>100			***	<1	
								EC40	>100				<1	
								EC50	>100		***		<1	
96h Survival I	Rate Summary													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std E	rr	Std Dev	CV%	%Eff	ect
0	N	4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	%
6.25		4	1.000		1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	%
12.5		4	1.000		1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	%
25		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.009	
50		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.009	
100		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	0	0.0000		0.009	%
96h Survival F	Rate Detail							MD	5: E887	740A	7CB88EC46	B4EC0A60	E4B8A	EB7
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	Ν	1.0000	1.000	1.0000	1.0000									
6.25		1.0000	1.000	1.0000	1.0000									
12.5		1.0000	1.000	1.0000	1.0000									
		1.0000 1.0000	1.000 1.000		1.0000 1.0000									
25				1.0000										
25 50		1.0000	1.000	1.0000 1.0000	1.0000									
25 50 100	Rate Binomials	1.0000 1.0000	1.000	1.0000 1.0000	1.0000 1.0000									
25 50 100 96h Survival F	Rate Binomials Code	1.0000 1.0000	1.000	1.0000 1.0000 1.0000	1.0000 1.0000									
25 50 100 96h Survival F Conc-%		1.0000 1.0000 1.0000	1.000 1.000 1.000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000									
25 50 100 96h Survival F Conc-%	Code	1.0000 1.0000 1.0000 Rep 1	1.0000 1.0000 1.0000 Rep 2	1.0000 1.0000 1.0000 Rep 3	1.0000 1.0000 1.0000									
25 50 100 96h Survival F Conc-% 0 6.25	Code	1.0000 1.0000 1.0000 Rep 1 5/5 5/5	1.0000 1.0000 1.0000 Rep 2 5/5 5/5	1.0000 1.0000 1.0000 Rep 3 5/5 5/5	1.0000 1.0000 1.0000 Rep 4 5/5 5/5									
Conc-% 0 6.25 12.5	Code	1.0000 1.0000 1.0000 Rep 1 5/5 5/5	1.0006 1.0006 1.0006 Rep 2 5/5 5/5 5/5	1.0000 1.0000 1.0000 Rep 3 5/5 5/5 5/5	1.0000 1.0000 1.0000 Rep 4 5/5 5/5									
25 50 100 96h Survival F Conc-% 0 6.25	Code	1.0000 1.0000 1.0000 Rep 1 5/5 5/5	1.0000 1.0000 1.0000 Rep 2 5/5 5/5	1.0000 1.0000 1.0000 Rep 3 5/5 5/5	1.0000 1.0000 1.0000 Rep 4 5/5 5/5									

Report Date:

07 Apr-22 10:46 (p 1 of 2)

Test Code/ID: VCF0322.207achi / 13-3853-0320

Chironomus 9	96-Hou	r Acute S	urvival	Bioassay								Aquat	ic Bio	assay & C	Consultin	g Labs, Inc.
Analysis ID:	08-959	2-5934		Endpoint:	96h	Survival Ra	ate				CETIS	Versi	on:	CETISv1.	.9.7	
Analyzed:	05 Apr	-22 15:32		Analysis:	Nonp	parametric-	Control	vs T	reatments		Status	Leve	l:	1		
Edit Date:	05 Apr	-22 15:31		MD5 Hash:	E887	'40A7CB88	BEC46E	4EC	0A60E4B8	AEB	Editor	· ID:		000-189-	126-0	
Batch ID:	20-633	30-2156		Test Type:	Surv	ival (96h)					Analys	st:				
Start Date:	29 Ma	r-22 11:10		Protocol:	EPA	/821/R-02-	012 (20	02)			Diluer	nt:	Labora	atory Wate	er	
Ending Date:	02 Apr	-22 11:55	;	Species:	Chiro	onomus dil	utus				Brine:		Not Ap	plicable		
Test Length:	4d 1h		•	Taxon:	Inse	cta					Sourc	e:	Aquati	c Biosyste	ems, CO	Age:
Sample ID:	06-089	7-1574		Code:	VCF	0322.207a	chi				Projec	et:	NPDE	S Stormw	ater Wet	Season (Cor
Sample Date:	28 Ma	r-22 13:10		Material:	Sam	ple Water					Sourc	e:	Bioass	ay Report	t	
Receipt Date:	28 Ma	r-22 13:40		CAS (PC):							Statio	n:	ME-VF	₹2		
Sample Age:	22h (1	4.5 °C)	4	Client:	VCW	/PD										
Data Transfor	m		Alt H	ур					NOEL	LOE	EL	TOEL	-	τυ		
Angular (Corre	ected)		C > T						100	>10	0		4	1		
Steel Many-Or	ne Ran	k Sum Te	st													
Control	vs	Conc-%		Test S	Stat	Critical	Ties	DF	P-Type	P-V	alue	Decis	ion(α:	5%)		
Negative Contr	rol	6.25		18		10	1	6	CDF	0.83	333	Non-S	Signific	ant Effect		
		12,5		18		10	1	6	CDF	0.83	333	Non-S	Signific	ant Effect		
		25		18		10	1	6	CDF	0.83	333	Non-S	Signific	ant Effect		
		50		18		10	1	6	CDF	0.83	333	Non-S	Signific	ant Effect		
		100		18		10	1	6	CDF	0.83	333	Non-S	Signific	ant Effect		
ANOVA Table																
Source	:	Sum Squa	ares	Mean	Squa	ire	DF		F Stat	P-V	alue	Decis	ion(α:	5%)		
Between	()		0			5					Indete	erminat	te		
Error	()		0			18									
Total	()					23									
ANOVA Assur	mption	s Tests														
Attribute	-	Γest					Test S	Stat	Critical	P-V	alue	Decis	ion(α:	1%)		
Variance	E	Bartlett Eq	uality o	f Variance T	est							Indete	erminat	te		
Distribution	5	Shapiro-W	ilk W N	ormality Te	st							Indete	ermina	te		
96h Survival F	Rate Si	ımmary														
Conc-%		Code	Count	Mean		95% LCL	95% เ	JCL	Median	Min		Max	:	Std Err	CV%	%Effect
0	- 1	1	4	1.000	0	1.0000	1.000	0	1.0000	1.00	000	1.000	0 (0.0000	0.00%	0.00%
6.25			4	1.000	0	1.0000	1.000	0	1.0000	1.00	000	1.000	0 (0.0000	0.00%	0.00%
12.5			4	1.000	0	1.0000	1.000	0	1.0000	1.00	000	1.000		0.000.0	0.00%	0.00%
25			4	1.000	0	1.0000	1.000		1.0000	1.00		1.000		0.0000	0.00%	0.00%
50			4	1.000		1.0000	1.000		1.0000	1.00		1.000		0.0000	0.00%	0.00%
100			4	1.000	0	1.0000	1.000	0	1.0000	1.00	000	1.000	0 (0.0000	0.00%	0.00%
		Transform	ned Su	mmary												
	ected)					050/ 1.01	95% เ	JCL	Median	Min		Max		Std Err	CV%	%Effect
Angular (Corr	•	Code	Count	Mean		95% LCL										
Angular (Corre		Code N	Count 4	1.345	0	1.3450	1.346		1.3450	1.34		1.345		0.0000	0.00%	0.00%
Angular (Corre Conc-% 0 6.25				1.345 1.345	0	1.3450 1.3450	1.346 1.346	0	1.3450	1.34	150	1.345	0 (0.0000	0.00%	0.00%
Angular (Corre Conc-% 0 6.25 12.5			4 4 4	1.345 1.345 1.345	0 0 0	1.3450 1.3450 1.3450	1.346 1.346 1.346	D D	1.3450 1.3450	1.34 1.34	150 150	1.345 1.345	0 (0.0000 0.0000	0.00% 0.00%	0.00% 0.00%
Angular (Corre Conc-% 0 6.25 12.5 25			4 4 4 4	1.345 1.345 1.345 1.345	0 0 0 0	1.3450 1.3450 1.3450 1.3450	1.346 1.346 1.346 1.346	0 0 0	1.3450 1.3450 1.3450	1.34 1.34 1.34	150 150 150	1.3456 1.3456 1.3456	0 (0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%
Angular (Corre Conc-% 0 6.25 12.5 25 50 100			4 4 4	1.345 1.345 1.345	0 0 0 0 0	1.3450 1.3450 1.3450	1.346 1.346 1.346	0 0 0 0	1.3450 1.3450	1.34 1.34	150 150 150 150	1.345 1.345	0 (0.0000 0.0000	0.00% 0.00%	0.00% 0.00%



Report Date:

07 Apr-22 10:46 (p 2 of 2)

Test Code/ID: VCF0322.207achi / 13-3853-0320

CETISv1.9.7

Chironomus 96-Hour Acute Survival Bioassay

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 08-9592-5934 Endpoint: 96h Survival Rate **CETIS Version:**

Editor ID:

Analyzed: 05 Apr-22 15:32 Edit Date: 05 Apr-22 15:31

Analysis: Nonparametric-Control vs Treatments MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB Status Level:

000-189-126-0

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000

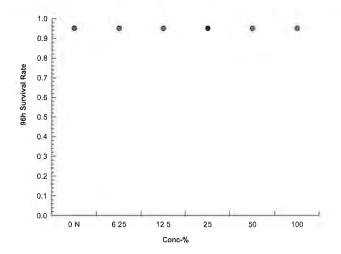
Angular (Corrected) Transformed Detail

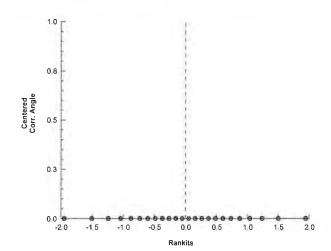
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.3450	1.3450	1.3450	1.3450
6.25		1.3450	1.3450	1.3450	1.3450
12.5		1.3450	1.3450	1.3450	1.3450
25		1.3450	1.3450	1.3450	1.3450
50		1.3450	1.3450	1.3450	1.3450
100		1.3450	1.3450	1.3450	1.3450

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	5/5	5/5	5/5	5/5	
6.25		5/5	5/5	5/5	5/5	
12.5		5/5	5/5	5/5	5/5	
25		5/5	5/5	5/5	5/5	
50		5/5	5/5	5/5	5/5	
100		5/5	5/5	5/5	5/5	

Graphics





Report Date:

07 Apr-22 10:46 (p 1 of 2)

Test Code/ID: VCF

VCF0322.207achi / 13-3853-0320

Chiron	omus !	96-Hour Acute S	urvival Bio	assay							Aquati	c Bi	oassay &	Consulting	Labs, Inc.
Analys		00-4026-2088		point:	96h Survival R						S Versi		CETISv	1.9.7	
Analyz		05 Apr-22 15:33		lysis:	Linear Interpola			E 4D0	4 E D		s Level	:	1	100.0	
Edit Da	ate:	05 Apr-22 15:31	MD	Hasn:	E88740A7CB8	8EC46B4EC	UAGU	15458/	AEB	Edito	יטו זי:		000-189	-126-0	
Batch I		20-6330-2156			Survival (96h)					Analy					
Start D		29 Mar-22 11:10		tocol:	EPA/821/R-02-	, ,				Dilue			ratory Wa	ter	
_	•	02 Apr-22 11:55		cies:	Chironomus di	lutus				Brine			Applicable		
Test Le	ength:	4d 1h	Tax	on:	Insecta					Sour	ce: /	Aqua	atic Biosys	tems, CO	Age:
Sample	e ID:	06-0897-1574	Cod	le:	VCF0322.207a	ichi				Proje	ct: I	NPD	ES Stormy	water Wet S	eason (Cor
-		28 Mar-22 13:10		erial:	Sample Water					Sour	ce: I	3ioa:	ssay Repo	rt	
•		28 Mar-22 13:40	CAS	6 (PC):						Static	on: I	MΕ-/	/R2		
Sample	e Age:	22h (14.5 °C)	Clie	nt:	VCWPD										
Linear	Interpo	olation Options													
X Tran	sform	Y Transform	See.	d	Resamples	Exp 95%	CL	Meth							
Linear		Linear	0		280	Yes		Two-l	Point	nterpo	olation				
Point E	Stimat	es													
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL									
EC10	>100		***	<1	***										
EC15	>100		***	<1	***	***									
EC20	>100	***	***	<1	2 .	***									
EC25	>100			<1											
EC40	>100		***	<1	***	***									
EC50	>100	***	-	<1											
96h Su	rvival	Rate Summary				Calcu	lated	Varia						Isoton	ic Variate
Conc-%	/ 6	Code	Count	Mean		Min	Max		CV%		%Effe		A/B	Mean	%Effect
0		Ν	4	1.000		1.0000	1.00		0.00		0.00%		20/20	1.0000	0.00%
6.25			4	1.000		1.0000	1.00		0.00		0.00%		20/20	1.0000	0.00%
12.5			4	1.000		1.0000	1.00		0.00		0.00%		20/20	1.0000	0.00% 0.00%
25 50			4 4	1.000		1.0000 1.0000	1.00		0.00		0.00%		20/20 20/20	1.0000 1.0000	0.00%
100			4	1.000		1.0000	1.00		0.00		0.00%		20/20	1.0000	0.00%
				1.000	1.0000	1.0000	1100		0.00	,,,	0.0075		20,20	7,0000	
		Rate Detail													
Conc-9	%	Code	Rep 1	Rep 2		Rep 4									
0		N	1.0000	1.000		1.0000									
6.25			1.0000	1.000		1.0000									
12.5			1.0000	1.000		1.0000									
25			1.0000	1.000		1.0000									
50			1.0000 1.0000	1.000 1.000		1.0000 1.0000									
100			1.0000	1.000	0 1.0000	1.0000									
		Rate Binomials	D 4	Б	D	Don 4									
Conc-9	/o	Code N	Rep 1 5/5	Rep 2 5/5	2 Rep 3 5/5	Rep 4 5/5	-		_			_			
_		IN	5/5 5/5	5/5 5/5	5/5 5/5	5/5 5/5									
6.25 12.5			5/5 5/5	5/5	5/5 5/5	5/5 5/5									
12.5 25			5/5 5/5	5/5	5/5 5/5	5/5 5/5									
50			5/5 5/5	5/5	5/5 5/5	5/5									
100			5/5	5/5	5/5	5/5									
100			3/3	3/3	3/3	313									

Report Date:

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Test Code/ID:

VCF0322.207achi / 13-3853-0320

Chironomus 96-Hour Acute Survival Bioassay

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: Edit Date:

00-4026-2088 05 Apr-22 15:33

05 Apr-22 15:31

Endpoint: Analysis:

Endpoint: 96h Survival Rate

Linear Interpolation (ICPIN)

MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

CETIS Version:

Editor ID:

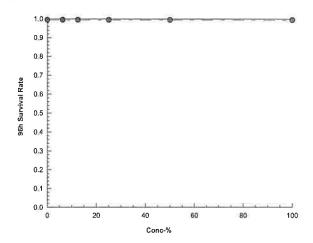
Status Level:

1

000-189-126-0

CETISv1.9.7

Graphics



07 Apr-22 10:46 (p 1 of 4)

Test Code/ID: VCF032

VCF0322.207achi / 13-3853-0320

Chironomus !	96-Hour Acute	Survival	Bioassay					Aquati	c Bioassay &	Consulting	g Labs, Inc.
Batch ID: Start Date: Ending Date: Test Length:	20-6330-2156 29 Mar-22 11: 02 Apr-22 11:5 4d 1h	10 55	Test Type: Protocol: Species: Taxon:	Survival (96h) EPA/821/R-02 Chironomus di Insecta	, ,			Brine:	aboratory Wa Not Applicable Aquatic Biosys		Age:
•	06-0897-1574 28 Mar-22 13: 28 Mar-22 13: 22h (14.5 °C)	10 40	Code: Material: CAS (PC): Client:	VCF0322.207a Sample Water VCWPD				Source:	NPDES Storm Bioassay Repo ME-VR2		Season (Con
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	60	60	60	60	60	0	0	0.00%	0
100		3	96	96	96	96	96	0	0	0.00%	0
Overall		6	78	57.31	98.69	60	96	8.05	19.72	25.28%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	365.7	358.5	372.8	364	369	0.9623	2.887	0.79%	0
6.25		3	432.7	426.4	438.9	430	435	0.8389	2.517	0.58%	0
12.5		3	474.7	462.4	486.9	469	478	1.644	4.933	1.04%	0
25		3	543.3	516.8	569.9	531	550	3.564	10.69	1.97%	0
50		3	716.7	698.7	734.6	712	725	2.411	7.234	1.01%	0
100		3	1056	1020	1092	1040	1068	4.807	14.42	1.37%	0
Overall		18	598.2	479.3	717	364	1068	56.33	239	39.95%	0 (0%)
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	7.467	6.893	8.04	7.2	7.6	0.07698	0.2309	3.09%	0
6.25		3	7.6	6.704	8.496	7.2	7.9	0.1202	0.3606	4.74%	0
12.5		3	7.467	6.463	8.471	7	7.7	0.1347	0.4041	5.41%	0
25		3	7.433	6.493	8.374	7	7.7	0.1262	0.3786	5.09%	0
50		3	7.433	6.493	8.374	7	7.7	0.1262	0.3786	5.09%	0
100		3	7.433	6.493	8.374	7	7.7	0.1262	0.3786	5.09%	0
Overall		18	7.472	7.319	7.626	7	7.9	0.0726	0.3083	4.13%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	3	83	83	83	83	83	0	0	0.00%	0
100		3	340	340	340	340	340	0	0	0.00%	0
Overall		6	211.5	63.78	359.2	83	340	57.47	140.8	66.56%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	8.133	7.846	8.42	8	8.2	0.03849	0.1155	1.42%	0
6.25		3	7.833	7.454	8.213	7.7	8	0.05092	0.1528	1.95%	0
12.5		3	7.833	7.454	8.213	7.7	8	0.05092	0.1528	1.95%	0
25		3	7.8	7.303	8.297	7.6	8	0.0666	7 0.2	2.56%	0
50		3	7.8	7.37	8.23	7.6	7.9	0.05773	0.1732	2.22%	0
100		3	7.8	7.37	8.23	7.6	7.9	0.05773	0.1732	2.22%	0
Overall		18	7.867	7.775	7.959	7.6	8.2	0.04354	0.1847	2.35%	0 (0%)

CETIS Measurement Report

Report Date:

07 Apr-22 10:46 (p 2 of 4)

Test Code/ID: VCF0322.207achi / 13-3853-0320

Chironomus 96-Hour Acute Survival Bioassay									Aquatic Bioassay & Consulting Labs, Inc.			
Temperature-°C												
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count	
0	N	3	22	22	22	22	22	0	0	0.00%	0	
6.25		3	22	22	22	22	22	0	0	0.00%	0	
12.5		3	22	22	22	22	22	0	0	0.00%	0	
25		3	22	22	22	22	22	0	0	0.00%	0	
50		3	22	22	22	22	22	0	0	0.00%	0	
100		3	22	22	22	22	22	0	0	0.00%	0	
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)	

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Test Code/ID: VCF0322.207achi / 13-3853-0320

Chironomus 96										
Alkalinity (CaC										
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
)	N	1		60						
100				96						
)	N	2		60						
100				96						
)	N	3		60						
100				96						
Conductivity-µ	mhos									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
)	N	1		364						
6.25				433						
12.5				469						
25				531						
50				712						
100				1040						
)	N	2		364						
5.25	• •	_		430						
12.5				477						
25				549						
50				713						
100				1060						
)	N	3		369				_		
6.25	1N	3		435						
				435 478						
12.5										
25				550						
50				725						
100				1068						
Dissolved Oxy										
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	N	1		7.6						
3.25				7.9						
12.5				7.7						
25				7.6						
50				7.6						
100				7.6						
)	N	2		7.6						
5.25				7.7						
12.5				7.7						
25				7.7						
50				7.7						
100				7.7						
)	N	3		7.2						
6.25				7.2						
12.5				7						
25				7						
50				7						
100				7						

07 Apr-22 10:46 (p 4 of 4)

Test Code/ID:

VCF0322.207achi / 13-3853-0320

Chironomus 96-H	lour Acute	Survival	Bioassay						Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaCO	3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		83				-	
100				340					
0	N	2		83					
100				340					
0	N	3		83					
100				340					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1			-				
6.25				7.7					
12.5				7.7					
25				7.6					
50				7.6					
100				7.6					
0	N	2		8.2	-				
6.25	IN	2		7.8					
12.5				7.8					
25				7.8					
50				7.9					
100				7.9					
0	N	3		8					
6.25				8					
12.5				8					
25				8					
50				7.9					
100				7.9					
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25	IN	2		22					
12.5				22					
25				22					
50				22					
100				22					
0	N	3		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-CC
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.208

CHRONIC FATHEAD MINNOW SURVIVAL & GROWTH BIOASSAY

SURVIVAL	NOEC = TUc = EC25 = EC50 =	100.00 % 1.00 >100.00 % >100.00 %
BIOMASS	NOEC = TUc = IC25 = IC50 =	100.00 % 1.00 >100.00 % >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

20 Apr-22 16:07 (p 1 of 2)

Test Code/ID: VCF0322.208fml / 01-8640-1672

Fathead Minn	ow 7-d Larval S	urvival and G	rowth	Test					Aquatic	Bioassay & C	Consulting	Labs, Ir	ıc.
Batch ID: Start Date: Ending Date: Test Length:	04-5913-1947 29 Mar-22 11:40 05 Apr-22 13:20 7d 2h	Protoc	col: E es: F	Growth-Surviva EPA/821/R-02-0 Pimephales pro Actinopterygii	013 (2002)			Dilu Brin	ie: No	aboratory Wate ot Applicable quatic Biosyste		Age: <	
Receipt Date:	08-5636-7674 28 Mar-22 12:55 28 Mar-22 14:20	CAS (ial: S PC):	/CF0322.208fn Sample Water				Stat	rce: Bi	PDES Stormw oassay Repor E-CC		eason (C	 Cor
Sample Age:		Client	: \	/entura County	Watershed	Protectio	n Dis	stri					
	parison Summa	•	0	-1 88-411			, .	1051		TOF:			
	Endpoint			rison Method	· - ·			IOEL	LOEL	TOEL	PMSD	TU	_
	7d Survival Rate			lany-One Rank				00	>100		4.46%	1	
09-3149-1741	Mean Dry Bioma	ass-mg S	Steel M	lany-One Rank	Sum Test		1	00	>100	***	11.8%	1	
Point Estimat	te Summary												
Analysis ID	Endpoint		Point E	stimate Metho	od		√ L	.evel	%	95% LCL	95% UCL	TU	
06-3966-2402	7d Survival Rate	e l	Linear I	nterpolation (IC	CPIN)		√ E	C15	>100		***	<1	
							√ E	C20	>100			<1	
							√ E	C25	>100	***		<1	
							√ E	C40	>100			<1	
							√ E	C50	>100		***	<1	
02-6425-1647	Mean Dry Bioma	ass-mg l	Linear I	nterpolation (IC	CPIN)		√ I	C15	>100		-	<1	
		•		•	,			C20	>100			<1	
							✓ I	C25	>100			<1	
							√ B	C40	>100			<1	
							√ I	C50	>100			<1	
Test Acceptab	bility					TAC	1 :	14-					
Analysis ID	Endpoint _		Attribu	te	Test Stat		Lim L	lts Jpper	Overlap	Decision			
	7d Survival Rate		Control		1	0.8	_	<	Yes	Passes Cr	iteria		
	7d Survival Rate		Control	•	1	0.8	<	<	Yes	Passes Cr			
	Mean Dry Bioma		Control		0.3398	0.25		<	Yes	Passes Cr			
	Mean Dry Bioma	-	Control	,	0.3398	0.25		:<	Yes	Passes Cr			
	Mean Dry Bioma		PMSD	Тоор	0.1183	0.12		.3	Yes	Below Crit			
7d Survival R							-						
Conc-%	Code	Count !	Mean	95% LCL	95% UCL	Min	N	/lax	Std Err	Std Dev	CV%	%Effe	ct
0	N		1.0000	1.0000	1.0000	1.0000		.0000	0.0000	0.0000	0.00%	0.00%	_
6.25			0.9000	0.8388	0.9612	0.8667		.9333	0.0193	0.0385	4.28%	10.009	
12.5			1.0000	1.0000	1.0000	1.0000		.0000	0.0000	0.0000	0.00%	0.00%	
25			1.0000	1.0000	1.0000	1.0000		.0000	0.0000	0.0000	0.00%	0.00%	
50			0.9833	0.9303	1.0360	0.9333		.0000	0.0167	0.0333	3.39%	1.67%	
100			0.9667	0.9054	1.0280	0.9333		.0000	0.0107	0.0335	3.98%	3.33%	
	mass-mg Summ												
wean bry ыо Conc-%	Code		Mean	95% LCL	95% UCL	Min	ı.	1ax	Std Err	Std Dev	CV%	%Effe	ct
0	N		0.3398	0.3339	0.3457	0.3353		.344	0.00185		1.09%	0.00%	_
•	IN		0.2722	0.3339	0.3457	0.2093		.3353	0.00165		18.94%	19.91	
6 25			0.3425	0.1901									
			1.74/7	v.3349	0.3501	0.3387	U	.3493	0.00237		1.39%	-0.78%	
12.5					0.0000	0.000	^	2647	0.00000	0.04056	2 620/	4 000	/
12.5 25		4 (0.3462	0.3262	0.3662	0.338		.3647	0.00628		3.63%	-1.86%	
6.25 12.5 25 50 100		4 (0.3662 0.3619 0.3568	0.338 0.34 0.2967	0	.3647 .3587 .3413	0.00628 0.00440 0.01021	9 0.008817	3.63% 2.53% 6.29%	-1.86% -2.35% 4.56%	%



CETIS Summary Report

Report Date:

20 Apr-22 16:07 (p 2 of 2)

Test Code/ID:

VCF0322.208fml / 01-8640-1672

Fathead Minn	ow 7-d Larval	Survival an	d Growth T	est		Aquatic Bioassay & Consulting Labs, Inc.
7d Survival R	ate Detail					MD5: F88DE55F6C1B454619B47930668478EC
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.0000	1.0000	1.0000	1.0000	
6.25		0.8667	0.9333	0.9333	0.8667	
12.5		1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	
50		1.0000	0.9333	1.0000	1.0000	
100		0.9333	1.0000	1.0000	0.9333	
Mean Dry Bio	mass-mg Deta	iil				MD5: 20B06BE7EAEEE61D29250A017BEF6E18
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	0.3353	0.3413	0.3387	0.344	
6.25		0.2093	0.268	0.3353	0.276	
12.5		0.3493	0.34	0.3387	0.342	
25		0.3433	0.3647	0.338	0.3387	
50		0.3413	0.3513	0.34	0.3587	
100		0.3213	0.3413	0.338	0.2967	
7d Survival R	ate Binomials					
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	15/15	15/15	15/15	15/15	
6.25		13/15	14/15	14/15	13/15	
12.5		15/15	15/15	15/15	15/15	
25		15/15	15/15	15/15	15/15	
50		15/15	14/15	15/15	15/15	
100		14/15	15/15	15/15	14/15	

Report Date:

20 Apr-22 16:06 (p 1 of 3)

Test Code/ID: VCF0322.208fml / 01-8640-1672

															1 00 10 101
Fathead Minne	ow	7-d Larval S	urviva	l and	Growth	Test					Aqu	atic Bi	oassay & C	onsulting	Labs, Inc
Analyzed:	20 .	6022-2765 Apr-22 16:05 Apr-22 15:59		Ana	ysis:	Nonp		te -Control vs 1 B454619B4		Sta	TIS Ver atus Lev itor ID:		CET!Sv2. 1 008-463-0		
Batch ID:	04-	5913-1947		Test	Type:	Grow	th-Surviva	al (7d)		An	alyst:				
		Mar-22 11:40		Prot	ocol:	EPA/	821/R-02	-013 (2002)		Dil	uent:	Labo	ratory Wate	r	
Ending Date:				Spe	cies:	Pime	phales pr	omelas		Bri	ne:	Not A	Applicable		
Test Length:	7d	2h		Taxo	on:	Actin	opterygii			So	urce:	Aqua	itic Biosyste	ms, CO	Age: <2
Sample ID:	08-	5636-7674		Cod	e:	VCF)322.208f	ml		Pro	oject:	NPDI	ES Stormwa	ater Wet S	eason (Co
Sample Date:	28 1	Mar-22 12:55	i	Mate	erial:	Samp	ole Water			So	urce:	Bioas	ssay Report		
Receipt Date:	28	Mar-22 14:20)	CAS	(PC):					Sta	ation:	ME-C	CC		
Sample Age:	23h	(11 °C)		Clie	nt:	Ventu	ura Count	y Watershed	Protection	Distri					
Data Transfor	m		Alt I	Тур					NOEL	LOEL	TOE	L	TU	MSDu	PMSD
Angular (Corre	cted	1)	C > 1						100	>100			1	0.04456	4.46%
Steel Many-Or	ne R	lank Sum Te	est												
Control	vs	Conc-%		df	Test St	tat	Critical	Ties	P-Type	P-Value	Dec	ision(c	x:5%)		
Negative Contr	ol	6.25*		6	10		10	0	CDF	0.0417	Sign	ificant	Effect		
		12.5		6	18		10	1	CDF	0.8333	Non	-Signifi	cant Effect		
		25		6	18		10	1	CDF	0.8333	Non-	-Signifi	cant Effect		
		50		6	16		10	1	CDF	0.6105	Non-	-Signifi	cant Effect		
		100		6	14		10	1	CDF	0.3451	Non	-Signifi	cant Effect		
Test Acceptab	ility	Criteria	Т	AC Li	mits										
Attribute		Test Stat	Low	er	Upper		Overlap	Decision							
Control Resp		1	8.0		<<	,	Yes	Passes Ci	riteria						
ANOVA Table															
Source		Sum Squa	ares		Mean S	Squa	re	DF	F Stat	P-Value	Dec	ision(c	x:5%)		
Between		0.108246			0.0216	492		5	9.054	0.0002	Sign	ificant	Effect		
Error		0.0430386	i		0.0023	910		18	4						
Total		0.151285						23							
ANOVA Assum	npti	ons Tests													
Attribute		Test						Test Stat	Critical	P-Value	Dec	ision(c	x:1%)		
Variance		Bartlett Eq	uality	of Var	iance Te	est					Inde	termina	ate		
		Levene Eq	uality	of Vai	riance Te	est		22.32	4.248	<1.0E-0	5 Une	qual Va	ariances		
		Mod Lever		-		ce Te	est	5.073	4.248	0.0045	Une	qual Va	ariances		
Distribution		Anderson-	Darling	3 A2 T	Test			1.535	3.878	8.8E-05	Non-	-Norma	al Distributio	n	
		D'Agostino						0.2555	2.576	0.7983	Norr	nal Dis	tribution		
		D'Agostino	Skew	ness	Test			1.103	2.576	0.2701	Norr	nal Dis	tribution		
		D14 **		1.0	0.0		1	4.000	0.04	0.5000	N.L.	L D1	Catherine Chairman		

7.4	Survival	Rate	Summary
1 u	Sulvival	Mare	Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
6.25		4	0.9000	0.8388	0.9612	0.9000	0.8667	0.9333	0.0193	4.28%	10.00%
12.5		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
25		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
50		4	0.9833	0.9303	1.0000	1.0000	0.9333	1.0000	0.0167	3.39%	1.67%
100		4	0.9667	0.9054	1.0000	0.9667	0.9333	1.0000	0.0192	3.98%	3.33%

1.282

0.2917

0.887

9.21

0.2056

0.884

0.5269

1.2E-05

0.0115

Normal Distribution

Normal Distribution

Non-Normal Distribution



D'Agostino-Pearson K2 Omnibus Test

Kolmogorov-Smirnov D Test

Shapiro-Wilk W Normality Test

Report Date: Test Code/ID: 20 Apr-22 16:06 (p 2 of 3)

VCF0322.208fml / 01-8640-1672

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 01-6022-2765 Analyzed:

Endpoint: 7d Survival Rate 20 Apr-22 16:05

Analysis: Nonparametric-Control vs Treatments MD5 Hash: F88DE55F6C1B454619B47930668478EC **CETIS Version:**

Editor ID:

Status Level:

CETISv2.1.1 008-463-000-3

Edit Date:	20 Apr-22 15:59	MD5 Ha
Angular (Co	rrected) Transform	ed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
6.25		4	1.2530	1.1500	1.3570	1.2530	1.1970	1.3100	0.0325	5.19%	13.04%
12.5		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
25		4	1.4410	1.4410	1.4420	1.4410	1.4410	1.4410	0.0000	0.00%	0.00%
50		4	1.4080	1.3040	1.5130	1.4410	1.3100	1.4410	0.0329	4.68%	2.28%
100		4	1.3750	1.2540	1.4960	1.3750	1.3100	1.4410	0.0380	5.53%	4.57%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		0.8667	0.9333	0.9333	0.8667
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	0.9333	1.0000	1.0000
100		0.9333	1.0000	1.0000	0.9333

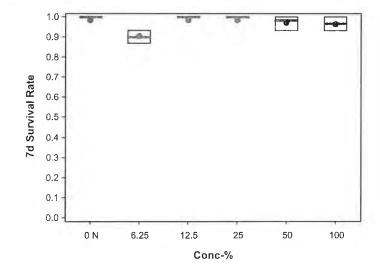
Angular (Corrected) Transformed Detail

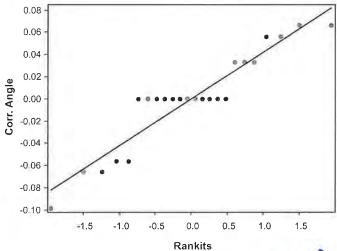
0 N 1.4410 1.4410 1.4410
6.25 1.1970 1.3100 1.3100 1.1970
12.5 1.4410 1.4410 1.4410
25 1.4410 1.4410 1.4410
50 1.4410 1.3100 1.4410 1.4410
100 1.3100 1.4410 1.3100

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	15/15	15/15	15/15	15/15
6.25		13/15	14/15	14/15	13/15
12.5		15/15	15/15	15/15	15/15
25		15/15	15/15	15/15	15/15
50		15/15	14/15	15/15	15/15
100		14/15	15/15	15/15	14/15

Graphics





Page DI - 517 CETIS V2.1.1.6 x64

Report Date:

20 Apr-22 16:06 (p 3 of 3)

Test Code/ID: VCF0322.208fml / 01-8640-1672

Fathead Minn	ow 7	-d Larval S	urvival ar	d Growt	h Te	st					Aquat	ic Bioassay &	Consulting	Labs, Inc
Analysis ID:	09-3	149-1741	Er	dpoint:	Mea	an Dry Biom	ass-mg			CETI	S Versi	on: CETISv2	2.1.1	
Analyzed:	20 A	pr-22 16:05	. An	alysis:	Non	parametric-	Control vs T	reatments		Statu	ıs Leve	l: 1		
Edit Date:	20 A	pr-22 15:59	MI	D5 Hash:	: 20B	06BE7EAE	EE61D2925	0A017BEF	6E18	Edito	or ID:	008-463-	-000-3	
Batch ID:	04-5	913-1947	Te	st Type:	Gro	wth-Surviva	I (7d)			Anal	yst:			
Start Date:	29 N	Лаг-22 11:40) Pr	otocol:	EP/	\/821/R-02-	013 (2002)			Dilue	ent:	Laboratory Wat	er	
Ending Date:	05 A	pr-22 13:20	Sp.	ecies:	Pim	ephales pro	melas			Brine	e:	Not Applicable		
Test Length:	7d 2	2h	Та	xon:	Acti	nopterygii				Sour	ce:	Aquatic Biosyst	ems, CO	Age: <2
Sample ID:	08-5	636-7674	Co	de:	VCF	-0322.208fr	nl			Proje	ect:	NPDES Stormv	vater Wet S	eason (Co
Sample Date:	28 N	1ar-22 12:55	5 Ma	aterial:	San	nple Water				Sour	ce:	Bioassay Repo	rt	
Receipt Date:	28 N	1ar-22 14:20) CA	AS (PC):						Stati	on:	ME-CC		
Sample Age:	23h	(11 °C)	CI	ient:	Ven	itura County	Watershed	Protection	Distri					
Data Transfoi	rm		Alt Hyp					NOEL	LOE	L	TOEL	ΤU	MSDu	PMSD
Untransformed	d		C > T					100	>10	0		1	0.04019	11.83%
Steel Many-O	ne R	ank Sum Te	est											
Control	vs	Conc-%		f Test	Stat	Critical	Ties	P-Type	P-V	alue	Decis	ion(α:5%)		
Negative Cont	rol	6.25	6	10.5		10	1	CDF	0.05	86	Non-S	Significant Effec	t	
		12.5	6	20.5		10	1	CDF	0.96	67	Non-S	Significant Effec	t	
		25	6	19.5		10	1	CDF	0.93	315	Non-S	Significant Effec	t	
		50	6	22.5		10	1	CDF	0.99	944	Non-S	Significant Effec	t	
		100	6	3 13.5		10	1	CDF	0.28	353	Non-S	Significant Effec	t	
Test Acceptal	bility	Criteria	TAC	Limits										
Attribute		Test Stat	Lower	Uppe	r	Overlap	Decision							
Control Resp		0.3398	0.25	<<		Yes	Passes Ci	riteria						
PMSD		0.1183	0.12	0.3		Yes	Below Crit	eria						
ANOVA Table)													
Source		Sum Squ	ares	Mean	Squ	are	DF	F Stat	P-V	alue	Decis	ion(α:5%)		
Between		0.0168023	3	0.003	3605	i	5	6.027	0.00)19	Signif	icant Effect		
Error		0.0100359	9	0.000	5575		18							
Total		0.0268382	2				23							
ANOVA Assu	mptic	ons Tests												
Attribute		Test					Test Stat	Critical	P-V	alue	Decis	ion(α:1%)		
Variance		Bartlett Ed	quality of V	'ariance ⁻	Test		23.56	15.09	0.00	003		ual Variances		
		Levene Ed	quality of \	/ariance	Test		2.395	4.248	0.07	7 84	Equal	Variances		
		Mod Leve	ne Equalit	y of Varia	ance `	Test	2.25	4.248	0.09	936	Equal	Variances		
Distribution		Anderson-	-Darling A	2 Test			2.057	3.878	<1.()E-05	Non-N	Normal Distribut	ion	
		D'Agostino	o Kurtosis	Test			3.216	2.576	0.00)13	Non-N	Normal Distribut	ion	
		D'Agostino	o Skewnes	ss Test			0.04281	2.576	0.96	559		al Distribution		
		D'Agostino	o-Pearson	K2 Omn	ibus	Test	10.34	9.21	0.00)57	Non-N	Normal Distribut	ion	
		Kolmogoro	ov-Smirno	v D Test			0.2646	0.2056	0.00	001	Non-N	Normal Distribut	ion	
		Shapiro-W	Vilk W Nor	mality Te	st		0.8064	0.884	0.00	004	Non-N	Normal Distribut	ion	
Mean Dry Bio	mass	s-mg Sumn	nary											
Conc-%		Code	Count	Mean		95% LCL	95% UCL	Median	Min		Max	Std Err	CV%	%Effect
0		N	4	0.339		0.3339	0.3457	0.34	0.33		0.344			0.00%
6.25			4	0.272		0.1901	0.3542	0.272	0.20		0.335		18.94%	19.91%
12.5			4	0.342	25	0.3349	0.3501	0.341	0.33	387	0.349	3 0.002379	1.39%	-0.78%
25			4	0.346	32	0.3262	0.3662	0.341	0.33	38	0.364	7 0.00628	3.63%	-1.86%
50			4	0.347	' 8	0.3338	0.3619	0.3463	0.34	1	0.358	7 0.004409	2.53%	-2.35%
						0.0040	0.0500	0.0007	0.00	0.07	0.044	0 04004	6 200/	A EC0/

6.29%

4.56%

0.01021

0.3297

0.2967

0.3413

0.3568

100

0.3243

0.2918

Report Date: Test Code/ID: 20 Apr-22 16:06 (p 4 of 3)

VCF0322.208fml / 01-8640-1672

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 09-3149-1741 Endpoint: Mean Dry Biomass-mg CETIS Version: CETISv2.1.1

Analyzed: 20 Apr-22 16:05 Analysis: Nonparametric-Control vs Treatments Status Level: 1

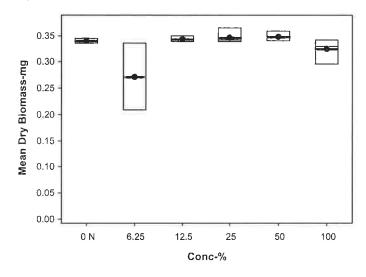
 Analyzed:
 20 Apr-22 16:05
 Analysis:
 Nonparametric-Control vs Treatments
 Status Level:
 1

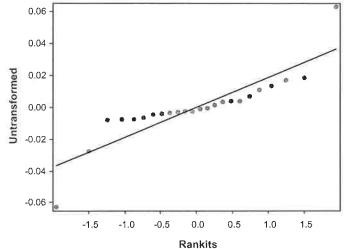
 Edit Date:
 20 Apr-22 15:59
 MD5 Hash:
 20B06BE7EAEEE61D29250A017BEF6E18
 Editor ID:
 008-463-000-3

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	0.3353	0.3413	0.3387	0.344
6.25		0.2093	0.268	0.3353	0.276
12.5		0.3493	0.34	0.3387	0.342
25		0.3433	0.3647	0.338	0.3387
50		0.3413	0.3513	0.34	0.3587
100		0.3213	0.3413	0.338	0.2967

Graphics





Report Date:

20 Apr-22 16:06 (p 1 of 4)

Test Code/ID:

VCF0322.208fml / 01-8640-1672

Fathead	Minno											Consulting	
Analysis	ID:	06-3966-2402	End	point:	7d Survival Rat	e		С	ETIS Versi	on:	CETISv	2.1.1	
Analyzed	d:	20 Apr-22 16:05	Ana	lysis:	Linear Interpola	ition (ICPIN	1)	S	tatus Leve	l:	1		
Edit Date	e:	20 Apr-22 15:59	MD5	Hash:	F88DE55F6C1I	B454619B4	4793066847	8EC E	ditor ID:		008-463	-000-3	
Batch ID):	04-5913-1947	Test	Type:	Growth-Surviva	l (7d)		Α	nalyst:				
Start Dat	te:	29 Mar-22 11:40	Prot	ocol:	EPA/821/R-02-	013 (2002)		D	iluent:	Labo	ratory Wa	ter	
Ending (Date:	05 Apr-22 13:20	Spe	cies:	Pimephales pro	melas		В	rine:	Not A	Applicable		
Test Len	ngth:	7d 2h	Taxo	on:	Actinopterygii			S	ource:	Aqua	itic Biosys	tems, CO	Age : <2
Sample I	ID:	08-5636-7674	Cod	e:	VCF0322.208fr	nl		Р	roject:	NPDI	ES Storm	water Wet S	eason (Co
Sample I	Date:	28 Mar-22 12:55	Mate	erial:	Sample Water			s	ource:	Bioas	ssay Repo	ort	
Receipt I	Date:	28 Mar-22 14:20	CAS	(PC):				S	tation:	ME-C	CC		
Sample A	Age:	23h (11 °C)	Clie	nt:	Ventura County	Watershe	d Protection	Distri					
Linear In	nterpo	lation Options											
X Transf	form	Y Transform	See	d	Resamples	Exp 95%	6 CL Met	hod					
Linear		Linear	0		280	Yes	Two	-Point Int	erpolation				
Test Acc	eptab	ility Criteria	TAC L	imits									
Attribute		Test Stat	Lower	Upper	Overlap	Decision							
Control R	Resp	1	8.0	<<	Yes	Passes C	Criteria						
Point Es	timate	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL	_						
EC15	>100	***		<1	***								
=015													
	>100	***		<1									
EC20				<1 <1		***							
EC20 EC25	>100												
EC20 EC25 EC40	>100 >100			<1		***							
EC20 EC25 EC40 EC50	>100 >100 >100 >100	=		<1 <1			ulated Varia	ate(A/B)				Isoton	ic Variate
EC20 EC25 EC40 EC50 7d Survi	>100 >100 >100 >100	-		<1 <1			ulated Varia Max	ate(A/B)	%Effe	ect	A/B	lsoton Mean	
EC20 EC25 EC40 EC50 7d Survi Conc-%	>100 >100 >100 >100	ate Summary	_	<1 <1 <1 Mean 1.0000	Median 1.0000	Calco	Max 1.0000		%Effe		A/B 60/60		%Effec 0.00%
EC20 EC25 EC40 EC50 7d Survit Conc-%	>100 >100 >100 >100	ate Summary	Count	<1 <1 <1 Mean	Median 1.0000 0.9000	Calco	Max	CV%		,	60/60 54/60	Mean	%Effec 0.00% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 3.25	>100 >100 >100 >100	ate Summary	Count 4	<1 <1 <1 <1 Mean 1.0000 0.9000 1.0000	Median 1.0000 0.9000 1.0000	Calco Min 1.0000 0.8667 1.0000	Max 1.0000 0.9333 1.0000	CV% 0.00% 4.28% 0.00%	0.00% 10.00% 0.00%	% >	60/60 54/60 60/60	Mean 1.0000 0.9708 0.9708	%Effec 0.00% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5	>100 >100 >100 >100	ate Summary	Count 4 4 4 4 4 4	<1 <1 <1 Mean 1.0000 0.9000 1.0000	Median 1.0000 0.9000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00%	0.00% 10.00° 0.00%	% >	60/60 54/60 60/60 60/60	Mean 1.0000 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25	>100 >100 >100 >100	ate Summary	Count 4 4 4 4 4 4	<1 <1 <1 <1 Mean 1.0000 0.9000 1.0000 1.0000 0.9833	Median 1.0000 0.9000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25	>100 >100 >100 >100	ate Summary	Count 4 4 4 4 4 4	<1 <1 <1 Mean 1.0000 0.9000 1.0000	Median 1.0000 0.9000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00%	0.00% 10.00° 0.00%	% % o	60/60 54/60 60/60 60/60	Mean 1.0000 0.9708 0.9708 0.9708	2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 3.25 12.5 25 50 100	>100 >100 >100 >100 >ival Ra	ate Summary	Count 4 4 4 4 4 4	<1 <1 <1 <1 Mean 1.0000 0.9000 1.0000 1.0000 0.9833	Median 1.0000 0.9000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100	>100 >100 >100 >100 >ival Ra	ate Summary Code N	Count 4 4 4 4 4 4	<1 <1 <1 <1 Mean 1.0000 0.9000 1.0000 1.0000 0.9833	Median 1.0000 0.9000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi [*] Conc-% 0 6.25 12.5 25 50 100 7d Survi [*] Conc-%	>100 >100 >100 >100 >ival Ra	te Summary Code N	Count 4 4 4 4 4 4 4 4 4 4	<1 <1 <1 <1	Median 1.0000 0.9000 1.0000 1.0000 0.9667	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effect 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 3.25 12.5 25 50 100 7d Survi Conc-%	>100 >100 >100 >100 >ival Ra	te Summary Code N	Count 4 4 4 4 4 4 4 Rep 1	<1 <1 <1 <1 <1 <1 Mean 1.0000 0.9000 1.0000 0.9833 0.9667 Rep 2	Median 1.0000 0.9000 1.0000 1.0000 1.0000 0.9667 Rep 3 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25	>100 >100 >100 >100 >ival Ra	te Summary Code N	Count 4 4 4 4 4 4 1 1.0000	<pre><1 <1 <1 <1 <10000 0.9000 1.0000 1.0000 0.9833 0.9667 Rep 2 1.0000</pre>	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25	>100 >100 >100 >100 >ival Ra	te Summary Code N	Count 4 4 4 4 4 4 1 1.0000 0.8667	<pre></pre>	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25 12.5	>100 >100 >100 >100 >ival Ra	te Summary Code N	Count 4 4 4 4 4 4 1.0000 0.8667 1.0000	<pre><1 <1 <1 <1 </pre> <pre>Mean 1.0000 0.9000 1.0000 1.0000 0.9833 0.9667</pre> <pre>Rep 2 1.0000 0.9333 1.0000</pre>	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25 12.5	>100 >100 >100 >100 >ival Ra	te Summary Code N	Count 4 4 4 4 4 4 1 1.0000 0.8667 1.0000 1.0000	<pre><1 <1 <1 <1 <1 </pre> <pre>Mean 1.0000 0.9000 1.0000 0.9833 0.9667 </pre> <pre>Rep 2 1.0000 0.9333 1.0000 1.0000</pre>	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25 12,5 25 50 100	>100 >100 >100 >100 ival Ra	te Summary Code N	Count 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 1.0000	<pre></pre>	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000 1.0000 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effect 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi [*] Conc-% 0 6.25 12.5 25 50 100 7d Survi [*] 0 6.25 12,5 25 50 10,0	>100 >100 >100 >100 ival Ra	te Summary Code N te Detail Code N	Count 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 1.0000	<pre></pre>	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000 1.0000 1.0000	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-%	>100 >100 >100 >100 ival Ra	te Summary Code N te Detail Code N	Count 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 0.9333	Mean 1.0000 0.9000 1.0000 0.9833 0.9667 Rep 2 1.0000 0.9333 1.0000 0.9333 1.0000 Rep 2 15/15	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000 1.0000 1.0000 1.0000	Calci Min 1.0000 0.8667 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000 1.0000 1.0000 0.9333	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survition 5.25 12.5 25 100 7d Survition 5.25 12.5 25 100 7d Survition 6.25 12.5 25 50 100 7d Survition 6.25	>100 >100 >100 >100 ival Ra	te Summary Code N te Detail Code N	Count 4 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 1.0000 0.9333	<pre><1 <1 <1 <1 <1 <1 </pre> <pre>Mean 1.0000 0.9000 1.0000 0.9833 0.9667 Rep 2 1.0000 0.9333 1.0000 1.0000 0.9333 1.0000 </pre>	Median 1.0000 0.9000 1.0000 1.0000 1.0000 0.9667 Rep 3 1.0000 0.9333 1.0000 1.0000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 03.25 12.5 25 50 100 7d Survi Conc-% 03.25 12.5 25 50 100 7d Survi Conc-% 03.25	>100 >100 >100 >100 ival Ra	te Summary Code N te Detail Code N	Count 4 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 1.0000 0.9333 Rep 1 15/15	Mean 1.0000 0.9000 1.0000 0.9833 0.9667 Rep 2 1.0000 0.9333 1.0000 0.9333 1.0000 Rep 2 15/15	Median 1.0000 0.9000 1.0000 1.0000 1.0000 0.9667 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000 0.8667 1.0000 1.0000 1.0000 0.9333 Rep 4 15/15	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 3.25 12.5 25 50 100 Conc-% 0 3.25 12.5 25 50 1100 Conc-% 0 3.25 12.5 25 50 1100	>100 >100 >100 >100 ival Ra	te Summary Code N te Detail Code N	Count 4 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 1.0000 0.9333 Rep 1 15/15 13/15	Color Color	Median 1.0000 0.9000 1.0000 1.0000 0.9667 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00115 13/15	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effec 0.00% 2.92% 2.92% 2.92% 2.92%
EC20 EC25 EC40 EC50 7d Survi Conc-% 0 6.25 12.5 25 50 100 7d Survi Conc-% 0 6.25 12,5 25 50 100	>100 >100 >100 >100 ival Ra	te Summary Code N te Detail Code N	Count 4 4 4 4 4 4 1.0000 0.8667 1.0000 1.0000 0.9333 Rep 1 15/15 13/15	Color Colo	Median 1.0000 0.9000 1.0000 1.0000 1.0000 0.9667 Rep 3 1.0000 1.0000 1.0000 1.0000 1.0000 1.40000 1.40000 1.40000 1.40000 1.40000 1.40000 1.40000 1.40115 15/15	Calco Min 1.0000 0.8667 1.0000 1.0000 0.9333 0.9333 Rep 4 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0015 15/15 13/15	Max 1.0000 0.9333 1.0000 1.0000	CV% 0.00% 4.28% 0.00% 0.00% 3.39%	0.00% 10.00% 0.00% 0.00%	% % o	60/60 54/60 60/60 60/60 59/60	Mean 1.0000 0.9708 0.9708 0.9708 0.9708	%Effect 0.00% 2.92% 2.92% 2.92% 2.92%



Report Date:

20 Apr-22 16:06 (p 2 of 4)

Test Code/ID:

VCF0322.208fml / 01-8640-1672

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

06-3966-2402 Analysis ID: Analyzed:

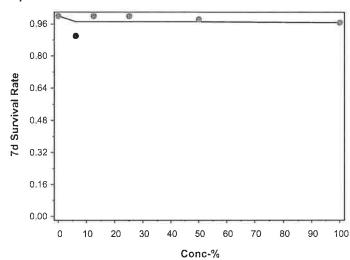
20 Apr-22 16:05 20 Apr-22 15:59 MD5 Hash: F88DE55F6C1B454619B47930668478EC

Endpoint: 7d Survival Rate Analysis: Linear Interpolation (ICPIN) **CETIS Version:** Editor ID:

Status Level:

CETISv2.1.1 008-463-000-3

Edit Date: Graphics



Report Date:

20 Apr-22 16:06 (p 3 of 4)

Test Code/ID:

VCF0322.208fml / 01-8640-1672

Fathead Mir	nnow 7-d Larv	al Survival	and Growt	h Test				Aq	uatic B	ioassay & Cons	ulting	Labs, Inc
Analysis ID:	02-6425-16	47	Endpoint:	Mean Dry Bion	nass-mg			CETIS V	ersion:	CETISv2.1.1		
Analyzed:	20 Apr-22 1		Analysis:	Linear Interpol	•	•		Status L		1		
Edit Date:	20 Apr-22 1	5:59	MD5 Hash:	20B06BE7EA	EEE61D292	250A017BE	F6E18	Editor ID):	008-463-000-3	3	
Batch ID:	04-5913-19	47	Test Type:	Growth-Surviv	al (7d)			Analyst:				
Start Date:	29 Mar-22 1	11:40	Protocol:	EPA/821/R-02	-013 (2002)	1		Diluent:	Labo	oratory Water		
Ending Date	e: 05 Apr-22 1	3:20	Species:	Pimephales pr	omelas			Brine:	Not .	Applicable		
Test Length	ı: 7d 2h		Taxon:	Actinopterygii				Source:	Aqua	atic Biosystems,	CO	Age: <2
Sample ID:	08-5636-76	74	Code:	VCF0322.208f	ml			Project:	NPD	ES Stormwater	Wet S	eason (Co
Sample Date	e: 28 Mar-22 1	12:55	Material:	Sample Water				Source:	Bioa	ssay Report		
Receipt Date	e: 28 Mar-22 1	14:20	CAS (PC):					Station:	ME-	CC		
Sample Age	e: 23h (11 °C)		Client:	Ventura Count	y Watershe	d Protection	n Distri					
Linear Inter	polation Option	ons										
X Transform	n Y Trans	form_	Seed	Resamples	Exp 95%	6 CL Met	thod					
Linear	Linear		285621	280	Yes	Two	o-Point I	nterpolati	on			
Test Accept	ability Criteria	а тд	C Limits									
Attribute	Test S	Stat Lowe		r Overlap	Decision	1						
Control Resp	0.339	8 0.25	<<	Yes	Passes (Criteria						
Point Estim	ates											
Level %	95% L	_CL 95% L	JCL TU	95% LCL	95% UCI							
IC15 >10			<1		-							
IC20 >10	00		<1	1.0								
IC25 >10	00		<1									
IC40 >10	00		<1									
IC50 >10	00	***	<1									
Mean Dry Bi	iomass-mg Sı	ummary			Ca	alculated V	ariate				sotor	ic Variate
Conc-%	Code	Count	t Mean	Median	Min	Max	CV%	%	Effect	Me	an	%Effect
0	N	4	0.339	8 0.34	0.3353	0.344	1.09	% 0.0	00%	0.3	398	0.00%
6.25		4	0.272	2 0.272	0.2093	0.3353	18.94	4% 19	.91%	0.3	272	3.73%
12.5		4	0.342	5 0.341	0.3387	0.3493	1.39	% -0.	78%	0.3	272	3.73%
25		4	0.346	2 0.341	0.338	0.3647	3.63	% -1.	86%	0.3	272	3.73%
50		4	0.347		0.34	0.3587	2.53		35%		272	3.73%
100		4	0.324	3 0.3297	0.2967	0.3413	6.29	% 4.5	56%	0.3	243	4.56%
Mean Dry Bi	iomass-mg De	etail										
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4							
0	N	0.3353	3 0.341	3 0.3387	0.344							
6.25		0.2093		0.3353	0.276							
12.5		0.3493		0.3387	0.342							
25		0.3433			0.3387							
50		0.3410	3 0.351	3 0.34	0.3587							

0.2967

0.3213

0.3413

0.338

100

Report Date:

20 Apr-22 16:06 (p 4 of 4)

Test Code/ID:

VCF0322.208fml / 01-8640-1672

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 02-6425-1647 Analyzed:

20 Apr-22 16:05 20 Apr-22 15:59 MD5 Hash: 20B06BE7EAEEE61D29250A017BEF6E18 Editor ID:

Endpoint: Mean Dry Biomass-mg Analysis: Linear Interpolation (ICPIN) **CETIS Version:**

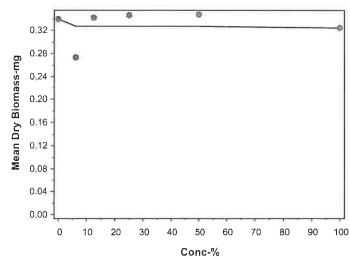
CETISv2.1.1

Status Level:

008-463-000-3

Graphics

Edit Date:



CETIS Measurement Report

Report Date:

20 Apr-22 16:07 (p 1 of 2)

Test Code/ID: VCF

VCF0322.208fml / 01-8640-1672

Fathead Minn	ow 7-d Larval	Surviva	I and Growt	h Test	st Aquatic Bioassay & Consulting Labs, In						g Labs, Inc.
=	rt Date: 29 Mar-22 11:40 Protocol: EF ling Date: 05 Apr-22 13:20 Species: Pi t Length: 7d 2h Taxon: Ac		Growth-Surviv EPA/821/R-02 Pimephales pr Actinopterygii	-013 (2002)			Analyst: Diluent: Brine: Source:	Laboratory Water Not Applicable Aquatic Biosystems, CO		Age: <24	
-	08-5636-7674 28 Mar-22 12:5 28 Mar-22 14:2		Code: Material: CAS (PC):	VCF0322.2086 Sample Water				Project: Source: Station:	ource: Bioassay Report		
Sample Age:			Client:	Ventura Count	ty Watershe	d Protect	ion Distri	otation.	WE GO		
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	8	60	60	60	60	60	0	0	0.00%	0
100		8	116	116	116	116	116	0	0	0.00%	0
Overall		16	88	72.59	103.4	60	116	7.23	28.92	32.86%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	8	364.1	362.2	366.1	360	367	0.2946	3 2.357	0.65%	0
6.25		8	485.5	482.8	488.2	480	490	0.4009	3.207	0.66%	0
12,5		8	485.3	469.5	501	452	502	2.356	18.85	3.88%	0
25		8	542.9	537.4	548.4	530	550	0.8249	9 6.6	1.22%	0
50		8	678.9	672.5	685.2	670	690	0.950		1.12%	0
100		8	990.8	984.7	996.8	974	997	0.9082		0.73%	0
Overall		48	591.2	532	650.4	360	997	29.42	203.8	34.48%	0 (0%)
Dissolved Oxy	ygen-mg/L										
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	8	7.588	7.443	7.732	7.4	7.8	0.021	59 0.1727	2.28%	0
6.25		8	7.638	7.465	7.81	7.3	7.9	0.0258	32 0.2066	2.70%	0
12.5		8	7.638	7.49	7.785	7.3	7.8	0.022	1 0.1768	2.31%	0
25		8	7.612	7.449	7.776	7.2	7.8	0.0244	19 0.1959	2.57%	0
50		8	7.625	7.465	7.785	7.2	7.8	0.0238	36 0.1909	2.50%	0
100		8	7.625	7.465	7.785	7.2	7.8	0.0238	36 0.1909	2.50%	0
Overall		48	7.621	7.569	7.673	7.2	7.9	0.0259		2.36%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	8	83	83	83	83	83	0	0	0.00%	0
100		8	213	213	213	213	213	0	0	0.00%	0
Overall		16	148	112.2	183.8	83	213	16.78	67.13	45.36%	0 (0%)
pH-Units											
Conc-%	Code	Count	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Coun
0	N	8	8.037	7.949	8.126	7.9	8.2	0.0132	26 0.1061	1.32%	0
6.25		8	7.875	7.728	8.022	7.6	8	0.0219	91 0.1753	2.23%	0
12.5		8	7.875	7.728	8.022	7.6	8	0.0219	91 0.1753	2.23%	0
25		8	7.863	7.737	7.988	7.6	8	0.0188	32 0.1506	1.92%	0
50		8	7.875	7.743	8.007	7.6	8	0.0197	76 0.1581	2.01%	0
100		8	7.863	7.737	7.988	7.6	8	0.0188	32 0.1506	1.92%	0
Ournell		40	7.000	7.050	7.044	7.0	0.0	0.000	0.0 0.4 5.0 4	2.020/	0 (00/)



2.02%

0 (0%)

7.944

7.6

8.2

0.02296

0.1591

48

7.898

7.852

Overall

CETIS Measurement Report

Report Date:

20 Apr-22 16:07 (p 2 of 2)

Test Code/ID:

VCF0322.208fml / 01-8640-1672

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Temperature-°	C,C										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.08	24	24.15	24	24.2	0.01107	0.08857	0.37%	0
12.5		8	24.08	23.99	24.16	24	24.3	0.01294	0.1035	0.43%	0
25		8	24.08	23.98	24.17	24	24.3	0.01456	0.1165	0.48%	0
50		8	24.08	23.99	24.16	24	24.3	0.01294	0.1035	0.43%	0
100		8	24.09	23.97	24.2	24	24.4	0.01695	0.1356	0.56%	0
Overall		48	24.06	24.04	24.09	24	24.4	0.01443	0.09998	0.42%	0 (0%)





April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*" *EPA-821-R-02-013*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-CC
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.208

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL NOEC = 100.00 % TUc = 1.00

> EC25 = >100.00 % EC50 = >100.00 %

REPRODUCTION NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 % IC50 = >100.00 %

Yours/very truly

Scott Johnson

Laboratory Director

Report Date:

20 Apr-22 16:11 (p 1 of 2)

Test Code/ID: VCF0322.208cer / 00-2216-2192

Ceriodaphnia	7-d Survival and	d Reproduction 1	est					Aquat	tic Bi	oassay & 0	Consulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	13-9423-6512 29 Mar-22 11:40 05 Apr-22 13:20 7d 2h	Protocol:	: Reproduction-8 EPA/821/R-02 Ceriodaphnia o Branchiopoda	-013 (2002)			Dilu Brin	rine: Not		ratory Wate applicable tic Biosyste		Age:	<24
•	02-3360-8667 28 Mar-22 12:55 28 Mar-22 14:20		VCF0322.2086 Sample Water Ventura Count		I Protection	Die	Proj Sou Stat	rce:		say Repor	ater Wet So	eason	(Con
			ventura Count	y watershed	rotection	DIS	uı						
	parison Summa					/ N	051	1.051		TO 51	21102		
Analysis ID	Endpoint		parison Method			_	OEL	LOEL		TOEL	PMSD	TU	_
	7d Survival Rate Reproduction		er Exact/Bonferro nett Multiple Com				00 00	>100 >100			13.2%	1	
		Buil	Tota Malapio Gom	parison res				7100			13.2 /6		
Point Estimat	-	Dain	4 Catimata Math			/ L.		0/		0.50/ 1.01	05% 1161	T 11	
Analysis ID	Endpoint 7d Survival Rate		t Estimate Meth			/ Le		%		95% LCL			
.0-2303-8000	ru Survivai Rate	Linea	ar Interpolation (I	OF III)			C15 C20	>100 >100				<1 <1	
							C25	>100				<1	
							C40	>100		***		<1	
						/ E		>100				<1	
4-3852-4258	Reproduction	Linea	ar Interpolation (I	CPIN)		/ IC		>100				<1	
				,			20	>100			***	<1	
					,	/ IC	25	>100			***	<1	
							240	>100			***	<1	
					`	/ IC	50	>100			***	<1	
Test Acceptal	bility				TAC	Limi	ts						
Analysis ID	Endpoint	Attri	bute	Test Stat	Lower	U	pper	Overl	ар	Decision			
03-9100-7519	7d Survival Rate	Cont	rol Resp	1	0.8	<	<	Yes		Passes Cr	iteria		
	7d Survival Rate		rol Resp	1	0.8	<<	<	Yes		Passes Cr	iteria		
	Reproduction		roi Resp	26.3	15	<<	<	Yes		Passes Cr			
	Reproduction		rol Resp	26.3	15	<		Yes		Passes Cr			
04-8114-9556	Reproduction	PMS	D	0.1316	0.13	0.	47	Yes		Passes Cr	iteria		
	ate Summary		0.007.1.001	0.507 11.01				0.15					
Conc-%	Code N	10 1.000		95% UCL 1.0000	1.0000		0000	0.000		0.0000	CV% 0.00%	%Ef	
) 3.25	IN	10 1.000		1.0000	1.0000		0000	0.000		0.0000	0.00%	0.00	
12.5		10 1.000		1.0000	1.0000		0000	0.000		0.0000	0.00%	0.00	
25		10 1.000		1.0000	1.0000		0000	0.000		0.0000	0.00%	0.00	
50		10 1.000		1.0000	1.0000		0000	0.000		0.0000	0.00%	0.00	
100		10 1.000		1.0000	1.0000		0000	0.000		0.0000	0.00%	0.00	
Reproduction	Summary												
Conc-%	Code	Count Mean	n 95% LCL	95% UCL	Min	М	ах	Std E	rr	Std Dev	CV%	%Ef	fect
)	N	10 26.3	23.28	29.32	18	32	2	1.334		4.218	16.04%	0.00	%
6.25		10 24.9	22.37	27.43	18	29	€	1.12		3.542	14.22%	5.32	%
12.5		10 24.9	23.07	26.73	21	29		0.809		2.558	10.27%	5.32	%
25		10 29.1	26.57	31.63	24	35		1.12		3.542	12.17%	-10.6	
50		10 31.5	29.74	33.26	28	35	5	0.778	2	2.461	7.81%	- 19.	77%
20											4.4.0=04		

11.97%

-14.83%

32.79

26

38

1.143

3.615

10

30.2

27.61

100

50

100

Report Date:

20 Apr-22 16:11 (p 2 of 2)

Test Code/ID:

VCF0322.208cer / 00-2216-2192

Ceriodaphnia	7-d Survival a	ınd Reprodu	iction Test					Aquatic	Bioassay &	Consulting	Labs, Inc.
7d Survival R	ate Detail						MC	5: 521A0D	F2AE1E590	D72392DBA	BE0C7AEFC
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Reproduction	Detail						ME	5: BB0A63	96ECA3E2	CA748C0C5	SEF3CA139E
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	18	30	25	24	28	25	23	31	27	32
6.25		25	28	25	22	18	29	26	21	28	27
12.5		23	25	29	26	27	23	24	28	23	21
25		25	29	28	30	24	28	35	27	34	31
50		35	31	32	28	35	32	30	28	31	33
100		29	26	29	33	33	38	29	29	30	26
7d Survival R	ate Binomials										
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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

1/1

1/1

1/1

1/1

1/1

1/1

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Report Date:

20 Apr-22 16:11 (p 1 of 2)

Test Code/ID: VCF0322.208cer / 00-2216-2192
Ceriodaphnia 7-d Survival and Reproduction Test Aquatic Bioassay & Consulting Labs, Inc.

vsis ID:	04-8114-9556	Endpoint: Reproduction	CETIS Version: (CETISv2 1 1

Analysis ID:04-8114-9556Endpoint:ReproductionCETIS Version:CETIS V2.1Analyzed:20 Apr-22 16:09Analysis:Parametric-Control vs TreatmentsStatus Level:1

Edit Date: 20 Apr-22 16:08 MD5 Hash: BB0A6396ECA3E2CA748C0C5EF3CA139 Editor ID: 008-463-000-3

Batch ID: 13-9423-6512 Test Type: Reproduction-Survival (7d) Analyst:

Start Date:29 Mar-22 11:40Protocol:EPA/821/R-02-013 (2002)Diluent:Laboratory WaterEnding Date:05 Apr-22 13:20Species:Ceriodaphnia dubiaBrine:Not Applicable

Test Length:7d 2hTaxon:BranchiopodaSource:Aquatic Biosystems, COAge: <24</th>Sample ID:02-3360-8667Code:VCF0322.208cerProject:NPDES Stormwater Wet Season (Con

Sample Date: 28 Mar-22 12:55 Material: Sample Water Source: Bioassay Report

Receipt Date: 28 Mar-22 14:20 CAS (PC): Station: ME-CC

Sample Age: 23h (11 °C) Client: Ventura County Watershed Protection Distri

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	MSDu	PMSD
Untransformed	C > T	100	>100		1	3.46	13.16%

Dunnett Multiple Comparison Test

Control vs	Conc-%	df	Test Stat	Critical	MSD	P-Type	P-Value	Decision(α:5%)
Negative Control	6.25	18	0.9262	2.289	3.46	CDF	0.4503	Non-Significant Effect
	12.5	18	0.9262	2.289	3.46	CDF	0.4503	Non-Significant Effect
	25	18	-1.852	2.289	3.46	CDF	0.9991	Non-Significant Effect
	50	18	-3.44	2.289	3.46	CDF	1.0000	Non-Significant Effect
	100	18	-2.58	2.289	3.46	CDF	1.0000	Non-Significant Effect

Test Acceptability Criteria TAC Limits

•	•	IAC	Limits		
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	26.3	15	<<	Yes	Passes Criteria
PMSD	0.1316	0.13	0.47	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(a:5%)
Between	402.083	80.4167	5	7.039	4.0E-05	Significant Effect
Error	616.9	11.4241	54			
Total	1018.98		59			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(a:1%)
Variance	Bartlett Equality of Variance Test	3.689	15.09	0.5951	Equal Variances
	Levene Equality of Variance Test	0.6609	3.377	0.6546	Equal Variances
	Mod Levene Equality of Variance Test	0.5425	3.377	0.7432	Equal Variances
Distribution	Anderson-Darling A2 Test	0.227	3.878	0.8470	Normal Distribution
	D'Agostino Kurtosis Test	0.1522	2.576	0.8790	Normal Distribution
	D'Agostino Skewness Test	0.07612	2.576	0.9393	Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	0.02896	9.21	0.9856	Normal Distribution
	Kolmogorov-Smirnov D Test	0.06647	0.1331	0.7148	Normal Distribution
	Shapiro-Wilk W Normality Test	0.9923	0.9459	0.9704	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	26.3	23.28	29.32	25.67	18	32	1.334	16.04%	0.00%
6.25		10	24.9	22.37	27.43	25.33	18	29	1.12	14.22%	5.32%
12.5		10	24.9	23.07	26.73	24.5	21	29	0.809	10.27%	5.32%
25		10	29.1	26.57	31.63	28.33	24	35	1.12	12.17%	-10.65%
50		10	31.5	29.74	33.26	31.5	28	35	0.7782	7.81%	-19.77%
100		10	30.2	27.61	32.79	29	26	38	1.143	11.97%	-14.83%



Report Date:

20 Apr-22 16:11 (p 2 of 2)

Test Code/ID: VCF0322.208cer / 00-2216-2192

Ceriodaphnia 7-d Survival and Reproduction Test

20 Apr-22 16:08

Aquatic Bioassay & Consulting Labs, Inc.

04-8114-9556 Analysis ID: Analyzed:

Endpoint: Reproduction 20 Apr-22 16:09

Analysis: Parametric-Control vs Treatments MD5 Hash: BB0A6396ECA3E2CA748C0C5EF3CA139

CETIS Version:

Editor ID:

Status Level:

008-463-000-3

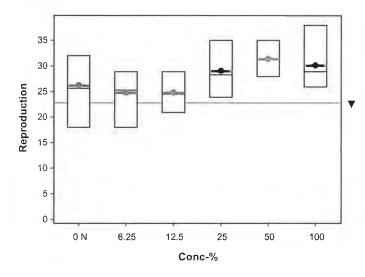
CETISv2.1.1

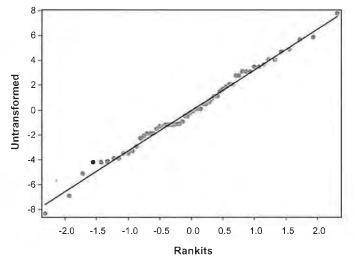
Reproduction Detail

Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	18	30	25	24	28	25	23	31	27	32
6.25		25	28	25	22	18	29	26	21	28	27
12.5		23	25	29	26	27	23	24	28	23	21
25		25	29	28	30	24	28	35	27	34	31
50		35	31	32	28	35	32	30	28	31	33
100		29	26	29	33	33	38	29	29	30	26

Graphics





Report Date:

20 Apr-22 16:11 (p 1 of 4)

Test Code/ID: VCF0322.208cer / 00-2216-2192

								est Code/ID;	VCF0322.2	coscer / u	0-2216-2192
Ceriod	aphnia	7-d Survival and	d Reproduc	tion Te	est			Aquati	c Bioassay & C	onsulting	g Labs, Inc.
Analys Analyz		20-2939-9358 20 Apr-22 16:09		point: ysis:	7d Survival Rat Linear Interpola	-		CETIS Version		.1	
Edit Da		20 Apr-22 16:08		•	'	E59D72392DBAE	BE0C7AEF	Editor ID:	008-463-0	00-3	
Batch I	D:	13-9423-6512	Test	Type:	Reproduction-S	Survival (7d)		Analyst:			
Start D	ate:	29 Mar-22 11:40	Prot	ocol:	EPA/821/R-02-	013 (2002)		Diluent: l	_aboratory Wate		
Ending	Date:	05 Apr-22 13:20	Spe	cies:	Ceriodaphnia d	ubia		Brine:	Not Applicable		
Test Le	ength:	7d 2h	Taxo	on:	Branchiopoda			Source:	Aquatic Biosyste	ms, CO	Age: <24
Sample	e ID:	02-3360-8667	Cod	e:	VCF0322.208c	er		Project:	NPDES Stormwa	ter Wet S	Season (Con
Sample	Date:	28 Mar-22 12:55	Mate	erial:	Sample Water			Source: E	Bioassay Report		
Receip	t Date:	28 Mar-22 14:20	CAS	(PC):				Station:	ME-CC		
Sample	e Age:	23h (11 °C)	Clie	nt:	Ventura County	Watershed Prot	ection Distri				
Linear	Interpo	olation Options									
X Trans	sform	Y Transform	See	d	Resamples	Exp 95% CL	Method				
Linear		Linear	0		280	Yes	Two-Point	Interpolation			
Test Ad	ceptal	oility Criteria	TAC L	mits							
Attribu	te	Test Stat	Lower	Uppe	r Overlap	Decision					
Control	Resp	1	8.0	<<	Yes	Passes Criteria	l				
Point E	stimat	es									
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL					
EC15	>100			<1	***						
EC20	>100		***	<1							
EC25	>100	***		<1							
EC40	>100			<1		***					
EC50	>100			<1	344	200					
7d Sur	vival R	ate Summary				Calculated	Variate(A/E	3)		Isoto	nic Variate
		•					•				

7d Survival R	ate Summary				Calc	ulated Varia	ate(A/B)			Isotor	ic Variate
Conc-%	Code	Count	Mean	Median	Min	Max	CV%	%Effect	A/B	Mean	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%
6.25		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%
12.5		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%
25		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%
50		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%
100		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000	0.00%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12,5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1



Report Date:

20 Apr-22 16:11 (p 2 of 4)

Test Code/ID:

Editor ID:

VCF0322.208cer / 00-2216-2192

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 20-2939-9358 Analyzed:

20 Apr-22 16:09 20 Apr-22 16:08 Endpoint: 7d Survival Rate

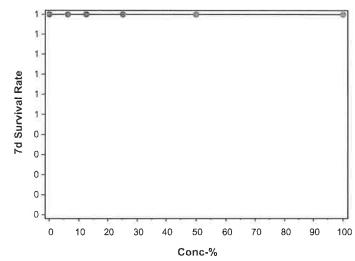
Analysis: Linear Interpolation (ICPIN) MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF

CETIS Version: Status Level:

CETISv2.1.1

008-463-000-3

Edit Date: Graphics



Report Date:

20 Apr-22 16:11 (p 3 of 4)

Test Code/ID:

VCF0322.208cer / 00-2216-2192

							T	est Co	de/ID:	VCF032	2.208cer / 0	0-2216-219
Ceriodaphnia	a 7-d Survival ar	nd Reprodu	ction Te	est					Aquatic B	lioassay &	Consulting	g Labs, Inc.
Analysis ID:	14-3852-4258	End	point:	Reproduction				CETI	S Version:	CETISV	2.1.1	
Analyzed:	20 Apr-22 16:09	9 A na	lysis:	Linear Interpola	ation (ICPII	N)		Statu	s Level:	1		
Edit Date:	20 Apr-22 16:08	3 MD :	5 Hash:	BB0A6396ECA	3E2CA748	BC0C5E	F3CA139	Edito	r ID:	008-463	3-000-3	
Batch ID:	13-9423-6512	Tes	t Type:	Reproduction-S	Survival (7d	d)		Analy	/st:			
Start Date:	29 Mar-22 11:4	0 Pro	tocol:	EPA/821/R-02-	-013 (2002))		Dilue	nt: Lab	oratory Wa	iter	
•	: 05 Apr-22 13:20) Spe	cies:	Ceriodaphnia o	lubia			Brine	: Not	Applicable		
Test Length:	7d 2h	Тах	on:	Branchiopoda				Sour	ce: Aqu	atic Biosys	stems, CO	Age: <24
Sample ID:	02-3360-8667	Cod	le:	VCF0322.208d	er			Proje	ct: NP	DES Storm	water Wet S	Beason (Co
Sample Date	: 28 Mar-22 12:5	5 Mat	erial:	Sample Water				Sour	ce: Bioa	assay Repo	ort	
Receipt Date	: 28 Mar-22 14:20	0 CAS	6 (PC):					Statio	on: ME-	-CC		
Sample Age:	23h (11 °C)	Clie	nt:	Ventura County	y Watershe	ed Prote	ction Distri					
_inear Interp	olation Options											
X Transform	Y Transform	n See	d	Resamples	Exp 95%	% CL	Method					
inear	Linear	140	4864	280	Yes		Two-Point	Interpo	olation			
Test Accepta	bility Criteria	TAC L	imits									
Attribute	Test Stat	Lower	Uppe	r Overlap	Decision	n						
Control Resp	26.3	15	<<	Yes	Passes (Criteria						
oint Estima	tes											
_evel %	95% LCL	95% UCL	TU	95% LCL	95% UCI	L						
C15 >100)		<1									
C20 >100			<1	***								
C25 >100)		<1	***	1.555							
C40 >100		***	<1	222	***							
C50 >100)	3440	<1	***	***							
Reproduction	n Summary				Ca	alculate	ed Variate				Isoto	nic Variate
Conc-%	Code	Count	Mean	Median	Min	Max	CV	%	%Effect		Mean	%Effect
)	N	10	26.3	25.67	18	32	16.0	04%	0.00%		27.82	0.00%
5.25		10	24.9	25.33	18	29	14.2	22%	5.32%		27.82	0.00%
12.5		10	24.9	24.5	21	29	10.2	27%	5.32%		27.82	0.00%
25		10	29.1	28.33	24	35	12.	17%	-10.65%		27.82	0.00%
50		10	31.5	31.5	28	35	7.8	1%	-19.77%		27.82	0.00%
100		10	30.2	29	26	38	11.9	97%	-14.83%		27.82	0.00%
Reproduction	n Detail								-			
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep	5 Rep	6	Rep 7	Rep 8	Rep 9	Rep 10
D	N	18	30	25	24	28	25		23	31	27	32

6.25 12.5

Report Date:

20 Apr-22 16:11 (p 4 of 4)

Test Code/ID:

VCF0322.208cer / 00-2216-2192

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID; 14-3852-4258 Analyzed: 20 Apr-22 16:09

Endpoint: Reproduction

Linear Interpolation (ICPIN)

CETIS Version: Status Level:

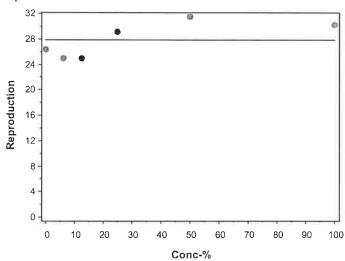
CETISv2.1.1

Edit Date: 20 Apr-22 16:08 Analysis: MD5 Hash: BB0A6396ECA3E2CA748C0C5EF3CA139

Editor ID:

008-463-000-3

Graphics



Report Date:

20 Apr-22 16:11 (p 1 of 2)

Test Code/ID: VCF0322.208cer / 00-2216-2192

Ceriodaphnia	a 7-d	Survival and	d Repro	duction Te	st					Aquat	tic Bio	assay &	Consu	Iting	Labs, Inc
Analysis ID:		100-7519		-	7d Survival Ra				CETIS	S Vers	ion:	CETISV	2.1.1		
Analyzed:		pr-22 16:09		-	STP 2xK Cont				Statu	s Leve	el:	1			
Edit Date:	20 A	pr-22 16:08	N	/ID5 Hash:	521A0DF2AE1	E59D72392I	DBABE0C	7AEF	Edito	r ID:		008-463	3-000-3		
Batch ID:	13-9	423-6512	Т	est Type:	Reproduction-	Survival (7d)			Analy	st:					
Start Date:	29 N	lar-22 11:40	F	rotocol:	EPA/821/R-02	-013 (2002)			Dilue	nt:	Labor	atory Wa	iter		
Ending Date:	: 05 A	pr-22 13:20	9	pecies:	Ceriodaphnia o	aidut			Brine	:	Not A	pplicable			
Test Length:	7d 2	?h	T	axon:	Branchiopoda				Sourc	e:	Aquat	ic Biosys	items, C	00	Age: <24
Sample ID:	02-3	360-8667	C	ode:	VCF0322.208	er			Proje	ct:	NPDE	S Storm	water W	et S	eason (Co
Sample Date	: 28 N	lar-22 12:55	N	laterial:	Sample Water				Sourc	e:	Bioas	say Repo	ort		
Receipt Date	:: 28 N	lar-22 14:20	C	AS (PC):					Statio	n:	ME-C	С			
Sample Age:	: 23h	(11 °C)	C	lient:	Ventura Count	y Watershed	Protection	Distri							
Data Transfo	rm		Alt Hy	р			NOEL	LOEI		TOEL		TU			
Untransforme	ed		C > T				100	>100		-		1			
Fisher Exact	/Bonfe	erroni-Holm	Test												
Control	vs	Conc-%		Test S	tat P-Type	P-Value	Decision	(a:5%)							
Negative Con	itrol	6.25		1.0000		1.0000	Non-Sign	ificant E	ffect						
		12.5		1.0000	Exact	1.0000	Non-Sign	ificant E	ffect						
		25		1.0000	Exact	1.0000	Non-Sign								
		50		1.0000	Exact	1.0000	Non-Sign								
		100		1.0000	Exact	1.0000	Non-Sign	ificant E	ffect						
Test Accepta	bility	Criteria	TAG	C Limits											
Attribute		Test Stat	Lower	Upper	Overlap	Decision									
Control Resp		1	0.8	<<	Yes	Passes Cr	riteria								
7d Survival F	Rate F	requencies													
Conc-%		Code	NR	R	NR + R	Prop NR	Prop R	%Eff	ect						
0		N	10	0	10	1.0000	0.0000	0.00%	6						
6.25			10	0	10	1.0000	0.0000	0.00%	6						
12.5			10	0	10	1.0000	0.0000	0.00%							
25			10						/						
50			10	0	10	1.0000	0.0000	0.00%							
			10	0	10	1.0000	0.0000	0.00%	6						
									6						
100	Rate S	ummary	10	0	10	1.0000	0.0000	0.00%	6						
100 7d Survival R Conc-%	Rate S	Code	10 10 Count	0	10	1.0000 1.0000 95% UCL	0.0000	0.00%	6	Max		Std Err	CV%	ı	%Effect
100 7d Survival F Conc-% 0	Rate S		10 10 Count	0 0 Mean 1.0000	10 10 95% LCL	1.0000 1.0000 95% UCL 1.0000	0.0000 0.0000 Median 1.0000	0.00% 0.00% Min 1.000	6	1.000	0	0.0000	0.00	%	0.00%
100 7d Survival R Conc-% 0 6.25	Rate S	Code	10 10 Count 10 10	0 0 Mean	10 10 95% LCL	1.0000 1.0000 95% UCL	0.0000 0.0000 Median 1.0000 1.0000	0.00% 0.00% Min 1.000	0000	_	0			%	
100 7d Survival F Conc-% 0 6.25 12.5	Rate S	Code	10 10 Count 10 10	0 0 Mean 1.0000	10 10 95% LCL 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000	0.00% 0.00% Min 1.000	0000	1.000	0 (0.0000	0.00	% %	0.00%
7d Survival R Conc-% 0 6.25 12.5 25	Rate S	Code	10 10 Count 10 10 10	0 0 0 Mean 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000	0.00% 0.00% Min 1.000	00	1.000	0 0 0	0.0000	0.00	% % %	0.00% 0.00%
100 7d Survival R Conc-% 0 6.25 12.5 25	Rate S	Code	10 10 Count 10 10	0 0 0 Mean 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000	0.00% 0.00% Min 1.000 1.000	000000000000000000000000000000000000000	1.000 1.000 1.000	0 (0.0000 0.0000 0.0000	0.000	% % % %	0.00% 0.00% 0.00%
100 7d Survival R Conc-% 0 6.25 12.5 25	Rate S	Code	10 10 Count 10 10 10	0 0 0 Mean 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000	0.00% 0.00% Min 1.000 1.000 1.000	000000000000000000000000000000000000000	1.000 1.000 1.000 1.000	0 (0 (0 (0 (0.0000 0.0000 0.0000 0.0000	0.000	% % % %	0.00% 0.00% 0.00% 0.00%
100 7d Survival R Conc-% 0 6.25 12.5 25 50 100		Code N	10 10 Count 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000	0.00% 0.00% Min 1.000 1.000 1.000	000000000000000000000000000000000000000	1.000 1.000 1.000 1.000	0 (0 (0 (0 (0.0000 0.0000 0.0000 0.0000	0.00° 0.00° 0.00° 0.00°	% % % %	0.00% 0.00% 0.00% 0.00%
7d Survival R Conc-% 0 6.25 12.5 25 50 100		Code N	10 10 Count 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000	0.00% 0.00% Min 1.000 1.000 1.000	666666666666666666666666666666666666666	1.000 1.000 1.000 1.000	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0	0.0000 0.0000 0.0000 0.0000	0.00° 0.00° 0.00° 0.00°	% % % % %	0.00% 0.00% 0.00% 0.00%
100 7d Survival R Conc-% 0 6.25 12.5 25 50 100 7d Survival R Conc-%		Code N	10 10 Count 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000	0.009 0.009 Min 1.000 1.000 1.000	600000000000000000000000000000000000000	1.000 1.000 1.000 1.000 1.000	00 (00 (00 (00 (00 (00 (00 (00 (00 (00	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.00° 0.00° 0.00° 0.00°	% % % % %	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
7d Survival R Conc-% 0 6.25 12.5 25 50 100 7d Survival R Conc-%		Code N etail	10 10 Count 10 10 10 10 10 10	Mean 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5	0.009 0.009 Min 1.000 1.000 1.000 1.000	600000000000000000000000000000000000000	1.000 1.000 1.000 1.000 1.000 1.000	0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.00° 0.00° 0.00° 0.00° 0.00°	% % % % % %	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
7d Survival R Conc-% 0 6.25 12.5 25 50 100 7d Survival R Conc-% 0 6.25		Code N etail	10 10 10 10 10 10 10 10 10 10	0 0 0 1.0000 1.0000 1.0000 1.0000 Rep 2	10 10 95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 3 1.0000 1.0000	1.0000 1.0000 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 4	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5	0.009 0.009 Min 1.000 1.000 1.000 1.000 1.000	66666666666666666666666666666666666666	1.000 1.000 1.000 1.000 1.000 1.000 Rep 7		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Rep 8	0.00° 0.00° 0.00° 0.00° 0.00° Rep	% % % % % 9 00	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
100 7d Survival F Conc-% 0		Code N etail	10 10 10 10 10 10 10 10 10 10 10 10.	Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	10 10 95% LCL 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 4 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Rep 5 1.0000 1.0000	0.009 0.009 1.000 1.000 1.000 1.000 1.000 1.000 1.000	6 6 6 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 1.000 1.000 1.000 1.000 Rep 7		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Rep 8 1.0000	0.00° 0.00° 0.00° 0.00° 0.00° 0.00°	% % % % % % 9 00	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 10 1.0000
100 7d Survival R Conc-% 0 6.25 12.5 25 50 100 7d Survival R Conc-% 0 6.25 12.5		Code N etail	10 10 10 10 10 10 10 10 10 10 1.0000 1.0000	0 0 0 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	10 10 95% LCL 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 4 1.0000 1.0000	0.0000 0.0000 Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.009 0.009 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	6 6 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Rep 8 1.0000 1.0000	0.00° 0.00° 0.00° 0.00° 0.00° 1.000 1.000	% % % % % 9 00 00	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Rep 10 1.0000 1.0000



Report Date:

20 Apr-22 16:11 (p 2 of 2)

Test Code/ID:

VCF0322.208cer / 00-2216-2192

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 03-9100-7519

20 Apr-22 16:09 Analysis

Endpoint: 7d Survival Rate

Analysis: STP 2xK Contingency Tables

CETIS Version: Status Level:

CETISv2.1.1

b. 4

Edit Date: 20 Apr-22 16:08

MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF

Editor ID:

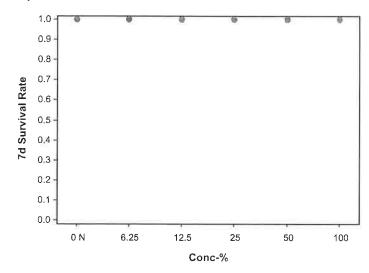
008-463-000-3

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
6.25		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
12.5		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
50		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics

Analyzed:



Report Date:

20 Apr-22 16:11 (p 1 of 2)

Test Code/ID: VCF0322.208cer / 00-2216-2192

Ceriodaphnia	7-d Survival	and Repr	oduction Te	est				Aqua	g Labs, Inc.		
Batch ID: Start Date: Ending Date: Test Length:	•	40	Test Type: Protocol: Species: Taxon:	Reproduction- EPA/821/R-02 Ceriodaphnia Branchiopoda	:-013 (2002)	,		Analyst: Diluent: Brine: Source:	Laboratory Wa Not Applicable Aquatic Biosys		Age: <24
Sample ID:	02-3360-8667		Code:	VCF0322.208	cer			Project:	NPDES Storm	water Wet	Season (Con
Sample Date:			Material:	Sample Water	•			Source:	Bioassay Repo	ort	
Receipt Date:		20	CAS (PC):					Station:	ME-CC		
Sample Age:	23h (11 °C)		Client:	Ventura Count	ty Watershe	d Protect	tion Distri				
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Count	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	60	60	60	60	60	0	0	0.00%	0
100		8	116	116	116	116	116	0	0	0.00%	0
Overall		16	88	72.59	103.4	60	116	7.23	28.92	32.86%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	364.1	362.2	366.1	360	367	0.294	3 2.357	0.65%	0
6.25		8	485.5	482.8	488.2	480	490	0.4009	9 3.207	0.66%	0
12.5		8	485.3	469.5	501	452	502	2.356	18.85	3.88%	0
25		8	542.9	537.4	548.4	530	550	0.824	9 6.6	1.22%	0
50		8	678.9	672.5	685.2	670	690	0.950	7 7.605	1.12%	0
100		8	990.8	984.7	996.8	974	997	0.9082	2 7.265	0.73%	0
Overall		48	591.2	532	650.4	360	997	29.42	203.8	34.48%	0 (0%)
Dissolved Oxy	ygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	7.588	7.443	7.732	7.4	7.8	0.021	59 0.1727	2.28%	0
6.25		8	7.638	7.465	7.81	7.3	7.9	0.0258	32 0.2066	2.70%	0
12.5		8	7.638	7.49	7.785	7.3	7.8	0.022	1 0.1768	2.31%	0
25		8	7.612	7.449	7.776	7.2	7.8	0.0244	49 0.1959	2.57%	0
50		8	7.625	7.465	7.785	7.2	7.8	0.0238	36 0.1909	2.50%	0
100		8	7.625	7.465	7.785	7.2	7.8	0.0238	36 0.1909	2.50%	0
Overall		48	7.621	7.569	7.673	7.2	7.9	0.0259	95 0.1798	2.36%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	83	83	83	83	83	0	0	0.00%	0
100		8	213	213	213	213	213	0	0	0.00%	0
Overall		16	148	112.2	183.8	83	213	16.78	67.13	45.36%	0 (0%)
pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	N	8	8.037	7.949	8.126	7.9	8.2	0.0132	26 0.1061	1.32%	0
6.25		8	7.875	7.728	8.022	7.6	8	0.0219	91 0.1753	2.23%	0
12.5		8	7.875	7.728	8.022	7.6	8	0.0219	91 0.1753	2.23%	0
25		8	7.863	7.737	7.988	7.6	8	0.0188	32 0.1506	1.92%	0
50		8	7.875	7.743	8.007	7.6	8	0.0197	76 0.1581	2.01%	0
100		8	7.863	7.737	7.988	7.6	8	0.0188	32 0.1506	1.92%	0



2.02%

0 (0%)

7.944

7.6

8.2

0.02296

0.1591

Overall

48

7.898

7.852

CETIS Measurement Report

Report Date:

20 Apr-22 16:11 (p 2 of 2)

Test Code/ID: VCF0322.208cer / 00-2216-2192

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Temperature-°C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.00%	0
6.25		8	24.08	24	24.15	24	24.2	0.01107	0.08857	0.37%	0
12.5		8	24.08	23.99	24.16	24	24.3	0.01294	0.1035	0.43%	0
25		8	24.08	23.98	24.17	24	24.3	0.01456	0.1165	0.48%	0
50		8	24.08	23.99	24.16	24	24.3	0.01294	0.1035	0.43%	0
100		8	24.09	23.97	24.2	24	24.4	0.01695	0.1356	0.56%	0
Overall		48	24.06	24.04	24.09	24	24.4	0.01443	0.09998	0.42%	0 (0%)



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-CC
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.208

ACUTE 96 HOURS HYALELLA AZTECA SURVIVAL BIOASSAY

% Survival = 100 % Survival in 100% Sample

*TUa = 0.00

* TU(a) Is calculated by: log (% Mortality)/1.7

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

07 Apr-22 10:52 (p 1 of 1)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

Hyalella 96-h	Acute Survival T	est							Aqua	tic B	Bioassay & C	Consulting	Labs,	Inc.
Batch ID: Start Date: Ending Date: Test Length:	21-4736-2044 29 Mar-22 11:40 02 Apr-22 13:15 4d 2h	P S	est Type: rotocol: pecies: axon:	Survival (96h) EPA/821/R-02 Hyalella aztec Malacostraca	2-012 (2002)			Dilu Brir	lyst: ent:	Lab Not	oratory Wate Applicable latic Biosyste	er	Age:	
•	15-1985-0840 28 Mar-22 12:55 28 Mar-22 14:20 23h (11 °C)	N C	ode: laterial: AS (PC):	VCF0322.208 Sample Water	-				ject: rce: ion:		DES Stormw assay Repor -CC		ason ((Con
	parison Summai						_			_				_
Analysis ID	Endpoint	,	Com	parison Metho	d		./	NOEL	LOE		TOEL	PMSD	TU	
	96h Survival Rat	e		Many-One Ran			<u> </u>	100	>100				1	5
Point Estimat	e Summary													
Analysis ID	Endpoint		Point	Estimate Metl	hod		./	Level	%		95% LCL	95% UCL	TU	5
	96h Survival Rat	е		r Interpolation (<u> </u>	EC10	>100			3370 GGL	<1	
.0 1000 1000	oon our mar na		Linou	· interpolation (101 111)			EC15	>100		***	***	<1	
								EC20	>100				<1	
								EC25	>100		***	time .	<1	
								EC40	>100			400	<1	
								EC50	>100				<1	
96h Survival I	Rate Summary													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std E	Err	Std Dev	CV%	%Ef	fect
0	N	4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000	alam.	0.00	%
6.25		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000	-	0.00	%
12.5		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.00	%
25		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.00	%
50		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000	-	0.00	%
100		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.00	%
96h Survival I	Rate Detail							MD	5: E88	740A	7CB88EC4€	6B4EC0A60	E4B8/	AEB7
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	1.0000	1.000	0 1.0000	1.0000									
6.25		1.0000	1.000	0 1.0000	1.0000									
12.5		1.0000	1.000	0 1.0000	1.0000									
25		1.0000	1.000	0 1.0000	1.0000									
50		1.0000			1.0000									
100		1.0000			1.0000									
96h Survival I	Rate Binomials													
	Code	Rep 1	Rep 2	Rep 3	Rep 4									
Conc-%		-1-	5/5	5/5	5/5									
	N	5/5	3/3	3/3	0,0									
0	N	5/5 5/5	5/5	5/5	5/5									
0 6.25	N													
0 6.25 12.5	N	5/5	5/5	5/5	5/5									
Conc-% 0 6.25 12.5 25 50	N	5/5 5/5	5/5 5/5	5/5 5/5	5/5 5/5									

Report Date:

07 Apr-22 10:52 (p 1 of 2)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

Hyalella 96-h A	cute Surviva	l Test							Aquatic	Bioassay &	Consultin	g Labs, Inc
Analysis ID:	17-9050-2843	E	ndpoint:	96h Survival	Rate			CET	IS Versior	n: CETISv	1.9.7	
Analyzed: (05 Apr-22 15:	35 A	nalysis:	Nonparametr	ic-Contro	I vs T	reatments	State	us Level:	1		
Edit Date: (05 Apr-22 15:	33 N	1D5 Hash:	E88740A7CE	88EC46	34EC	0A60E4B8	SAEB Edit	or ID:	000-189	-126-0	
Batch ID:	21-4736-2044	Т	est Type:	Survival (96h)			Anal	yst:			
Start Date: 2	29 Mar-22 11:	40 F	rotocol:	EPA/821/R-0	2-012 (20	002)		Dilu	ent: La	boratory Wa	ter	
Ending Date: (02 Apr-22 13:	15 S	pecies:	Hyalella azte	ca			Brin	e: No	ot Applicable		
Test Length: 4	4d 2h	Т	axon:	Malacostraca				Sou	rce: Ad	quatic Biosys	tems, CO	Age:
Sample ID:	15-1985-0840	C	ode:	VCF0322,20	Bahya			Proj	ect: NF	DES Storm	vater Wet S	Season (Co
Sample Date: 2	28 Mar-22 12:	55 N	laterial:	Sample Wate	er			Sou	rce: Bi	oassay Repo	rt	
Receipt Date: 2	28 Mar-22 14:	20 C	AS (PC):					Stati	on: M	E-CC		
Sample Age: 2	23h (11 °C)		lient:	VCWPD								
Data Transforn	n	Alt Hy	p				NOEL	LOEL	TOEL	TU		
Angular (Correc	ted)	C > T					100	>100		1		
Steel Many-On	e Rank Sum	Test										
-	vs Conc-%		Test 5	Stat Critical	Ties	DF	P-Type	P-Value	Decisio	n(α:5%)		
Negative Contro	ol 6.25		18	10	1	6	CDF	0.8333		nificant Effec	t	
	12.5		18	10	1	6	CDF	0.8333	_	nificant Effec		
	25		18	10	1	6	CDF	0.8333	_	nificant Effec		
	50		18	10	1	6	CDF	0.8333	-	nificant Effec		
	100		18	10	1	6	CDF	0.8333	•	nificant Effec		
ANOVA Table												
Source	Sum Sq	uares	Mean	Square	DF		F Stat	P-Value	Decisio	n(a:5%)		
Between	0		0		5				Indetern	ninate		
Error	0		0		18							
Total	0				23		7					
ANOVA Assum	ptions Tests											
Attribute	Test				Test	Stat	Critical	P-Value	Decisio	n(α:1%)		
Variance	Bartlett I	Equality of	Variance 1	est					Indetern	ninate		
Distribution	Shapiro-	-Wilk W No	rmality Te	st					Indetern	ninate		
96h Survival R	ate Summary	/										
Conc-%	Code	Count	Mean	95% LC	L 95%	UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.000	1.0000	1.000	0	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
•						10	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
_		4	1.000	1.0000	1.000	10		1.0000			0.000/	0.00%
6.25		4 4	1.000 1.000		1.000 1.000		1.0000	1.0000	1.0000	0.0000	0.00%	
6.25 12.5				1.0000		0			1.0000 1.0000	0.0000	0.00%	0.00%
6.25 12.5 25		4	1.000	1.0000 1.0000	1.000	0 0	1.0000	1.0000				0.00% 0.00%
6.25 12.5 25 50		4 4	1.000 1.000	1.0000 1.0000 1.0000	1.000 1.000	10 10 10	1.0000 1.0000	1.0000 1.0000	1.0000	0.0000	0.00%	
6.25 12.5 25 50 100	cted) Transfo	4 4 4 4	1.000 1.000 1.000 1.000	1.0000 1.0000 1.0000	1.000 1.000 1.000	10 10 10	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	0.0000 0.0000	0.00% 0.00%	0.00%
6.25 12.5 25 50 100 Angular (Corre	cted) Transfo Code	4 4 4 4	1.000 1.000 1.000 1.000	1.0000 1.0000 1.0000 1.0000	1.000 1.000 1.000 1.000	00 00 00 00	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	0.0000 0.0000	0.00% 0.00%	0.00%
6.25 12.5 25 50 100 Angular (Corre Conc-%		4 4 4 4 ormed Sur	1.000 1.000 1.000 1.000 nmary	0 1.0000 0 1.0000 0 1.0000 0 1.0000 95% LC	1.000 1.000 1.000 1.000	00 00 00 00	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	0.0000 0.0000 0.0000	0.00% 0.00% 0.00%	0.00%
6.25 12.5 25 50 100 Angular (Corre Conc-%	Code	4 4 4 4 ormed Sur Count	1.000 1.000 1.000 1.000 nmary Mean	0 1.0000 1.0000 0 1.0000 1.0000 1.0000 95% LC	1.000 1.000 1.000 1.000 L 95%	00 00 00 00 00 UCL	1.0000 1.0000 1.0000 1.0000 Median	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 Max	0.0000 0.0000 0.0000 Std Err	0.00% 0.00% 0.00%	0.00% 0.00% %Effect
6.25 12.5 25 50 100 Angular (Corre Conc-% 0 6.25	Code	4 4 4 4 primed Sur Count 4	1.000 1.000 1.000 1.000 nmary Mean 1.345	0 1.0000 1.0000 0 1.0000 1.0000 95% LC 0 1.3450 0 1.3450	1.000 1.000 1.000 1.000 L 95%	00 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 Median 1.3450	1.0000 1.0000 1.0000 1.0000 Min 1.3450	1.0000 1.0000 1.0000 Max 1.3450	0.0000 0.0000 0.0000 Std Err 0.0000	0.00% 0.00% 0.00% CV%	0.00% 0.00% %Effect 0.00%
6.25 12.5 25 50 100 Angular (Corre Conc-% 0 6.25 12.5	Code	4 4 4 4 Drmed Sur Count 4 4	1.000 1.000 1.000 1.000 nmary Mean 1.345 1.345	95% LC 1.3450 1.3450	1.000 1.000 1.000 1.000 L 95% 1.346 1.346	00 00 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 Min 1.3450 1.3450	1.0000 1.0000 1.0000 Max 1.3450 1.3450	0.0000 0.0000 0.0000 Std Err 0.0000 0.0000	0.00% 0.00% 0.00% CV% 0.00% 0.00%	0.00% 0.00% %Effect 0.00% 0.00%
6.25 12.5 25 50 100 Angular (Corre Conc-% 0 6.25 12.5 25	Code	4 4 4 4 0rmed Sur Count 4 4 4	1.000 1.000 1.000 1.000 nmary Mean 1.345 1.345	95% LC 1.3450 1.3450 1.3450	1.000 1.000 1.000 1.000 L 95% 1.346 1.346	00 00 00 00 00 00 00 00 00	1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450 1.3450	1.0000 1.0000 1.0000 1.0000 Min 1.3450 1.3450 1.3450	1.0000 1.0000 1.0000 Max 1.3450 1.3450 1.3450	0.0000 0.0000 0.0000 Std Err 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% CV% 0.00% 0.00%	0.00% 0.00% %Effect 0.00% 0.00%



Report Date:

07 Apr-22 10:52 (p 2 of 2)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

Hyalella 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 17-9050-2843

05 Apr-22 15:35 An

Endpoint: 96h Survival Rate

CETIS Version:

CETISv1.9.7

Analyzed: 05 A Edit Date: 05 A

05 Apr-22 15:33 MD5 H

Analysis: Nonparametric-Control vs Treatments
MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

Status Level: Editor ID:

000-189-126-0

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000

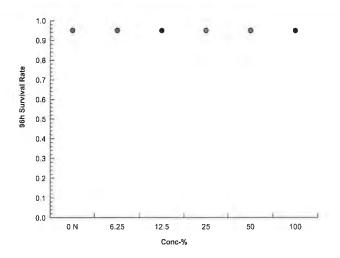
Angular (Corrected) Transformed Detail

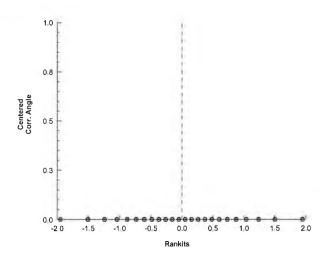
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.3450	1.3450	1.3450	1.3450
6.25		1.3450	1.3450	1.3450	1.3450
12.5		1.3450	1.3450	1.3450	1.3450
25		1.3450	1.3450	1.3450	1.3450
50		1.3450	1.3450	1.3450	1.3450
100		1.3450	1.3450	1.3450	1.3450

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	5/5	5/5	5/5	5/5	
6.25		5/5	5/5	5/5	5/5	
12.5		5/5	5/5	5/5	5/5	
25		5/5	5/5	5/5	5/5	
50		5/5	5/5	5/5	5/5	
100		5/5	5/5	5/5	5/5	

Graphics





Report Date:

07 Apr-22 10:52 (p 1 of 2)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

									Test	Code/ID):	VCF0322.	208ahya / 1	9-7562-050
Hyalella	96-h	Acute Survival T	est							Aquati	c Bi	oassay &	Consulting	Labs, Inc
Analysi Analyze Edit Da	ed:	16-1588-1009 05 Apr-22 15:35 05 Apr-22 15:33	Ana	point: lysis: 5 Hash:	Linear Interpola	ation (ICPIN					on: :	1.9.7 -126-0		
Batch II	D:	21-4736-2044	Tes	Type;	Survival (96h)	_			Analy	yst:				
Start Da	ate:	29 Mar-22 11:40	Prof	ocol:	EPA/821/R-02	-012 (2002)			Dilue		abo	ratory Wa	ter	
Ending	Ending Date: 02 Apr-22 13:15			cies:	Hyalella azteca	3			Brine	e: 1	Not A	Applicable		
Test Le	ngth:	: 4d 2h Taxon: Malacostraca Source: Aquatic Biosy							atic Biosys	tems, CO	Age:			
Sample	ID:	15-1985-0840	Cod	e:	VCF0322.208a	ahya			Proje	ct: N	NPD	ES Storm	water Wet S	eason (Co
Sample	Date:	28 Mar-22 12:55	Mat	erial:	Sample Water				Sour		3ioa	ssay Repo	ort	
Receipt	t Date:	28 Mar-22 14:20	CAS	(PC):					Statio	on: N	ΛE-(CC		
Sample	Age:	23h (11 °C)	Clie	nt:	VCWPD									
Linear I	Interpo	lation Options												
X Trans	form	Y Transform		d	Resamples	Exp 95%		Method						
Linear		Linear	0		280	Yes		Two-Point	Interpo	olation				
Point E	stimat	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL								
EC10	>100			<1	1	***								
EC15	>100			<1										
EC20 EC25	>100 >100			<1 <1										
EC25 EC40	>100			<1										
EC50	>100			<1										
96h Sur	rvival F	Rate Summary				Calcu	lated \	Variate(A/	3)				Isotor	nic Variate
Conc-%		Code	Count	Mean	Median	Min	Max	CV		%Effe	ct	A/B	Mean	%Effect
0		N	4	1.000	0 1.0000	1.0000	1.000			0.00%		20/20	1.0000	0.00%
6.25			4	1.000	0 1.0000	1.0000	1.000	0.0	0%	0.00%		20/20	1.0000	0.00%
12.5			4	1.000	0 1.0000	1.0000	1.000	0.0	0%	0.00%		20/20	1.0000	0.00%
25			4	1.000	0 1.0000	1.0000	1.000	0.0	0%	0.00%		20/20	1.0000	0.00%
50			4	1.000		1.0000	1.000			0.00%		20/20	1.0000	0.00%
100			4	1.000	0 1.0000	1.0000	1.000	0.0	0%	0.00%		20/20	1.0000	0.00%
96h Sur	rvival F	Rate Detail												
Conc-%	, D	Code	Rep 1	Rep 2		Rep 4								
)		N	1.0000	1.000		1.0000								
6.25			1.0000	1.000		1.0000								
12.5			1.0000	1.000		1.0000								
25			1.0000	1.000		1.0000								
50			1.0000	1.000		1.0000								
100			1.0000	1.000	0 1.0000	1.0000								
		Rate Binomials												
Conc-%	b	Code	Rep 1	Rep 2		Rep 4					_			
0		N	5/5	5/5	5/5	5/5								
6.25			5/5	5/5	5/5	5/5								
12.5			5/5	5/5	5/5	5/5								
25			5/5	5/5	5/5	5/5								
50			5/5	5/5	5/5	5/5								



5/5

5/5

5/5

5/5

100

Report Date:

07 Apr-22 10:52 (p 2 of 2)

Test Code/ID:

VCF0322.208ahya / 19-7562-0503

Hyalella 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed: Edit Date:

05 Apr-22 15:35 05 Apr-22 15:33 Endpoint: 96h Survival Rate

Analysis: Linear Interpolation (ICPIN)

MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

CETIS Version: Status Level:

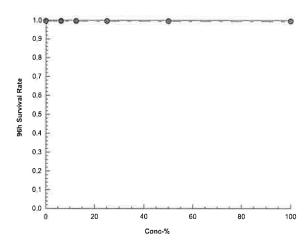
Editor ID:

1

000-189-126-0

CETISv1.9.7

Graphics





Report Date:

07 Apr-22 10:52 (p 1 of 4)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

Hyalella 96-h	Acute Surviva	l Test						Aquatic	Bioassay &	Consulting	g Labs, Inc.	
Batch ID: Start Date: Ending Date: Test Length:	•	Test Type: Protocol: Species: Taxon:	Survival (96h) EPA/821/R-02 Hyalella aztec Malacostraca	` '		D B	Analyst: Diluent: Laboratory Water Brine: Not Applicable Source: Aquatic Biosystems, CO Age:					
Sample ID: 15-1985-0840 Code: Sample Date: 28 Mar-22 12:55 Material: Receipt Date: 28 Mar-22 14:20 CAS (PC)			Material:	VCF0322.208a Sample Water	•		s	ource: Bio	PDES Storm ^e Dassay Repo		Season (Cor	
Sample Age:			Client:	VCWPD								
Alkalinity (Ca	CO3)-mg/L											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun	
0	N	3	60	60	60	60	60	0	0	0.00%	0	
100		3	116	116	116	116	116	0	0	0.00%	0	
Overall		6	88	55.81	120.2	60	116	12.52	30.67	34.86%	0 (0%)	
Conductivity-	umhos											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Cour	
0	N	3	365.7	358.5	372.8	364	369	0.9623	2.887	0.79%	0	
6.25		3	467.3	397.2	537.4	435	487	9.406	28.22	6.04%	0	
12.5		3	472.3	427.2	517.5	452	487	6.058	18.18	3.85%	0	
25		3	540	515.2	564.8	530	550	3.333	10	1.85%	0	
50		3	673.3	659	687.7	670	680	1.925	5.774	0.86%	0	
100		3	987	958.8	1015	974	995	3.786	11.36	1.15%	0	
Overall		18	584.3	480.5	688.1	364	995	49.21	208.8	35.73%	0 (0%)	
Dissolved Oxy	/gen-mg/L											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun	
0	N	3	7.467	6.893	8.04	7.2	7.6	0.07698	0.2309	3.09%	0	
6.25		3	7.667	6.868	8.465	7.3	7.9	0.1072	0.3215	4.19%	0	
12.5		3	7.567	6.563	8.571	7.1	7.8	0.1347	0.4041	5.34%	0	
25		3	7.5	6.417	8.583	7	7.8	0.1453	0.4359	5.81%	0	
50		3	7.5	6.417	8.583	7	7.8	0.1453	0.4359	5.81%	0	
100		3	7.5	6.417	8.583	7	7.8	0.1453	0.4359	5.81%	0	
Overall		18	7.533	7.369	7.698	7	7.9	0.07796	0.3308	4.39%	0 (0%)	
Hardness (Ca	CO3)-mg/L											
Conc-%	Code	Count		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun	
0	N	3	83	83	83	83	83	0	0	0.00%	0	
100		3	213	213	213	213	213	0	0	0.00%	0	
Overall		6	148	73.28	222.7	83	213	29.07	71.2	48.11%	0 (0%)	
pH-Units												
Conc-%	Code	Count		95% LCL		Min	Max	Std Err	Std Dev	CV%	QA Coun	
0	Ν	3	8.133	7.846	8.42	8	8.2	0.03849	0.1155	1.42%	0	
6.25		3	7.767	7.25	8.284	7.6	8	0.06939	0.2082	2.68%	0	
12.5		3	7.767	7.25	8.284	7.6	8	0.06939	0.2082	2.68%	0	
25		3	7.767	7.387	8.146	7.6	7.9	0.05092	0.1528	1.97%	0	
50		3	7.8	7.303	8.297	7.6	8	0.06667	0.2	2.56%	0	
100		3	7.767	7.387	8.146	7.6	7.9	0.05092	0.1528	1.97%	0	

CETIS Measurement Report

Report Date:

07 Apr-22 10:52 (p 2 of 4)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

Hyalella 96-h Ac	Hyalella 96-h Acute Survival Test Aquatic Bioassay & Consulting Labs, In														
Temperature-°C	emperature-°C														
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count				
0	N	3	22	22	22	22	22	0	0	0.00%	0				
6.25		3	22	22	22	22	22	0	0	0.00%	0				
12.5		3	22	22	22	22	22	0	0	0.00%	0				
25		3	22	22	22	22	22	0	0	0.00%	0				
50		3	22	22	22	22	22	0	0	0.00%	0				
100		3	22	22	22	22	22	0	0	0.00%	0				
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)				

Report Date:

07 Apr-22 10:52 (p 3 of 4)

Test Code/ID; VCF0322.208ahya / 19-7562-0503

Hyalella 96-h A	Acute Surviva	al Test							Aquatic Bioassay & Consulting Labs, Ir
Alkalinity (CaC	O3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		60					
100				116					
0	N	2		60					
100				116					
0	N	3		60					
100				116					
Conductivity-µ	ımhos								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		364					
6.25				487					
12.5				452					
25				530					
50				670					
100				974					
0	N	2		364					
6.25				480					
12.5				487					
25				540					
50				670					
100				992					
0	N	3		369					
6.25				435					
12.5				478					
25				550					
50				680					
100				995					
Dissolved Oxy	gen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
6.25				7.9					
12.5				7.8					
25				7.7					
50				7.7					
100				7.7					
0	N	2		7.6					
6.25				7.8					
12.5				7.8					
25				7.8					
50				7.8					
100				7.8					
0	N	3		7.2					
6.25				7.3					
12.5				7.1					
25				7					
50				7					
				7					

Report Date:

07 Apr-22 10:52 (p 4 of 4)

Test Code/ID: VCF0322.208ahya / 19-7562-0503

Hyalella 96-h Acu	te Surviva	al Test							Aquatic Bioassay & Consulting Labs, Inc
Hardness (CaCO:	3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		83					
100				213					
0	N	2		83					
100				213					
0	N	3		83					
100				213					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2					
6.25				7.6					
12.5				7.6					
25				7.6					
50				7.6					
100				7.6					
0	N	2		8.2					
6.25	IN	۷		8.2 7.7					
12.5				7.7 7.7					
25				7.8					
50				7.8					
100				7.8					
0	N	3		8					
6.25				8					
12.5				8					
25				7.9					
50				8					
100				7.9					
Temperature-°C									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	3		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms EPA-821-R-02-012*. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:

Ventura County Watershed Protection District

SAMPLE I.D.:

ME-CC

DATE RECEIVED:

3/28/2022

ABC LAB. NO.:

VCF0322.208

ACUTE 96 HOURS CHIRONOMUS SURVIVAL BIOASSAY

% Survival = 100 % Survival in 100% Sample

*TUa

= 0.00

* TU(a) Is calculated by: log (% Mortality)/1.7

Yours yery truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

07 Apr-22 10:53 (p 1 of 1)

Test Code/ID:

Chironomus	96-Hour Acute S	Surviva	l Bioassay						Aqua	tic B	ioassay & 0	Consulting	Labs,	nc.
Batch ID: Start Date: Ending Date: Test Length:	04-5171-6497 29 Mar-22 11:2 02 Apr-22 12:12 4d 1h		Test Type: Protocol: Species: Taxon:	Survival (96h) EPA/821/R-02 Chironomus di Insecta				Dilu Brin	lyst: ent: ie: rce:	Not .	oratory Wate Applicable atic Biosyste		Age:	
•	08-8688-4533 : 28 Mar-22 12:5 : 28 Mar-22 14:2 22h (11 °C)		Code: Material: CAS (PC): Client:	VCF0322.208a Sample Water				Sou	iect: rce: ion:		ES Stormw ssay Report		eason (Con
	parison Summa	arv					-							
Analysis ID	Endpoint	y	Comr	oarison Method			./	NOEL	LOEI	1	TOEL	PMSD	TU	
	96h Survival Ra	ite		Many-One Ran				100	>100				1	5
Point Estimat	te Summary													
Analysis ID	Endpoint		Point	Estimate Meth	od		./	Level	%		95% LCL	95% UCL	TU	S
	96h Survival Ra	ate.		r Interpolation (I			_	EC10	>100				<1	1
	3311 33111141114		20	morporation (i	O,			EC15	>100				<1	
								EC20	>100				<1	
								EC25	>100				<1	
								EC40	>100				<1	
								EC50	>100				<1	
96h Survival	Rate Summary													
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min		Max	Std E	-rr	Std Dev	CV%	%Eff	ect
0	N	4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000		0.009	6
6.25		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000	***	0.009	6
12.5		4	1.000		1.0000	1.0000		1.0000	0.000	00	0.0000		0.009	6
25		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.009	
50		4	1.000		1.0000	1.0000		1.0000	0.000		0.0000		0.009	
100		4	1.000	0 1.0000	1.0000	1.0000		1.0000	0.000	00	0.0000	***	0.009	% ——
96h Survival	Rate Detail							MD	5: E88	740A	7CB88EC46	B4EC0A60	E4B8A	EB7
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4									
0	N	1.000	0 1.000	0 1.0000	1.0000							_		
6.25		1.000	0 1.000	0 1.0000	1.0000									
12.5		1.000	0 1.000	0 1.0000	1.0000									
25		1.000	0 1.000	0 1.0000	1.0000									
50		1.000	0 1.000	0 1.0000	1.0000									
		1.000	0 1.000	0 1.0000	1.0000									
100														
	Rate Binomials													
96h Survival	Rate Binomials Code	Rep 1			Rep 4									
96h Survival Conc-%		Rep 1												
96h Survival Conc-%	Code		I Rep 2	Rep 3	Rep 4									
96h Survival Conc-% 0 6.25	Code	5/5	Rep 2	Rep 3	Rep 4 5/5									
96h Survival Conc-% 0 6.25 12.5	Code	5/5 5/5	Rep 2 5/5 5/5	Rep 3 5/5 5/5	Rep 4 5/5 5/5									
96h Survival Conc-% 0 6.25 12.5 25	Code	5/5 5/5 5/5	Rep 2 5/5 5/5 5/5	Rep 3 5/5 5/5 5/5	Rep 4 5/5 5/5 5/5									



Report Date:

07 Apr-22 10:53 (p 1 of 2)

Test Code/ID: VCF0322.208achi / 10-5934-5838

Chironomus 96-H	our Acute S	Survival	Bioassay							Aquat	ic Bioa	issay & (Consultin	g Labs, Inc.
	3358-3737			96h Survival R						S Versi		CETISv1	.9.7	
•	Apr-22 15:38 Apr-22 15:36		-	Nonparametric E88740A7CB8					Statu: Edito	s Level r ID:		1 000-189-	126-0	
Batch ID: 04-	5171-6497	1	Test Type:	Survival (96h)				,	Analy	st:				
Start Date: 29 l	Mar-22 11:20	i C	Protocol:	EPA/821/R-02	-012 (20	02)		- 1	Dilue	nt:	Labora	tory Wat	er	
Ending Date: 02 /	Apr-22 12:12	2 5	Species:	Chironomus di	lutus			- 1	Brine	: 1	Not Ap	plicable		
Test Length: 4d	1h	٦	Гахоn:	Insecta				;	Sourc	e:	Aquatio	Biosyst	ems, CO	Age:
Sample ID: 08-8	3688-4533	(Code:	VCF0322.208a	achi			ı	Proje	ct:	NPDES	Stormw	ater Wet	Season (Con
Sample Date: 28 l	Mar-22 12:5	5 r	Material:	Sample Water				;	Sourc	e:	Bioass	ay Repor	t	
Receipt Date: 28 f	Mar-22 14:20	0 (CAS (PC):					;	Statio	n:	ME-CC	;		
Sample Age: 22h	(11 °C)	(Client:	VCWPD										
Data Transform		Alt Hy	/p				NOEL	LOEL		TOEL	Т	ับ		
Angular (Corrected)	C > T					100	>100			1			
Steel Many-One R	ank Sum T	est												
Control vs	Conc-%		Test S		Ties	DF	P-Type	P-Val		Decis	ion(α:	5%)		
Negative Control	6.25		18	10	1	6	CDF	0.833	-		_	ant Effect		
	12.5		18	10	1	6	CDF	0.833			-	int Effect		
	25		18	10	1	6	CDF	0.833			-	int Effect		
	50		18	10	1	6	CDF	0.833			-	int Effect		
	100		18	10	1	6	CDF	0.833	13	Non-S	ignifica	nt Effect		
ANOVA Table														
Source	Sum Squ	ares		Square	DF		F Stat	P-Val	ue		ion(α:			
Between	0		0		5					Indete	rminat	е		
Error	0		0		18		-							
Total	0				23	_								
ANOVA Assumpti	ons Tests													
Attribute	Test				Test S	Stat	Critical	P-Val	lue		ion(α:′			
Variance			Variance Te							Indete	rminat	9		
Distribution	Shapiro-V	Vilk W N	ormality Tes	t						Indete	rminat	9		
96h Survival Rate	Summary													
Conc-%	Code	Count		95% LCL		_	Median	Min		Max		td Err	CV%	%Effect
0	N	4	1.0000		1.0000		1.0000	1.000		1.0000	-	.0000	0.00%	0.00%
6.25		4	1.0000		1.0000		1.0000	1.000		1.0000		.0000	0.00%	0.00%
12.5		4	1.0000		1.0000		1.0000	1.000		1.0000		.0000	0.00%	0.00%
25 50		4	1.0000		1.0000		1.0000	1.000		1.0000		.0000	0.00%	0.00%
50 400		4	1.0000		1.0000		1.0000	1.000		1.0000		.0000	0.00%	0.00%
100	_	4	1.0000	1.0000	1.0000	J	1.0000	1.000	10	1.0000	J 0	.0000	0.00%	0.00%
Angular (Correcte			_										01.10/	0/ 555
Conc-%	Code	Count		95% LCL			Median 1.3450	Min 1.345	:0	Max 1.3450		.0000	CV% 0.00%	%Effect 0.00%
0	N	4	1.3450		1.3460							.0000	0.00%	0.00%
6.25		4	1.3450		1.3460		1.3450 1.3450	1.345 1.345		1.3450		.0000	0.00%	0.00%
12.5		4	1.3450 1.3450		1.3460 1.3460		1.3450	1.345		1.3450		.0000	0.00%	0.00%
25 50		4 4	1.3450		1.3460		1.3450	1.345		1.3450		.0000	0.00%	0.00%
			1.3450				1.3450	1.345				.0000	0.00%	0.00%
100		4	1.3450	1.3450	1.3460	J	1.3400	1.343		1.3450	, (.0000	0.00 /6	0.0076



Report Date:

07 Apr-22 10:53 (p 2 of 2)

Test Code/ID: VCF0322.208achi / 10-5934-5838

Chironomus 96-Hour Acute Survival Bioassay

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 10-6358-3737

Endpoint: 96h Survival Rate

CETIS Version: CETISv1.9.7

Analyzed: 05 Apr-22 15:38 **Edit Date:** 05 Apr-22 15:36

22 15:38 Analysis:

Analysis: Nonparametric-Control vs Treatments
MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

Status Level:

Editor ID:

000-189-126-0

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
6.25		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	1.0000	1.0000
25		1.0000	1.0000	1.0000	1.0000
50		1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000

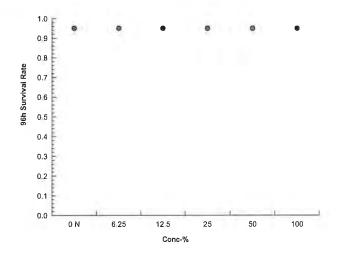
Angular (Corrected) Transformed Detail

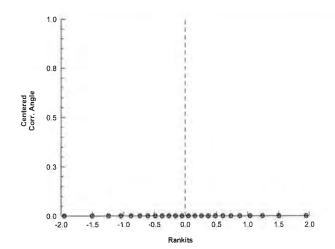
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.3450	1.3450	1.3450	1.3450
6.25		1.3450	1.3450	1.3450	1.3450
12.5		1.3450	1.3450	1.3450	1.3450
25		1.3450	1.3450	1.3450	1.3450
50		1.3450	1.3450	1.3450	1.3450
100		1.3450	1.3450	1.3450	1.3450

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4		
0	N	5/5	5/5	5/5	5/5		
6.25		5/5	5/5	5/5	5/5		
12.5		5/5	5/5	5/5	5/5		
25		5/5	5/5	5/5	5/5		
50		5/5	5/5	5/5	5/5		
100		5/5	5/5	5/5	5/5		

Graphics





Report Date:

07 Apr-22 10:53 (p 1 of 2)

Test Code/ID: V

VCF0322.208achi / 10-5934-5838

Chiron	ironomus 96-Hour Acute Survival Bioassay									Aquatio	c Bi	oassay &	Consultin	g Labs, Inc
Analysis ID: 14-1606-4606 Analyzed: 05 Apr-22 15:38 Edit Date: 05 Apr-22 15:36 Batch ID: 04-5171-6497			Ana	lpoint: lysis:	96h Survival Ra Linear Interpola E88740A7CB8	ation (ICPIN		IR8AER		6 Versions S Level:	n:	CETISv 1 000-189	1.9.7	
						0004004E0	JUAGUE4	DOAED			_	000-189	1-126-0	
Batch Start D		04-51/1-649/ 29 Mar-22 11:20			Survival (96h)	042 (2002)			Analy					
		02 Apr-22 12:12		tocol: cies:	EPA/821/R-02- Chironomus dil	` '			Dilue: Brine			ratory Wa		
_	ength:	-	Tax		Insecta	ulus			Source			opplicable tic Biosvs	tems, CO	Age:
Sample	a ID:	08-8688-4533	Coc	lo:	VCF0322.208a	chi			Proje		_			Season (Co
•		28 Mar-22 12:55		erial:	Sample Water	OIII			Source			say Repo		3692011 (CO
•		28 Mar-22 14:20		6 (PC):	Campio Trator				Statio		1E-C		<i>/</i> ()	
		22h (11 °C)	Clie		VCWPD				Otatio			,		
Linear	Interpo	lation Options												
X Tran		Y Transform	See	d	Resamples	Exp 95%	CL M	ethod						
Linear		Linear	0		280	Yes		wo-Point	Interpo	lation				
Point E	stimat	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL								
EC10	>100			<1	***									
EC15	>100			<1										
EC20	>100		***	<1										
EC25	>100		***	<1	***									
EC40 EC50	>100 >100			<1 <1										
		Rate Summary				7.7	lated Va	riate(A/E	1)				Isoto	nic Variate
Conc-9		Code	Count	Mean	Median					0/ 566				
0	/0	N	4	1.000		Min 1.0000	Max 1.0000	0.00		%Effec	τ	A/B 20/20	Mean 1.0000	%Effect 0.00%
6.25			4	1.000		1.0000	1.0000			0.00%		20/20	1.0000	0.00%
12.5			4	1.000		1.0000	1.0000			0.00%		20/20	1.0000	0.00%
25			4	1.000		1.0000	1.0000			0.00%		20/20	1.0000	0.00%
50			4	1.000	0.0000	1.0000	1.0000	0.00	%	0.00%		20/20	1.0000	0.00%
100			4	1.000	0 1.0000	1.0000	1.0000	0.00	%	0.00%		20/20	1.0000	0.00%
96h Su	rvival F	Rate Detail												
Conc-%	6	Code	Rep 1	Rep 2	Rep 3	Rep 4								
0		N	1.0000	1.000	1.0000	1.0000								
6.25			1.0000	1.000	1.0000	1.0000								
12.5			1.0000	1.0000	1.0000	1.0000								
25			1.0000	1.0000	1.0000	1.0000								
50			1.0000	1.0000	1.0000	1.0000								
100			1.0000	1.0000	1.0000	1.0000								
96h Su	rvival F	Rate Binomials												
Conc-%	6	Code	Rep 1	Rep 2		Rep 4								
0		N	5/5	5/5	5/5	5/5								
6.25			5/5	5/5	5/5	5/5								
12.5			5/5	5/5	5/5	5/5								
25			5/5	5/5	5/5	5/5								
50			5/5	5/5	5/5	5/5								



5/5

5/5

5/5

5/5

100

Report Date:

07 Apr-22 10:53 (p 2 of 2)

Test Code/ID:

VCF0322.208achi / 10-5934-5838

Chironomus 96-Hour Acute Survival Bioassay

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 14-1606-4606 Analyzed:

05 Apr-22 15:38 05 Apr-22 15:36 Endpoint: 96h Survival Rate

Linear Interpolation (ICPIN) Analysis:

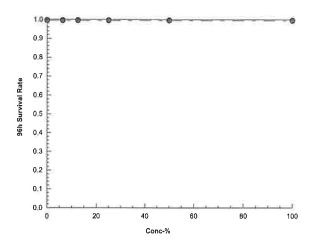
MD5 Hash: E88740A7CB88EC46B4EC0A60E4B8AEB

CETIS Version: Status Level: Editor ID:

000-189-126-0

CETISv1.9.7

Edit Date: Graphics



Chironomus 96-Hour Acute Survival Bioassay

Report Date:

07 Apr-22 10:53 (p 1 of 4)

Test Code/ID:

VCF0322.208achi / 10-5934-5838

Aquatic Bioassay & Consulting Labs, Inc.

Official distributions of		Juivivai	Dioassay					Aquat	C Divassay o	Consulting	g Labs, IIIc.
Batch ID:	04-5171-6497			Survival (96h)		Analyst:					
Start Date:	29 Mar-22 11:		Protocol:	EPA/821/R-02	` '				_aboratory Wa	ter	
_	02 Apr-22 12:		Species:	Chironomus di	lutus				Not Applicable		
Test Length:	40 111		Taxon:	Insecta				Source:	Aquatic Biosys	tems, CO	Age:
Sample ID:	08-8688-4533		Code:	VCF0322.208a				-	NPDES Storm		Season (Con
· ·	28 Mar-22 12:		Material:	Sample Water					Bioassay Repo	ort	
	28 Mar-22 14:		CAS (PC):					Station:	ME-CC		
Sample Age:	22h (11 °C)		Client:	VCWPD							
Alkalinity (Ca	CO3)-mg/L										
Conc-%	Code	Count		95% LCL	95% UCL	Min	Max	Std Eri		CV%	QA Coun
0	Ν	3	60	60	60	60	60	0	0	0.00%	0
100		3	116	116	116	116	116	0	0	0.00%	0
Overall		6	88	55.81	120.2	60	116	12.52	30.67	34.86%	0 (0%)
Conductivity-	µmhos										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std En	Std Dev	CV%	QA Coun
0	N	3	365.7	358.5	372.8	364	369	0.9623	2.887	0.79%	0
6.25		3	467.3	397.2	537.4	435	487	9.406	28.22	6.04%	0
12.5		3	472.3	427.2	517.5	452	487	6.058	18.18	3.85%	0
25		3	540	515.2	564.8	530	550	3.333	10	1.85%	0
50		3	673.3	659	687.7	670	680	1.925	5.774	0.86%	0
100		3	987	958.8	1015	974	995	3.786	11.36	1.15%	0
Overall		18	584.3	480.5	688.1	364	995	49.21	208.8	35.73%	0 (0%)
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Eri	Std Dev	CV%	QA Coun
0	N	3	7.467	6.893	8.04	7.2	7.6	0.0769	3 0.2309	3.09%	0
6.25		3	7.633	6.693	8.574	7.2	7.9	0.1262	0.3786	4.96%	0
12.5		3	7.567	6.563	8.571	7.1	7.8	0.1347	0.4041	5.34%	0
25		3	7.5	6.417	8.583	7	7.8	0.1453	0.4359	5.81%	0
50		3	7.5	6.417	8.583	7	7.8	0.1453	0.4359	5.81%	0
100		3	7.5	6.417	8.583	7	7.8	0.1453	0.4359	5.81%	0
Overall		18	7.528	7.361	7.695	7	7.9	0.0791	3 0.3357	4.46%	0 (0%)
Hardness (Ca	CO3)-mg/L										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Eri	Std Dev	CV%	QA Coun
0	N	3	83	83	83	83	83	0	0	0.00%	0
100		3	213	213	213	213	213	0	0	0.00%	0
Overall		6	148	73.28	222.7	83	213	29.07	71.2	48.11%	0 (0%)
pH-Units											
Conc-%	Code	Count		95% LCL	95% UCL	Min	Max	Std Eri		CV%	QA Coun
0	N	3	8.133	7.846	8.42	8	8.2	0.0384		1.42%	0
6.25		3	7.767	7.25	8.284	7.6	8	0.0693		2.68%	0
12.5		3	7.767	7.25	8.284	7.6	8	0.0693		2.68%	0
25		3	7.767	7.387	8.146	7.6	7.9	0.0509		1.97%	0
50		3 3	7.8 7.767	7.303 7.387	8.297 8.146	7.6 7.6	8 7.9	0.0666 0.0509		2.56% 1.97%	0
100											

CETIS Measurement Report

Report Date:

07 Apr-22 10:53 (p 2 of 4)

Test Code/ID:

Chironomus 9	6-Hour Acute	Survival B	ioassay					Aquatic	Bioassay &	Consultin	g Labs, Inc.
Temperature-°	С										
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	22	22	22	22	22	0	0	0.00%	0
6.25		3	22	22	22	22	22	0	0	0.00%	0
12.5		3	22	22	22	22	22	0	0	0.00%	0
25		3	22	22	22	22	22	0	0	0.00%	0
50		3	22	22	22	22	22	0	0	0.00%	0
100		3	22	22	22	22	22	0	0	0.00%	0
Overall		18	22	22	22	22	22	0	0	0.00%	0 (0%)



Report Date:

07 Apr-22 10:53 (p 3 of 4)

Test Code/ID:

Chironomus 9	o-nour Acute	Juivival	ыоаѕѕау						Aquatic Bioassay & Consulting Labs, Ir
Alkalinity (CaC									
Conc-%	Code N	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
100	IN	1		60 116					
0	N	2		60					
100				116					
0	N	3		60					
100				116					
Conductivity-µ	ımhos								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		364					
6.25				487					
12.5				452					
25				530					
50				670					
100				974					
0	N	2		364					
3.25	IN	_		480					
12.5				487					
25				540					
50				670					
100				992					
)	N	3		369					
6.25				435					
12.5				478					
25				550					
50				680					
100				995					
Dissolved Oxy	gen-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.6					
5.25				7.9					
12.5				7.8					
25				7.7					
50				7.7					
100				7.7					
)	N	2		7.6		_			
6.25				7.8					
12.5				7.8					
25				7.8					
50				7.8					
100				7.8					
	A.1								
)	N	3		7.2					
6.25				7.2					
12.5				7.1					
25				7					
50				7					
100				7					

Report Date:

07 Apr-22 10:53 (p 4 of 4)

Test Code/ID:

Chironomus 9	6-Hour Acute	s Survival	Bioassay						Aquatic Bioassay & Consulting Labs, Inc.
Hardness (CaC	O3)-mg/L								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		83					
100				213					
0	N	2		83					
100				213					
0	N	3		83					
100	,,	Ü		213					
pH-Units									
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		8.2				- manyot	
6.25	, ,			7.6					
12.5				7.6					
25				7.6					
50				7.6					
100				7.6					
0	N	2		8.2					
6.25				7.7					
12.5				7.7					
25				7.8					
50				7.8					
100				7.8					
0	N	3		8					
6.25				8					
12.5				8					
25				7.9					
50				8					
100				7.9					
Temperature-°0	C								
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		22					
6.25				22					
12.5				22					
25				22					
50				22					
100				22					
0	N	2		22					
6.25	. •	_		22					
12.5				22					
25				22					
50				22					
100				22					
0	N	3		22					
6.25	1.4	J		22					
12.5				22					
25				22					
50				22					
100				22					



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed revised bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA-600/R95/136, 1995.* Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-SCR
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.210

CHRONIC SEA URCHIN FERTILIZATION BIOASSAY

NOEC = 100.00 %TUc = 1.00

IC25 = >100.00 %IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

26 Apr-22 15:27 (p 1 of 1)

Test Code/ID:

VCF0322.210urc / 13-9353-4245

Purple Sea U	Jrchin Sperm Ce	Il Fertilization	Test				-	163	Code/ID:	tic B	ioassay & (Consulting		
				'= util(= = #'						D		- Januaring	Luvo,	
Batch ID:	21-1242-3588	_		ertilization	100 (1005)				nalyst:	1 -1				
Start Date:	29 Mar-22 17:02 29 Mar-22 17:42			PA/600/R-95/	. ,	tuo			iluent:		oratory Seav	water		
Test Length:		Z Specie Taxon:		Strongylocentro Echinoidea	itus purpura	เนร			rine:		Applicable tura Dive		Δ	
rest Length.	40111	Taxon.		Chinologia				- 3	ource:	ven	tura Dive		Age:	
Sample ID:	20-3968-8521	Code:	V	CF0322.210u	rc			Р	roject:	NPD	DES Stormw	ater Wet Se	eason (Con
-	: 28 Mar-22 12:15			Sample Water				S	ource:		assay Repor	t		
•	: 28 Mar-22 16:03	•	•						tation:	ME-	SCR			
Sample Age:	29h (6.5 °C)	Client:	V	entura County	Watershed	Protection	on Di	istri						
Multiple Com	nparison Summa	ry												
Analysis ID	Endpoint			rison Method			✓	NOEL	LOEI		TOEL	PMSD	TU	
16-5106-7595	Fertilization Rat	e D	unnett	Multiple Comp	parison Test			100	>100		**	2.81%	1	9
Point Estimat	ite Summary													
Analysis ID	Endpoint			stimate Metho			_	Level	%		95% LCL	95% UCL		
07-2569-5076	Fertilization Rate	e Li	inear Ir	nterpolation (IC	CPIN)			EC15	>100				<1	
								EC20	>100				<1	
								EC25	>100				<1	
								EC40	>100		***		<1	
								EC50	>100				<1	
Test Accepta	bility					TAC	Lin	nits						
Analysis ID	Endpoint	Α	ttribut	e	Test Stat	Lower		Upper		lap	Decision			
07-2569-5076	Fertilization Rate	e C	ontrol	Resp	0.945	0.7		<<	Yes		Passes Cr	riteria		
16-5106-7595	Fertilization Rate	e C	ontrol	Resp	0.945	0.7		<<	Yes		Passes Cr	riteria		
16-5106-7595	Fertilization Rate	e P	MSD		0.02813	<<		0.25	No		Passes Cr	riteria		
Fertilization F	Rate Summary													
Conc-%	Code	Count M	lean	95% LCL	95% UCL	Min		Max	Std E	rr	Std Dev	CV%	%Eff	ect
0	N		.9450	0.9245	0.9655	0.9300		0.9600	0.006	55	0.0129	1.37%	0.009	%
6.25			.9525	0.9373	0.9677	0.9400		0.9600			0.0096	1.01%	-0.79	
12.5			.9300	0.9040	0.9560	0.9100		0.9500			0.0163	1.76%	1.599	
25			.9475	0.9323	0.9627	0.9400		0.9600			0.0096	1.01%	-0.26	
50			.9475	0.9147	0.9803	0.9300		0.9700			0.0206	2.18%	-0.26	
100		4 0.	.9525	0.9325	0.9725	0.9400		0.9700	0.006	3	0.0126	1.32%	-0.79	% —
Fertilization F	Rate Detail							Ī	MD5: 4AD	02C1	18426753D6	BF1C62AB	57DA7	79B
Conc-%	Code		ep 2	Rep 3	Rep 4									
0	Ν		.9500	0.9400	0.9300									
6.25			.9400	0.9500	0.9600									
12.5		0.9100 0.	.9500	0.9300	0.9300									
25		0.9400 0.	.9600	0.9400	0.9500									
50		0.9300 0.	.9300	0.9700	0.9600									
100		0.9500 0.	.9700	0.9400	0.9500									
Fertilization F	Rate Binomials													
Conc-%	Code	Rep 1 R	ер 2	Rep 3	Rep 4									
	N.I.	96/100 95	5/100	94/100	93/100									
0	N	90/100 93	0, , 0 0											
	N		4/100	95/100	96/100									
6.25	N	96/100 94			96/100 93/100									
6.25 12.5	N	96/100 94 91/100 95	4/100	95/100										
0 6.25 12.5 25 50	N	96/100 94/100 95/94/100 96/96/96/96/96/96/96/96/96/96/96/96/96/9	4/100 5/100	95/100 93/100	93/100									



Report Date:

26 Apr-22 15:27 (p 1 of 3)

Test Code/ID: VCF0322.210urc / 13-9353-4245

Purple Sea Ur						Aquat	ic Bic	assay & C	Consulting	Labs, Inc						
Analyzed:	16-5106-7595 20 Apr-22 16:20 20 Apr-22 16:18				•	Fertilization Parametric-	Rate Control vs T	reatme	nts			S Versi us Leve		CETISv2.	1.1	
Edit Date:	20 /	Apr-22 16:18		MD5	Hash:	4AD02C184	26753D6BF	1C62A	B57DA7	79B	Edito	or ID:		008-463-0	000-3	
Batch ID:	21-	242-3588		Test	Type:	Fertilization					Anal	vst:				
Start Date:	29 N	/lar-22 17:02					95/136 (199	(5)			Dilue	-	Labor	atory Seav	vater	
Ending Date:	29 N	/lar-22 17:42		Spec	cies:	Strongyloce	ntrotus purp	uratus			Brine			pplicable		
Test Length:	40m			Taxo	on:	Echinoidea					Sour	ce:	Ventu	ra Dive		Age:
Sample ID:	20-3	968-8521		Cod	e:	VCF0322.2	10urc				Proje	ect:	NPDE	S Stormw	ater Wet S	eason (Co
Sample Date:	28 N	Mar-22 12:15		Mate	erial:	Sample Wa	ter				Sour			say Report		
Receipt Date:	28 N	/lar-22 16:03		CAS	(PC):						Stati		ME-S			
Sample Age:	29h	(6.5 °C)		Clie		Ventura Co	unty Waters	hed Pro	tection [Distri						
Data Transfor	m		Alt F	Іур				NO	DEL	LOE	L	TOEL		TU	MSDu	PMSD
Angular (Corre	cted)	C > T	77				10	0	>100	0	***		1	0.02658	2.81%
Dunnett Multip	ple (Comparison	Test													
Control	vs	Conc-%		df	Test S	at Critica	I MSD	P-	Туре	P-Va	alue	Decis	ion(α	:5%)		
Negative Contr	ol	6.25		6	-0.7382	2.407	0.0541			0.96	59	Non-S	Signific	ant Effect		
		12.5		6	1.374	2.407	0.0541	3 CI)F	0.27	06	Non-S	Signific	ant Effect		
		25		6	-0.2256	2.407	0.0541	3 CI)F	0.89	12	Non-S	Signific	ant Effect		
		50		6	-0.3461	2.407	0.0541	3 CI)F	0.91	52	Non-S	Signific	ant Effect		
		100		6	-0.7729	2.407	0.0541	3 C	OF	0.96	87	Non-S	Signific	ant Effect		
Test Acceptab	ility	Criteria	T	AC Li	mits											
Attribute		Test Stat	Lowe		Upper	Overla	p Decisi	on								
Control Resp		0.945	0.7		<<	Yes	Passe	s Criteri	а							
PMSD		0.02813	<<		0.25	No	Passe	s Criteri	а							
ANOVA Table																
Source		Sum Squa	res		Mean S	Square	DF	F	Stat	P-Va	alue	Decis	ion(a	:5%)		
Between		0.0063081			0.0012	616	5	1.2	247	0.32	85	Non-S	Signific	ant Effect		
Error		0.0182051			0.0010	114	18									
Total		0.0245132					23									
ANOVA Assum	nptio	ons Tests														
Attribute		Test					Test S	tat Cr	itical	P-Va	alue	Decis	ion(a	:1%)		
Variance		Bartlett Eq	uality o	of Var	iance Te	st	2.328	15	.09	0.80	21	Equal	Varia	nces		
		Levene Eq	uality o	of Var	riance Te	est	1.362	4.2	248	0.28	45	Equal	Varia	nces		
		Mod Lever	ie Equ	ality c	of Varian	ce Test	1.065	4.2	248	0.41	17	Equal	Varia	nces		
Distribution		Anderson-l	Darling	A2 T	est		0.337	3.8	378	0.50	94	Norma	al Dist	ribution		
		D'Agostino	Kurto	sis Te	est		1.316	2.	576	0.18	83	Norma	al Dist	ribution		
		D'Agostino	Skew	ness	Test		0.5932	2.5	576	0.55	31	Norma	al Dist	ribution		
		D'Agostino	-Pears	on K	2 Omnib	us Test	2.083	9.2	21	0.35	30	Norma	al Dist	ribution		
		Kolmogoro	v-Smir	nov [D Test		0.1022	0.2	2056	0.79	46	Norma	al Dist	ribution		
		Shapiro-W	ilk W N	Vorma	ality Test		0.9551	0.8	384	0.34	79	Norma	al Dist	ribution		
Fertilization Ra	ate :	Summary														
	ate :	Summary Code	Coun	t	Mean	95% L	CL 95% U	CL M	edian	Min		Max		Std Err	CV%	%Effect
Conc-%	ate \$	-	Coun	t	Mean 0.9450	95% L			edian 9450	Min 0.93	00	Max 0.9600		Std Err 0.0065	CV %	%Effect 0.00%
Conc-% 0 6.25	ate :	Code		t			0.9655	0.9		_)			0.00% -0.79%
Conc-% 0 6.25	ate :	Code	4	t	0.9450	0.9245	0.9655 0.9677	0.0	9450	0.93	00	0.9600))	0.0065	1.37%	0.00%
Conc-% 0 6.25 12.5	ate \$	Code	4	t	0.9450 0.9525	0.9245 0.9373	0.9655 0.9677 0.9560	9.0 9.0 9.0	9450 9567	0.93 0.94	00 00	0.9600 0.9600)))	0.0065 0.0048	1.37% 1.01%	0.00% -0.79%
Fertilization Ra Conc-% 0 6.25 12.5 25	ate :	Code	4 4 4	t	0.9450 0.9525 0.9300	0.9245 0.9373 0.9040	0.9655 0.9677 0.9560 0.9627	2.0 2.0 2.0 2.0	9450 9567 9300	0.93 0.94 0.91	00 00 00	0.9600 0.9600 0.9500)))	0.0065 0.0048 0.0082	1.37% 1.01% 1.76%	0.00% -0.79% 1.59%



Report Date: Test Code/ID: 26 Apr-22 15:27 (p 2 of 3)

VCF0322.210urc / 13-9353-4245

Purple Sea Urchin Sperm Cell Fertilization Test

Aquatic Bioassay & Consulting Labs, Inc.

Analyzed:

Edit Date:

Analysis ID: 16-5106-7595 20 Apr-22 16:20 20 Apr-22 16:18 Endpoint: Fertilization Rate

Analysis: Parametric-Control vs Treatments

CETIS Version:

Status Level:

CETISv2.1.1

008-463-000-3

Angular	(Corrected)) Transformed	Summary
---------	-------------	---------------	---------

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.3350	1.2900	1.3810	1.3340	1.3030	1.3690	0.0143	2.14%	0.00%
6.25		4	1.3520	1.3170	1.3870	1.3610	1.3230	1.3690	0.0111	1.64%	-1.24%
12.5		4	1.3040	1.2530	1.3560	1.3030	1.2660	1.3450	0.0162	2.48%	2.31%
25		4	1.3400	1.3050	1.3750	1.3310	1.3230	1.3690	0.0110	1.64%	-0.38%
50		4	1.3430	1.2670	1.4190	1.3250	1.3030	1.3970	0.0238	3.54%	-0.58%
100		4	1.3530	1.3030	1.4020	1.3450	1.3230	1.3970	0.0156	2.30%	-1.30%

Fertilization Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	0.9600	0.9500	0.9400	0.9300	
6.25		0.9600	0.9400	0.9500	0.9600	
12.5		0.9100	0.9500	0.9300	0.9300	
25		0.9400	0.9600	0.9400	0.9500	
50		0.9300	0.9300	0.9700	0.9600	
100		0.9500	0.9700	0.9400	0.9500	

Angular (Corrected) Transformed Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	1.3690	1.3450	1.3230	1.3030	
6.25		1.3690	1.3230	1.3450	1.3690	
12.5		1.2660	1.3450	1.3030	1.3030	
25		1.3230	1.3690	1.3230	1.3450	
50		1.3030	1.3030	1.3970	1.3690	
100		1.3450	1.3970	1.3230	1.3450	

Fertilization Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	96/100	95/100	94/100	93/100
6.25		96/100	94/100	95/100	96/100
12.5		91/100	95/100	93/100	93/100
25		94/100	96/100	94/100	95/100
50		93/100	93/100	97/100	96/100
100		95/100	97/100	94/100	95/100



Report Date:

26 Apr-22 15:27 (p 1 of 2)

Test Code/ID: VCF0322.210urc / 13-9353-4245

Purple	Sea Uı	rchin Sperm Cel	l Fertilizatio	on Test						Aquati	ic Bi	oassay & (Consulting	Labs, Inc.
Analys Analyz Edit Da	ed:	07-2569-5076 20 Apr-22 16:20 20 Apr-22 16:18	Ana	lysis:	Fertilization Rat Linear Interpola 4AD02C184267	ation (ICPII		\779B		S Versions Level or ID:		CETISv2 1 008-463-		
Batch I	ID:	21-1242-3588	Test	Type:	Fertilization				Analy	yst:				
Start D	ate:	29 Mar-22 17:02		ocol:	EPA/600/R-95/	136 (1995))		Dilue		_abo	ratory Seav	water	
Ending	Date:	29 Mar-22 17:42	Spe	cies:	Strongylocentro	otus purpur	atus		Brine	e: 1	Not A	Applicable		
Test Le	ength:	40m	Tax	on:	Echinoidea				Sour	ce: \	√entı	ura Dive		Age:
Sample	e ID:	20-3968-8521	Cod	e:	VCF0322.210u	rc			Proje	ct:	NPDE	ES Stormw	ater Wet S	eason (Cor
Sample	e Date:	28 Mar-22 12:15	Mate	erial:	Sample Water				Sour	ce: E	Bioas	ssay Repor	t	
-		28 Mar-22 16:03	CAS	(PC):					Statio	on: I	ME-S	SCR		
Sample	e Age:	29h (6.5 °C)	Clie	nt:	Ventura County	Watershe	d Protection	n Distri						
Linear	Interpo	olation Options												
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	% CL Met	hod						
Linear		Linear	0		280	Yes	Two	-Point	Interpo	olation				
Test A	cceptal	oility Criteria	TAC L	imits										
Attribu	te	Test Stat	Lower	Upper	r Overlap	Decision	1							
Control	Resp	0.945	0.7	<<	Yes	Passes (Oriteria							
Point E	stimat	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	L							
EC15	>100			<1		***								
EC20	>100	***	***	<1	•••	***								
EC25	>100	***		<1										
EC40	>100		***	<1		***								
EC50	>100			<1	***	(HEA)								
Fertiliz	ation R	late Summary		_		Calc	ulated Vari					-	Isoton	ic Variate
Conc-%	%	Code	Count	Mean	Median	Min	Max	CV%	_	%Effe	_	A/B	Mean	%Effect
0		N	4	0.9450		0.9300	0.9600	1.37		0.00%		378/400	0.9487	0.00%
6.25 12.5			4	0.952		0.9400 0.9100	0.9600 0.9500	1.01 1.76		-0.79% 1.59%		381/400 372/400	0.9487 0.9444	0.00% 0.46%
12.5 25			4 4	0.930		0.9100	0.9600	1.01		-0.26%		379/400	0.9444	0.46%
50			4	0.947		0.9300	0.9000	2.18		-0.26%		379/400	0.9444	0.46%
100			4	0.952		0.9400	0.9700	1.32		-0.79%		381/400	0.9444	0.46%
Fertiliz	ation R	late Detail												
Conc-%		Code	Rep 1	Rep 2	Rep 3	Rep 4								
0		N	0.9600	0.9500		0.9300								
6.25			0.9600	0.9400		0.9600								
12.5			0.9100	0.9500		0.9300								
25			0.9400	0.9600		0.9500								
50			0.9300	0.9300	0.9700	0.9600								
100			0.9500	0.970	0.9400	0.9500								
Fertiliz	ation R	ate Binomials												
Conc-%	/ 6	Code	Rep 1	Rep 2	Rep 3	Rep 4								
0		N	96/100	95/100	94/100	93/100								
6.25			96/100	94/100	95/100	96/100								
12.5			91/100	95/100	93/100	93/100								
25			94/100	96/100		95/100								
50			93/100	93/100		96/100								
100			95/100	97/100	94/100	95/100								

Report Date:

26 Apr-22 15:27 (p 2 of 2)

Test Code/ID:

VCF0322.210urc / 13-9353-4245

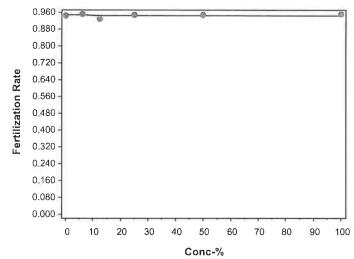
Purple Sea Urchin Sperm Cell Fertilization Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:07-2569-5076Endpoint:Fertilization RateCETIS Version:CETISv2.1.1Analyzed:20 Apr-22 16:20Analysis:Linear Interpolation (ICPIN)Status Level:1

Edit Date: 20 Apr-22 16:18 MD5 Hash: 4AD02C18426753D6BF1C62AB57DA779B Editor ID: 008-463-000-3

Graphics



CETIS Measurement Report

Report Date:

26 Apr-22 15:27 (p 1 of 1)

Age:

Test Code/ID:

VCF0322.210urc / 13-9353-4245

Purple Sea Urchin Sperm Cell Fertilization Test

2

12

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	21-1242-3588	Test Type: Fertilization	Analyst:
-----------	--------------	--------------------------	----------

Start Date:29 Mar-22 17:02Protocol:EPA/600/R-95/136 (1995)Diluent:Laboratory SeawaterEnding Date:29 Mar-22 17:42Species:Strongylocentrotus purpuratusBrine:Not Applicable

Test Length: 40m

Taxon: Echinoidea

Source: Ventura Dive

Sample ID: 20-3968-8521 Code: VCF0322.210urc Project: NPDES Stormwater Wet Season (Con

Sample Date: 28 Mar-22 12:15Material:Sample WaterSource:Bioassay ReportReceipt Date: 28 Mar-22 16:03CAS (PC):Station:ME-SCR

Sample Age: 29h (6.5 °C) Client: Ventura County Watershed Protection Distri

6.7

6.85

6.683

6.786

Parameter Acceptability Criteria **TAC Limits** Parameter Min Max Lower Upper Overlap Decision Salinity 34 34 32 36 Yes Passes Criteria Temperature 15.8 15.8 13 Yes Above Criteria 11

Dissolved Oxygen-mg/L Conc-% Code Count Mean 95% LCL 95% UCL Min Max Std Err Std Dev CV% **QA Count** 0 Ν 2 7 7 7 0 0 0.00% 0 2 6.25 6.8 6.788 6.812 6.8 6.8 0 0 0.00% 0 12.5 2 6.9 6.889 6.911 6.9 6.9 0 0 0.00% 0 25 2 6.9 6.889 6.911 6.9 6.9 0 0 0 0.00% 2 50 6.8 6.788 6.812 6.8 6.8 0 0 0.00% 0

6.7

6.7

6.7

7

0

0.02887

0

0.1

0.00%

1.46%

0

0 (0%)

6.717

6.914

Overall pH-Units

100

•											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
6.25		2	7.6	7.594	7.606	7.6	7.6	0	0	0.00%	0
12.5		2	7.7	7.698	7.702	7.7	7.7	0	0	0.00%	0
25		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
50		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
100		2	8	8	8	8	8	0	0	0.00%	0
Overall		12	7.783	7.703	7.864	7.6	8	0.03658	0.1267	1.63%	0 (0%)

Salinity-ppt

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.00%	0
6.25		2	34	34	34	34	34	0	0	0.00%	0
12.5		2	34	34	34	34	34	0	0	0.00%	0
25		2	34	34	34	34	34	0	0	0.00%	0
50		2	34	34	34	34	34	0	0	0.00%	0
100		2	34	34	34	34	34	0	0	0.00%	0
Overall		12	34	34	34	34	34	0	0	0.00%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
6.25		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
12.5		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
25		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
50		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
100		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
Overall		12	15.8	15.8	15.8	15.8	15.8	0	0	0.00%	0 (0%)





April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136.* "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-SCR
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.210

CHRONIC KELP GERMINATION AND GROWTH BIOASSAY

GERMINATION NOEC = 100.00 %

TUc = 1.00

EC25 = >100.00 % EC50 = >100.00 %

TUBE LENGTH NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 % IC50 = >100.00 %

Yours ery truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date:

26 Apr-22 16:06 (p 1 of 2)

Test Code/ID:

VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test Aquatic Bioassay & Consulting La										Labs, Inc		
Batch ID: Start Date: Ending Date: Test Length:	01-2003-9176 30 Mar-22 17:10 01 Apr-22 17:10 48h		EPA/ Macro	rth-Germin 600/R-95/ ocystis pyr ophyta	136 (1995)			Analyst: Diluent: Brine: Source:	Not A	ratory Seav pplicable ura Dive	water	Age:
•	18-7754-1836 28 Mar-22 12:15 28 Mar-22 16:03 53h (6.5 °C)		Material:Sample WaterSource:Bioassay ReportCAS (PC):Station:ME-SCR						ason (Co			
Multiple Com	parison Summa	ry										
Analysis ID	Endpoint	Соп	npariso	n Method			NO	EL LOE	L	TOEL	PMSD	TU
11-3810-7386	Germination Rat	e Dun	nett Mul	ltiple Com	parison Test		100	>100)		3.32%	1
07-1412-3453	Mean Length	Dun	nett Mul	Itiple Com	parison Test	t	100	>100)		1.54%	1
Point Estimat	e Summary											
Analysis ID	Endpoint	Poir	nt Estim	ate Meth	od	V	_ Lev	el %		95% LCL	95% UCL	ΤU
11-1507 - 4440	Germination Rat	e Line	ar Interp	oolation (IC	CPIN)		′ EC′)			<1
						V	CEC2	20 >100)	212	222	<1
						~	/ EC2	25 >100)			<1
						~	EC4	10 >100)		44	<1
							EC:	50 >100)			<1
01-6683-8148	Mean Length	Line	ar Interr	oolation (IC	CPIN)	_	′ IC1	5 >100)			<1
					·	_	/ IC2) >100)			<1
						~	/ IC2	5 >100)			<1
						_	/ IC4) >100)			<1
						~	CIC5	>100)		***	<1
Test Acceptal	bility					TAC L	imits					
Analysis ID	Endpoint	Attri	ibute		Test Stat		Upp	er Ove	rlap	Decision		
11-1507-4440	Germination Rat	e Con	trol Res	р	0.938	0.7	<<	Yes		Passes Cr	iteria	
11-3810-7386	Germination Rat	e Con	trol Res	р	0.938	0.7	<<	Yes		Passes Cr	riteria	
01-6683-8148	Mean Length	Con	trol Resi	p	13.16	10	<<	Yes		Passes Cr	iteria	
07-1412-3453	Mean Length	Con	trol Resi	p	13.16	10	<<	Yes		Passes Cr	iteria	
11-3810-7386	Germination Rat	e PMS	3D		0.03322	<<	0.2	No		Passes Cr	iteria	
07-1412-3453	Mean Length	PMS	3D		0.01544	<<	0.2	No		Passes Cr	riteria	
Germination I	Rate Summary											
Conc-%	Code	Count Mea	ın 🤉	95% LCL	95% UCL	Min	Max	Std I	Err	Std Dev	CV%	%Effect
0	N	5 0.93		0.9218	0.9542	0.9300	0.96	0.00	58	0.0130	1.39%	0.00%
6.25		5 0.93		0.9111	0.9649	0.9100	0.96			0.0217	2.31%	0.00%
12.5		5 0.92		0.8928	0.9552	0.9000	0.96			0.0251	2.72%	1.49%
25		5 0.93		0.9083	0.9597	0.9000	0.95			0.0207	2.22%	0.43%
50		5 0.94		0.9151	0.9689	0.9100	0.96			0.0217	2.30%	-0.43%
100		5 0.94	60 (0.9318	0.9602	0.9300	0.96	0.00	51	0.0114	1.21%	-0.85%
Mean Length	•											
Conc-%	Code	Count Mea		95% LCL	95% UCL	Min	Max			Std Dev	CV%	%Effect
0	N	5 13.1	6	13.02	13.3	13	13.3	0.05	99	0.114	0.87%	0.00%
6.25		5 13.1		12.97	13.35	13	13.4			0.1517	1.15%	0.00%
12.5		5 13.2		12.99	13.53	13	13.6			0.2191	1.65%	-0.76%
25		5 13.1		12.95	13.25	12.9	13.2			0.1225	0.93%	0.46%
50		5 13.1.	2	13.02	13.22	13	13.2	0.03	742	0.08367	0.64%	0.30%
100		5 13.2		13.11	13.29	13.1	13.3			0.07071	0.54%	-0.30%

CETIS Summary Report

Report Date:

26 Apr-22 16:06 (p 2 of 2) F0322.210klp / 04-6579-4553

Test Code/ID:	VCF0322.210klp /	04-6579-4

						rest Code/ib: VCF0322.2 Tokip / 04-03/9-4555
ermination ar	nd Germ Tu	be Growth	Test			Aquatic Bioassay & Consulting Labs, Inc.
tate Detail						MD5: E6A239984EE5B0174852CC63844AAF9F
Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
N	0.9300	0.9600	0.9300	0.9400	0.9300	
	0.9200	0.9500	0.9100	0.9500	0.9600	
	0.9000	0.9600	0.9100	0.9400	0.9100	
	0.9000	0.9300	0.9500	0.9500	0.9400	
	0.9100	0.9600	0.9300	0.9600	0.9500	
	0.9400	0.9300	0.9500	0.9600	0.9500	
Detail						MD5: 8E4B8691BF9A9BB248C485B6213EA19E
Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
N	13.3	13.2	13.2	13.1	13	
	13.4	13.1	13.2	13.1	13	
	13.6	13.3	13.2	13	13.2	
	13.1	13.2	13.2	12.9	13.1	
	13.2	13.1	13.1	13	13.2	
	13.3	13.2	13.2	13.1	13.2	
ate Binomials	S					
Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
N	93/100	96/100	93/100	94/100	93/100	
	92/100	95/100	91/100	95/100	96/100	
	90/100	96/100	91/100	94/100	91/100	
	90/100	93/100	95/100	95/100	94/100	
	91/100	96/100	93/100	96/100	95/100	
	94/100	93/100	95/100	96/100	95/100	
	Code N Detail Code N ate Binomials Code	Code Rep 1 N 0.9300 0.9200 0.9000 0.9000 0.9100 0.9400 Detail Code Rep 1 N 13.3 13.4 13.6 13.1 13.2 13.3 ate Binomials Code Rep 1 N 93/100 92/100 90/100 90/100 91/100	Code Rep 1 Rep 2 N	Code Rep 1 Rep 2 Rep 3 N 0.9300 0.9600 0.9300 0.9200 0.9500 0.9100 0.9000 0.9600 0.9100 0.9100 0.9600 0.9300 0.9400 0.9300 0.9500 Detail Code Rep 1 Rep 2 Rep 3 N 13.3 13.2 13.2 13.4 13.1 13.2 13.2 13.6 13.3 13.2 13.2 13.1 13.2 13.1 13.1 13.2 13.1 13.2 13.2 13.3 13.2 13.2 13.2 ate Binomials Rep 1 Rep 2 Rep 3 N 93/100 96/100 93/100 90/100 95/100 91/100 90/100 93/100 95/100 91/100 96/100 93/100	Code Rep 1 Rep 2 Rep 3 Rep 4	Code Rep 1 Rep 2 Rep 3 Rep 4 Rep 5

Report Date: Test Code/ID: 26 Apr-22 16:05 (p 1 of 3)

e/ID: VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test										Aquatic Bioassay & Consulting Labs, Inc					
Analysis ID: Analyzed:	26	3810-7386 Apr-22 16:04		Ana	point: lysis:	Par		ntrol vs Trea		A.F OF	State	IS Versious Level:	1		
Edit Date:	20	Apr-22 16:01		MIDS	Hasn:	E0/	1239984EE	5B01748520	UC63844A/	AF9F	Edit	or ID:	008-463-	000-3	
Batch ID:		2003-9176				Gro	wth-Germin	ation			Anal	lyst:			
Start Date:		Mar-22 17:10		Prot	ocol:	EP/	4/600/R-95/	136 (1995)			Dilu	ent: L	aboratory Sea	water	
Ending Date:				Spe	cies:	Mad	crocystis py	rifera			Brin	e: N	lot Applicable		
Test Length:	48h	1		Taxo	on:	Och	rophyta				Soul	rce: V	entura Dive		Age:
Sample ID:	18-	7754-1836		Cod	e:	VCI	=0322.210k	lp			Proj	ect: N	IPDES Stormw	ater Wet S	eason (Co
Sample Date:	28	Mar-22 12:15		Mate	erial:	San	nple Water				Soul	rce: B	ioassay Repor	t	
Receipt Date:	28	Mar-22 16:03		CAS	(PC):						Stati	ion: N	1E-SCR		
Sample Age:	53h	(6.5 °C)		Clie	nt:	Ver	ntura County	/ Watershed	Protection	Distri					
Data Transfor	m		Alt F	Јур					NOEL	LOE	L	TOEL	TU	MSDu	PMSD
Angular (Corre	ectec	i)	C > 7	Г					100	>10	0	200	1	0.03116	3.32%
Dunnett Multi	ple	Comparison	Test												
Control	vs	Conc-%		df	Test S	tat	Critical	MSD	P-Type	P-V	alue	Decisio	on(α:5%)		
Negative Cont	rol	6.25		8	-0.065	46	2.362	0.05975	CDF	0.85			gnificant Effect		
		12.5		8	1.011		2.362	0.05975	CDF	0.41	52	Non-Sig	- gnificant Effect		
		25		8	0.2837	7	2.362	0.05975	CDF	0.73	62	Non-Si	gnificant Effect		
		50		8	-0.406	6	2.362	0.05975	CDF	0.92			gnificant Effect		
		100		8	-0.668		2.362	0.05975	CDF	0.96	00	Non-Si	gnificant Effect		
Test Acceptab	oility	/ Criteria	T	AC Li	mits										
Attribute		Test Stat	Lowe		Upper		Overlap	Decision							
Control Resp		0.938	0.7		<<		Yes	Passes C	riteria						
PMSD		0.03322	<<		0.2		No	Passes C	riteria						
ANOVA Table															
Source		Sum Squa	ares		Mean	Squ	are	DF	F Stat	P-V	alue	Decisio	on(a:5%)		
Between		0.0054846			0.0010	969		5	0.6855	0.63	90	Non-Sig	gnificant Effect		
Error		0.0384056			0.0016	002		24	_						
Total		0.0438902						29							
ANOVA Assur	npti	ons Tests													
Attribute		Test						Test Stat	Critical	P-V	alue	Decisio	on(α:1%)		
Variance		Bartlett Eq	uality o	of Var	iance T	est		2.471	15.09	0.78			/ariances		
		Levene Eq						1.345	3.895	0.27		· ·	/ariances		
		Mod Lever	ne Equ	ality c	of Variar	ice -	Test	0.4155	4.248	0.83		Equal V	/ariances		
Distribution		Anderson-	Darling	A2 T	Test			0.3599	3.878	0.45	29	Normal	Distribution		
		D'Agostino	Kurto	sis Te	est			1.151	2.576	0.24	98	Normal	Distribution		
		D'Agostino						0.1457	2.576	0.88		Normal	Distribution		
		D'Agostino				ous -	Test	1.346	9.21	0.51			Distribution		
		Kolmogoro						0.1052	0.1853	0.53			Distribution		
		Shapiro-W	IIK VV I	vorma	anty res	ι		0.971	0.9031	0.56	65	Normai	Distribution		
Germination F	Rate	Summary													
Conc-%		Code	Coun	ıt	Mean		95% LCL	95% UCL	Median	Min		Max	Std Err	CV%	%Effect
0		N	5		0.9380		0.9218	0.9542	0.9300	0.93		0.9600	0.0058	1.39%	0.00%
3.25			5		0.9380		0.9111	0.9649	0.9500	0.91		0.9600	0.0097	2.31%	0.00%
12.5			5		0.9240		0.8928	0.9552	0.9100	0.90		0.9600	0.0112	2.72%	1.49%
25			5		0.9340		0.9083	0.9597	0.9400	0.90		0.9500	0.0093	2.22%	0.43%
50			5		0.9420		0.9151	0.9689	0.9500	0.91		0.9600	0.0097	2.30%	-0.43%
100			5		0.9460	1	0.9318	0.9602	0.9500	0.93	00	0.9600	0.0051	1.21%	-0.85%

Report Date: Test Code/ID:

26 Apr-22 16:05 (p 2 of 3) VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 11-3810-7386 Endpoint: Germination Rate

Analyzed: 26 Apr-22 16:04

Edit Date:

Analysis:

Parametric-Control vs Treatments MD5 Hash: E6A239984EE5B0174852CC63844AAF9F **CETIS Version:**

Editor ID:

Status Level:

008-463-000-3

CETISv2.1.1

26 Apr-22 16:01 Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.3200	1.2850	1.3560	1.3030	1.3030	1.3690	0.0129	2.18%	0.00%
6.25		5	1.3220	1.2670	1.3770	1.3450	1.2660	1.3690	0.0199	3.36%	-0.13%
12.5		5	1.2950	1.2320	1.3570	1.2660	1.2490	1.3690	0.0225	3.89%	1.94%
25		5	1.3130	1.2640	1.3630	1.3230	1.2490	1.3450	0.0179	3.04%	0.54%
50		5	1.3310	1.2750	1.3870	1.3450	1.2660	1.3690	0.0202	3.39%	-0.78%
100		5	1.3370	1.3060	1.3680	1.3450	1.3030	1.3690	0.0113	1.88%	-1.28%

Germination Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9300	0.9600	0.9300	0.9400	0.9300
6.25		0.9200	0.9500	0.9100	0.9500	0.9600
12.5		0.9000	0.9600	0.9100	0.9400	0.9100
25		0.9000	0.9300	0.9500	0.9500	0.9400
50		0.9100	0.9600	0.9300	0.9600	0.9500
100		0.9400	0.9300	0.9500	0.9600	0.9500

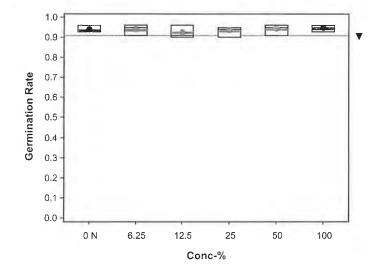
Angular (Corrected) Transformed Detail

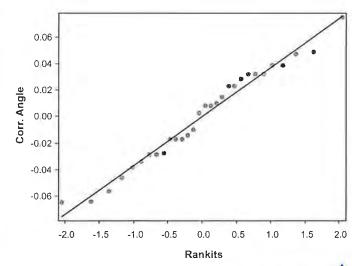
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.3030	1.3690	1.3030	1.3230	1.3030
6.25		1.2840	1.3450	1.2660	1.3450	1.3690
12.5		1.2490	1.3690	1.2660	1.3230	1.2660
25		1.2490	1.3030	1.3450	1.3450	1.3230
50		1.2660	1.3690	1.3030	1.3690	1.3450
100		1.3230	1.3030	1.3450	1.3690	1.3450

Germination Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	93/100	96/100	93/100	94/100	93/100	
6.25		92/100	95/100	91/100	95/100	96/100	
12.5		90/100	96/100	91/100	94/100	91/100	
25		90/100	93/100	95/100	95/100	94/100	
50		91/100	96/100	93/100	96/100	95/100	
100		94/100	93/100	95/100	96/100	95/100	

Graphics





Report Date:

26 Apr-22 16:05 (p 3 of 3)

Test Code/ID: VCF0322.210klp / 04-6579-4553

	rmination an	id Germ Tu	be Grow	th Test	Aquatic Bioassay & Consulting Labs, Inc								
•	7-1412-3453 6 Apr-22 16:0		dpoint: alysis:	Mean Length Parametric-Cor	ntrol vs Trea	tments			S Versi		ETISv2.	.1.1	
-	6 Apr-22 16:0		•	8E4B8691BF9			19E	Editor			08-463-0	000-3	
Batch ID: 0	1-2003-9176	Te	st Type:	Growth-Germin	nation			Analy	st:				
Start Date: 3	0 Mar-22 17:1	10 Pr (otocol:	EPA/600/R-95/	136 (1995)			Diluer		Laborate	ory Seav	vater	
Ending Date: 0	1 Apr-22 17:1	10 S p	ecies:	Macrocystis py	rifera			Brine:	: 1	Not App	licable		
Test Length: 4	8h	Tax	con:	Ochrophyta				Sourc	e: '	Ventura	Dive		Age:
Sample ID: 1	8-7754-1836	Co	de:	VCF0322.210klp					Project: NPDES Stormwater Wet Season				
Sample Date: 2	8 Mar-22 12:1	15 M a	terial:	Sample Water				Sourc	e: I	Bioassa	y Report	t	
Receipt Date: 2	3 Mar-22 16:0)3 CA	S (PC):					Statio	n: l	ME-SCF	₹		
Sample Age: 5	3h (6.5 °C)	Cli	ent:	Ventura County	/ Watershed	Protection	Distri						
Data Transform		Alt Hyp				NOEL	LOE	L	TOEL	Τl	J	MSDu	PMSD
Untransformed		C > T				100	>100)		1		0.2032	1.54%
Dunnett Multiple	e Compariso	n Test											
Control v	s Conc-%	d	f Test S	itat Critical	MSD	P-Type	P-Va	lue	Decisi	ion(α:5°	%)		
Negative Control	6.25	8	0	2.362	0.2032	CDF	0.83	33	Non-S	ignificar	nt Effect		
	12.5	8	-1.162	2.362	0.2032	CDF	0.98	95	Non-S	ignificar	nt Effect		
	25	8	0.6975	2.362	0.2032	CDF	0.55	82	Non-S	ignificar	nt Effect		
	50	8	0.465	2.362	0.2032	CDF	0.66	21	Non-S	ignificar	nt Effect		
	100	8	-0.465	2.362	0.2032	CDF	0.93	51	Non-S	ignificar	nt Effect		
Test Acceptabil	ity Criteria	TAC	Limits										
Attribute	Test Sta	t Lower	Upper	Overlap	Decision								
Control Resp	13.16	10	<<	Yes	Passes C								
PMSD	0.01544	<<	0.2	No	Passes Ci	riteria							
ANOVA Table													
Source	Sum Squ			Square	DF	F Stat	P-Va	lue	Decisi	ion(α:5°	%)		
Between	0.082666	37	0.0165	333	5	0.8937	0.50	10	Non-S	ignificar	nt Effect		
Error	0.444					0.0001							
			0.0185	5	24	_							
Total	0.526667	7	0.0185	5		-							
	0.526667	7	0.0185	5	24	-							
ANOVA Assump	0.526667	7	0.0185	5	24	-	P-Va	ılue	Decisi	ion(α:1'	%)		
ANOVA Assump Attribute	0.526667 otions Tests Test	7 Equality of Va			29	-	P-V a			ion(α:1° Varianc			
ANOVA Assump Attribute	0.526667 otions Tests Test Bartlett E		ariance T	est	24 29 Test Stat	- Critical		72	Equal		es		
ANOVA Assump Attribute	0.526667 otions Tests Test Bartlett E Levene E	Equality of Va	ariance T ariance T	est est	24 29 Test Stat 6.094	Critical	0.29	72 83	Equal Equal	Varianc	es es		
ANOVA Assump Attribute Variance	0.526667 otions Tests Test Bartlett E Levene E Mod Leve	Equality of Va	ariance T ariance T of Variar	est est	24 29 Test Stat 6.094 1.096	Critical 15.09 3.895	0.29	72 83 50	Equal Equal Equal	Varianc Varianc	es es es		
ANOVA Assump Attribute Variance	0.526667 otions Tests Test Bartlett E Levene E Mod Leve Andersor	Equality of Va Equality of Valence	ariance T ariance T of Variar Test	est est	24 29 Test Stat 6.094 1.096 0.6935	Critical 15.09 3.895 4.248	0.29 0.38 0.63	72 83 50 78	Equal Equal Equal Norma	Varianc Varianc Varianc	es es es es		
ANOVA Assump Attribute Variance	0.526667 otions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostin	Equality of Va Equality of Va ene Equality n-Darling A2	ariance T ariance T of Variar Test Fest	est est	24 29 Test Stat 6.094 1.096 0.6935 0.4452	Critical 15.09 3.895 4.248 3.878	0.29 0.38 0.63 0.28	72 83 50 78	Equal Equal Equal Norma Norma	Varianc Varianc Varianc I Distrib	es es es ution ution		
ANOVA Assump Attribute Variance	0.526667 tions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T	ariance T ariance T of Variar Test Fest s Test	est est nce Test	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433	Critical 15.09 3.895 4.248 3.878 2.576	0.29 0.38 0.63 0.28 0.15	72 83 50 78 19	Equal Equal Equal Norma Norma	Variano Variano Variano al Distrib al Distrib	es es es ution ution		
ANOVA Assump Attribute Variance	0.526667 tions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness	ariance T ariance T of Variar Test Fest s Test K2 Omnit	est est nce Test	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07	Critical 15.09 3.895 4.248 3.878 2.576 2.576	0.29 0.38 0.63 0.28 0.15 0.28	72 83 50 78 19 47	Equal Equal Equal Norma Norma Norma	Varianc Varianc Varianc I Distrib I Distrib	es es es ution ution ution		
ANOVA Assump Attribute Variance	0.526667 Itions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogor	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness no-Pearson I	ariance T ariance T of Variar Test Fest s Test K2 Omnit D Test	est est nce Test ous Test	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21	0.29 0.38 0.63 0.28 0.15 0.28 0.20	72 83 50 78 19 47 22	Equal Equal Equal Norma Norma Norma Norma	Variance Variance Variance Variance I Distribus I Dist	es es es ution ution ution ution ution		
ANOVA Assump Attribute Variance Distribution	0.526667 Itions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogol Shapiro-N	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness no-Pearson I prov-Smirnov	ariance T ariance T of Variar Test Fest s Test K2 Omnit D Test	est est nce Test ous Test	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853	0.29 0.38 0.63 0.28 0.15 0.28 0.20	72 83 50 78 19 47 22	Equal Equal Equal Norma Norma Norma Norma	Variance Variance Variance I Distribut	es es es ution ution ution ution ution		
ANOVA Assump Attribute Variance Distribution	0.526667 Itions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogol Shapiro-N	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness no-Pearson I prov-Smirnov	ariance T ariance T of Variar Test Fest s Test K2 Omnit D Test	est est nce Test ous Test	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139 0.9674	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031	0.29 0.38 0.63 0.28 0.15 0.28 0.20	72 83 50 78 19 47 22	Equal Equal Equal Norma Norma Norma Norma	Varianc Varianc Varianc Varianc al Distrib al Distrib al Distrib al Distrib al Distrib	es es es ution ution ution ution ution	CV%	%Effect
ANOVA Assump Attribute Variance Distribution Mean Length Su	0.526667 Itions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogoi Shapiro-\	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness no-Pearson I prov-Smirnov Wilk W Norm	ariance T ariance T of Variar Test Fest s Test K2 Omnit D Test nality Tes	est est nce Test ous Test	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139 0.9674	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031	0.29 0.38 0.63 0.28 0.15 0.28 0.20 0.40	72 83 50 78 19 47 22 03 05	Equal Equal Equal Norma Norma Norma Norma	Varianc Varianc Varianc Varianc al Distrib al Distrib al Distrib al Distrib al Distrib	es es ution ution ution ution ution ution ution ution	CV% 0.87%	%Effect 0.00%
ANOVA Assump Attribute Variance Distribution Mean Length Su Conc-%	0.526667 Potions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogor Shapiro-V Jummary Code	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness no-Pearson I wrov-Smirnov Wilk W Norn	ariance T ariance T of Variar Test S Test K2 Omnit D Test nality Tes	est est nce Test ous Test t	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139 0.9674	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031	0.29 0.38 0.63 0.28 0.15 0.28 0.20 0.40 0.47	72 83 50 78 19 47 22 03 05	Equal Equal Rorma Norma Norma Norma Norma Norma Norma	Varianc Varianc Varianc Varianc al Distrib al Distrib al Distrib al Distrib al Distrib	es es ution ution ution ution ution ution ution ution		
ANOVA Assump Attribute Variance Distribution Mean Length Su Conc-% 0 6.25	0.526667 Potions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogor Shapiro-V Jummary Code	Equality of Variable Equality	ariance T ariance T of Variar Test S Test K2 Omnit D Test nality Tes Mean 13.16	est est nce Test ous Test t 95% LCL 13.02	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139 0.9674 95% UCL 13.3	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 Median 13.2	0.29 0.38 0.63 0.28 0.15 0.20 0.40 0.47 Min	72 83 50 78 19 47 22 03 05	Equal Equal Norma Norma Norma Norma Norma Norma Norma 13.3	Varianc Varianc Varianc Varianc al Distrib al Distrib al Distrib al Distrib al Distrib	es es es ution ution ution ution ution ution ution d Err	0.87%	0.00%
Total ANOVA Assump Attribute Variance Distribution Mean Length St Conc-% 0 6.25 12.5 25	0.526667 Potions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogor Shapiro-V Jummary Code	Equality of Variance Equality	ariance T ariance T of Variar Test Fest S Test K2 Omnit D Test nality Tes Mean 13.16 13.16 13.26	est est nce Test bus Test t 95% LCL 13.02 12.97 12.99	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139 0.9674 95% UCL 13.3 13.35 13.53	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 Median 13.2 13.1 13.2	0.29 0.38 0.63 0.28 0.15 0.20 0.40 0.47 Min 13 13	72 83 50 78 19 47 22 03 05	Equal Equal Norma Norma Norma Norma Norma Norma 13.3	Varianc Varianc Varianc Varianc al Distrib al Distrib al Distrib al Distrib St 0.0	es es es ution ution ution ution ution ution d Err 05099	0.87% 1.15%	0.00%
ANOVA Assump Attribute Variance Distribution Mean Length Su Conc-% 0 6.25 12.5	0.526667 Potions Tests Test Bartlett E Levene E Mod Leve Andersor D'Agostir D'Agostir D'Agostir Kolmogor Shapiro-V Jummary Code	Equality of Va Equality of Va ene Equality n-Darling A2 no Kurtosis T no Skewness no-Pearson Darov-Smirnov Wilk W Norm	ariance T ariance T of Variar Test S Test K2 Omnit D Test nality Tes Mean 13.16	est eest cest cus Test t 95% LCL 13.02 12.97	24 29 Test Stat 6.094 1.096 0.6935 0.4452 1.433 1.07 3.197 0.1139 0.9674 95% UCL 13.3 13.35	Critical 15.09 3.895 4.248 3.878 2.576 2.576 9.21 0.1853 0.9031 Median 13.2 13.1	0.29 0.38 0.63 0.28 0.15 0.20 0.40 0.47 Min 13	72 83 50 78 19 47 22 03 05	Equal Equal Equal Norma Norma Norma Norma Norma 13.3	Variance Variance Variance Variance I Distribute Variance	es es es es ution	0.87% 1.15% 1.65%	0.00% 0.00% -0.76%

Report Date: Test Code/ID:

26 Apr-22 16:05 (p 4 of 3) VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

07-1412-3453 Analysis ID: Endpoint: Mean Length

26 Apr-22 16:01

Analyzed: 26 Apr-22 16:04

Parametric-Control vs Treatments Analysis:

CETIS Version: Status Level:

Editor ID:

008-463-000-3

CETISv2.1.1

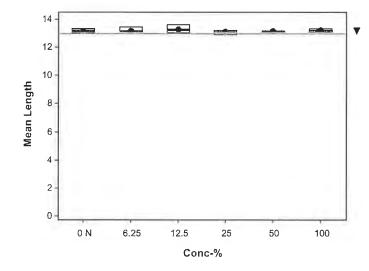
Mean Length Detail

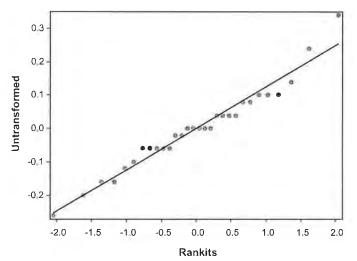
Edit Date:

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	13.3	13.2	13.2	13.1	13
6.25		13.4	13.1	13.2	13.1	13
12.5		13.6	13.3	13.2	13	13.2
25		13.1	13.2	13.2	12.9	13.1
50		13.2	13.1	13.1	13	13.2
100		13.3	13.2	13.2	13.1	13.2

MD5 Hash: 8E4B8691BF9A9BB248C485B6213EA19E

Graphics





Report Date:

26 Apr-22 16:05 (p 1 of 4)

Test Code/ID: VCF0322.210klp / 04-6579-4553

	Macrocystis Germination and Germ Tube Growth Test								Aquatic Bioassay & Consulting Labs, Inc.					
Analys		11-1507-4440	End	point:	Germination Ra				CETIS Vers	ion:	CETISv2	2.1.1		
Analyz	ed:	26 Apr-22 16:04		lysis:	Linear Interpola				Status Leve	el:	1			
Edit Da	ate:	26 Apr-22 16:01	MD	5 Hash:	E6A239984EE5	5B0174852	2CC63844A.	AF9F	Editor ID:		008-463-	-000-3		
Batch	ID:	01-2003-9176	Tes	t Type:	Growth-Germin	ation			Analyst:					
Start D	Date:	30 Mar-22 17:10	Pro	tocol:	EPA/600/R-95/	136 (1995))		Diluent:	Labora	atory Sea	water		
Ending	g Date:	01 Apr-22 17:10	Spe	cies:	Macrocystis pyr	rifera			Brine:	Not A	pplicable			
Test Le	ength:	48h	Tax	on:	Ochrophyta				Source:	Ventu	ra Dive		Age:	
Sample	e ID:	18-7754-1836	Cod	le:	VCF0322.210kl	İp			Project:	NPDE	S Stormw	vater Wet S	eason (Co	
Sample	e Date:	28 Mar-22 12:15	Mat	erial:	Sample Water				Source:	Bioass	say Repor	rt		
Receip	ot Date:	28 Mar-22 16:03	CAS	(PC):					Station:	ME-S	CR			
Sample	e Age:	53h (6.5 °C)	Clie	nt:	Ventura County	Watershe	d Protection	n Distri						
Linear	Interpo	lation Options												
X Tran	sform	Y Transform	See	d	Resamples	Exp 95%	6 CL Met	hod						
Linear		Linear	0		280	Yes	Two	-Point I	nterpolation					
Test A	cceptab	oility Criteria	TAC L	imits										
Attribu	ite	Test Stat		Upper	Overlap	Decision	1							
Control	Resp	0.938	0.7	<<	Yes	Passes (
Point E	Estimate	es												
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI								
EC15	>100		***	<1										
EC20	>100	***		<1	***									
EC25	>100			<1	3775									
EC40	>100			<1	***	***								
EC50	>100			<1	***									
Germir	nation F	Rate Summary				Calc	ulated Varia	ate(A/B)			Isotor	ic Variate	
Conc-%	%	Code	Count	Mean	Median	Min	Max	CV%	%Eff	ect ,	A/B	Mean	%Effect	
						0.0000	0.9600	4 200			100/500	0.9380	0.00%	
0		N	5	0.9380	0.9300	0.9300	0.9600	1.399	% 0.009	% ·	469/500	0.9360		
6.25		N	5	0.9380 0.9380		0.9300	0.9600	2.319	% 0.009		469/500 469/500	0.9380	0.00%	
6.25 12.5		N	5 5	0.9380 0.9240	0.9500 0.9100	0.9100 0.9000	0.9600 0.9600	2.31° 2.72°	% 0.009 % 1.499	% 4 % 4	469/500 462/500		0.16%	
0 6.25 12.5 25		N	5 5 5	0.9380 0.9240 0.9340	0.9500 0.9100 0.9400	0.9100 0.9000 0.9000	0.9600 0.9600 0.9500	2.31° 2.72° 2.22°	% 0.00% % 1.49% % 0.43%	% 4 % 4	469/500 462/500 467/500	0.9380 0.9365 0.9365	0.16% 0.16%	
6.25 12.5 25 50		N	5 5 5 5	0.9380 0.9240 0.9340 0.9420	0.9500 0.9100 0.9400 0.9500	0.9100 0.9000 0.9000 0.9100	0.9600 0.9600 0.9500 0.9600	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50		N	5 5 5	0.9380 0.9240 0.9340	0.9500 0.9100 0.9400 0.9500	0.9100 0.9000 0.9000	0.9600 0.9600 0.9500	2.31° 2.72° 2.22°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500	0.9380 0.9365 0.9365	0.16% 0.16%	
6.25 12.5 25 50 100	nation F	N Rate Detail	5 5 5 5	0.9380 0.9240 0.9340 0.9420	0.9500 0.9100 0.9400 0.9500	0.9100 0.9000 0.9000 0.9100	0.9600 0.9600 0.9500 0.9600	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germi r		Rate Detail Code	5 5 5 5 5 7	0.9380 0.9240 0.9340 0.9420 0.9460	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3	0.9100 0.9000 0.9000 0.9100 0.9300	0.9600 0.9600 0.9500 0.9600 0.9600	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc- %		Rate Detail	5 5 5 5 5 5 7 8 8 8 9 1 0.9300	0.9380 0.9240 0.9340 0.9420 0.9460 Rep 2	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc- % 0		Rate Detail Code	5 5 5 5 5 5 7 8 Rep 1 0.9300 0.9200	0.9380 0.9240 0.9340 0.9460 Rep 2 0.9600 0.9500	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5		Rate Detail Code	5 5 5 5 5 5 7 8 Rep 1 0.9300 0.9200 0.9200	0.9380 0.9240 0.9340 0.9420 0.9460 Rep 2 0.9600 0.9500 0.9600	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9400	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5		Rate Detail Code	5 5 5 5 5 5 Rep 1 0.9300 0.9200 0.9000 0.9000	0.9380 0.9240 0.9340 0.9420 0.9460 0.9600 0.9500 0.9300	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9500	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9400	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 25		Rate Detail Code	5 5 5 5 5 5 Rep 1 0.9300 0.9200 0.9000 0.9000 0.9100	0.9380 0.9240 0.9340 0.9420 0.9460 0.9600 0.9500 0.9300 0.9600	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9300	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9500 0.9600	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9400 0.9500	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 25		Rate Detail Code	5 5 5 5 5 5 Rep 1 0.9300 0.9200 0.9000 0.9000	0.9380 0.9240 0.9340 0.9420 0.9460 0.9600 0.9500 0.9300	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9300	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9500	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9400	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 25 50	//6	Rate Detail Code	5 5 5 5 5 5 Rep 1 0.9300 0.9200 0.9000 0.9000 0.9100	0.9380 0.9240 0.9340 0.9420 0.9460 0.9600 0.9500 0.9300 0.9600	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9300	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9500 0.9600	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9400 0.9500	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 25 50 100 Germir	% nation F	Rate Detail Code N	5 5 5 5 5 5 Rep 1 0.9300 0.9200 0.9000 0.9000 0.9100	0.9380 0.9240 0.9340 0.9420 0.9460 0.9600 0.9500 0.9300 0.9600	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9300	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9500 0.9600	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9400 0.9500	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 25 50 100 Germir Conc-%	% nation F	Rate Detail Code N	5 5 5 5 5 7 8ep 1 0.9300 0.9200 0.9000 0.9000 0.9100 0.9400	0.9380 0.9240 0.9340 0.9460 0.9460 0.9500 0.9500 0.9600 0.9300	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9500 0 0.9500 0 0.9500	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9500 0.9600	0.9600 0.9600 0.9500 0.9600 0.9600 0.9300 0.9600 0.9100 0.9400 0.9500	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 50 100 Germir Conc-% 0 6.25	% nation F	Rate Detail Code N Rate Binomials Code	5 5 5 5 5 5 7 8ep 1 0.9300 0.9200 0.9000 0.9000 0.9100 0.9400	0.9380 0.9240 0.9340 0.9460 Rep 2 0.9600 0.9500 0.9300 0.9300	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9500 0 0.9500 0 0.9500 0 0.9500	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600	0.9600 0.9500 0.9500 0.9600 0.9600 0.9300 0.9600 0.9100 0.9400 0.9500 Rep 5	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 50 100 Germir Conc-% 0 6.25	% nation F	Rate Detail Code N Rate Binomials Code	5 5 5 5 5 5 7 8ep 1 0.9300 0.9200 0.9000 0.9000 0.9400 8ep 1 93/100	0.9380 0.9240 0.9340 0.9460 0.9460 0.9500 0.9600 0.9300 0.9300 Rep 2 96/100	0 0.9500 0 0.9100 0 0.9400 0 0.9500 0 0.9500 0 0.9500 0 0.9100 0 0.9100 0 0.9500 0 0.9500 0 0.9500 0 0.9500 0 0.9500 0 0.9500	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600 Rep 4 94/100	0.9600 0.9600 0.9500 0.9600 0.9600 0.9300 0.9600 0.9100 0.9500 0.9500 Rep 5 93/100	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 50 100 Germir Conc-% 0 6.25	% nation F	Rate Detail Code N Rate Binomials Code	5 5 5 5 5 5 7 8ep 1 0.9300 0.9200 0.9000 0.9000 0.9400 0.9400 8ep 1 93/100 92/100	0.9380 0.9240 0.9340 0.9460 0.9460 0.9500 0.9600 0.9300 0.9300 Rep 2 96/100 95/100	0 0.9500 0 .9100 0 0.9400 0 0.9500 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9500 0 0.9500 Rep 3 0 0.9300 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100 0 0.9100	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600 0.9600 Rep 4 94/100 95/100	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9500 0.9500 Rep 5 93/100 96/100	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	
6.25 12.5 25 50 100 Germir Conc-% 0 6.25 12.5 25 50	% nation F	Rate Detail Code N Rate Binomials Code	5 5 5 5 5 5 7 8ep 1 0.9300 0.9200 0.9000 0.9100 0.9400 8ep 1 93/100 92/100 90/100	0.9380 0.9240 0.9340 0.9460 0.9460 0.9500 0.9600 0.9300 0.9300 Rep 2 96/100 96/100	0 0.9500 0 .9100 0 .9400 0 .9500 0 .9500 0 .9500 Rep 3 0 .9300 0 .9100 0 .9500 0 .9500 Rep 3 0 .9300 0 .9100 0 .9100 0 .9100 0 .9100 0 .9100 0 .9100 0 .9100 0 .9500 0 .9500	0.9100 0.9000 0.9000 0.9100 0.9300 Rep 4 0.9400 0.9500 0.9600 0.9600 0.9600 Pep 4 94/100 95/100 94/100	0.9600 0.9600 0.9500 0.9600 0.9600 Rep 5 0.9300 0.9600 0.9100 0.9500 0.9500 Rep 5 93/100 96/100 91/100	2.31° 2.72° 2.22° 2.30°	% 0.009 % 1.499 % 0.439 % -0.43	% 4 % 4	469/500 462/500 467/500 471/500	0.9380 0.9365 0.9365 0.9365	0.16% 0.16% 0.16%	

Report Date:

26 Apr-22 16:05 (p 2 of 4)

Test Code/ID: VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	11-1507-4440	Endpoint:	Germination Rate	CETIS Version:	CETISv2.1.1
Analyzed:	26 Apr-22 16:04	Analysis:	Linear Interpolation (ICPIN)	Status Level:	1

Edit Date: 26 Apr-22 16:01 MD5 Hash: E6A239984EE5B0174852CC63844AAF9F Editor ID: 008-463-000-3

Graphics 0.960 0.880 0.800 0.720 **Germination Rate** 0.640 0.560 0.480 0.400 0.320 0.240 0.160 0.080 0.000 10 20 30 40 50 60 70 80 90 100 Conc-%

Report Date:

26 Apr-22 16:05 (p 3 of 4)

Test Code/ID:

VCF0322.210klp / 04-6579-4553

													71 0010 10
Macroc	ystis	Germination and	Germ Tub	e Grow	th Test				Aqu	atic Bi	ioassay &	Consultin	g Labs, Ind
Analysi	is ID:	01-6683-8148	End	point:	Mean Length				CETIS Ver	sion:	CETISv2	.1.1	
Analyze	ed:	26 Apr-22 16:04		lysis:	Linear Interpola	•	,		Status Lev	/el:	1		
Edit Da	ite:	26 Apr-22 16:01	MDS	Hash:	8E4B8691BF9/	A9BB2480	C485B621	3EA19E	Editor ID:		008-463-	000-3	
Batch I	D:	01-2003-9176	Test	Type:	Growth-Germin	ation			Analyst:				
Start Da	ate:	30 Mar-22 17:10	Prot	ocol:	EPA/600/R-95/	136 (1995	5)		Diluent:	Labo	ratory Sea	water	
_		01 Apr-22 17:10	Spe	cies:	Macrocystis py	rifera			Brine:	Not A	Applicable		
Test Le	ngth:	48h	Taxo	on:	Ochrophyta				Source:	Vent	ura Dive		Age:
Sample		18-7754-1836	Cod	e:	VCF0322.210k	lp			Project:	NPD	ES Stormw	ater Wet	Season (Co
Sample	Date:	28 Mar-22 12:15	Mate	erial:	Sample Water				Source:	Bioa	ssay Repor	t	
•		28 Mar-22 16:03	CAS	(PC):					Station:	ME-S	SCR		
Sample	Age:	53h (6.5 °C)	Clie	nt:	Ventura County	/ Watersh	ed Protect	tion Distri					
Linear I	Interpo	olation Options											
X Trans	form	Y Transform	See	dt	Resamples	Exp 95	% CL N	lethod					
Linear		Linear	1006	8854	280	Yes	Т	wo-Point	Interpolation	1			
Test Ac	ceptal	bility Criteria	TAC L	imits									
Attribut	te	Test Stat	Lower	Uppe	r Overlap	Decisio	n						
Control	Resp	13.16	10	<<	Yes	Passes	Criteria						
Point E	stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UC	L						
IC15	>100	-		<1									
IC20	>100	444		<1	444								
IC25	>100	***	***	<1									
IC40	>100			<1									
IC50	>100	(4-4	-	<1	***	***							
Mean L	ength	Summary				С	alculated	Variate				Isoto	nic Variate
Conc-%	0	Code	Count	Mean	Median	Min	Max	CV%	ώ %Ε1	fect		Mean	%Effec
)		N	5	13.16	13.2	13	13.3	0.87	% 0.00	%		13.19	0.00%
5.25			5	13.16	13.1	13	13.4	1.15	% 0.00	%		13.19	0.00%
12.5			5	13.26	13.2	13	13.6	1.65	% -0.7	6%		13.19	0.00%
25			5	13.1	13.1	12.9	13.2	0.93	% 0.46	%		13.14	0.40%
50			5	13.12	13.1	13	13.2	0.64	% 0.30	%		13.14	0.40%
100			5	13.2	13.2	13.1	13.3	0.54	% -0.3	0%		13.14	0.40%
Mean L	ength	Detail											
Conc-%	·	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5						
0		N	13.3	13.2	13.2	13.1	13						
6.25			13.4	13.1	13.2	13.1	13						
12.5			13.6	13.3	13.2	13	13.2						
25			13.1	13.2	13.2	12.9	13.1						
50			13.2	13.1	13.1	13	13.2						
100			13.3	13.2	13.2	13.1	13.2						

Report Date:

Editor ID:

26 Apr-22 16:05 (p 4 of 4)

Test Code/ID: VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test

26 Apr-22 16:01

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 01-6683-8148 **Analyzed:** 26 Apr-22 16:04

Endpoint: Mean Length
Analysis: Linear Interpo

Analysis: Linear Interpolation (ICPIN)
MD5 Hash: 8E4B8691BF9A9BB248C485B6213EA19E

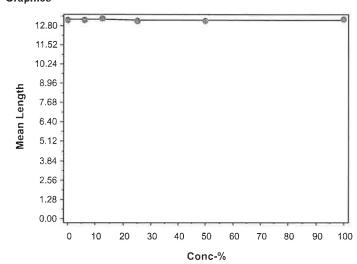
CETIS Version:

Status Level: 1

008-463-000-3

CETISv2.1.1

Edit Date: Graphics



Report Date:

26 Apr-22 16:06 (p 1 of 1)

Test Code/ID: VCF0322.210klp / 04-6579-4553

Macrocystis Germination and Germ Tube Growth Test									Aquatic Bioassay & Consulting Labs, Inc.					
Batch ID:	01-2003-9176		Test Type:	Growth-Germi	nation			Analyst:						
Start Date:	30 Mar-22 17:	:10	Protocol:	EPA/600/R-95	/136 (1995)			Diluent:	Laboratory Sea	awater				
Ending Date:	01 Apr-22 17:	10	Species:	Macrocystis py	yrifera			Brine:	Not Applicable					
Test Length:	48h		Тахоп:	Ochrophyta				Source:	Ventura Dive		Age:			
Sample ID:	18-7754-1836	ì	Code:	VCF0322.210	klp			Project:	NPDES Storm	water We	t Season (Con			
Sample Date:	: 28 Mar-22 12:	:15	Material:	Sample Water	•			Source:	Bioassay Repo	ort				
Receipt Date:	: 28 Mar-22 16:	:03	CAS (PC):					Station:	ME-SCR					
Sample Age:	53h (6.5 °C)		Client:	Ventura Count	y Watershe	d Protecti	ion Distri							
Dissolved Ox	kygen-mg/L													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Coun			
0	N	2	6.5	2.688	10.31	6.2	6.8	0.2121	0.4243	6.53%	0			
6.25		2	6.65	6.015	7.285	6.6	6.7	0.0353	0.07069	1.06%	0			
12.5		2	6.55	5.915	7.185	6.5	6.6	0.0353	0.0707	1.08%	0			
25		2	6.6	5.329	7.871	6.5	6.7	0.0707	'1 0.1414	2.14%	0			
50		2	6.55	3.373	9.727	6.3	6.8	0.1768	0.3536	5.40%	0			
100		2	6.45	4.544	8.356	6.3	6.6	0.1061	0.2121	3.29%	0			
Overall		12	6.55	6.424	6.676	6.2	6.8	0.0570	0.1977	3.02%	0 (0%)			
pH-Units														
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count			
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0			
6.25		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0			
12.5		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0			
25		2	7.95	7.315	8.585	7.9	8	0.0353	0.0707	0.89%	0			
50		2	7.95	7.315	8.585	7.9	8	0.0353	0.0707	0.89%	0			
100		2	8.05	7.415	8.685	8	8.1	0.0353	0.07073	0.88%	0			
Overall		12	7.942	7.899	7.984	7.9	8.1	0.0193	0.06686	0.84%	0 (0%)			
Salinity-ppt														
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count			
0	N	2	34	34	34	34	34	0	0	0.00%	0			
6.25		2	34	34	34	34	34	0	0	0.00%	0			
12.5		2	34	34	34	34	34	0	0	0.00%	0			
25		2	34	34	34	34	34	0	0	0.00%	0			
50		2	34	34	34	34	34	0	0	0.00%	0			
100		2	34	34	34	34	34	0	0	0.00%	0			
Overall		12	34	34	34	34	34	0	0	0.00%	0 (0%)			
Temperature-														
Conc-%	Code	Count		95% LCL	95% UCL		Max	Std Er		CV%	QA Count			
0	N	2	14.85	14.21	15.49	14.8	14.9	0.0353		0.48%	0			
6.25		2	14.85	14.21	15.49	14.8	14.9	0.0353		0.48%	0			
12.5		2	14.85	14.21	15.49	14.8	14.9	0.0353		0.48%	0			
25		2	14.85	14.21	15.49	14.8	14.9	0.0353		0.48%	0			
50		2	14.85	14.21	15.49	14.8	14.9	0.0353		0.48%	0			
100		2	14.85	14.21	15.49	14.8	14.9	0.0353	9 0.07077	0.48%	0			

0.35%

0 (0%)

14.88

14.8

14.9

0.01508

0.05222

12

14.85

14.82

Overall



April 26, 2022

Mr. Arne Anselm Ventura County Watershed Protection District 800 South Victoria Ave Ventura, CA 93009

Dear Mr. Anselm:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receving Waters to West Coast Estuarine Organisms, EPA/821/R-02-014.* Results were as follows:

CLIENT: Ventura County Watershed Protection District

SAMPLE I.D.: ME-SCR
DATE RECEIVED: 3/28/2022
ABC LAB. NO.: VCF0322.210

CHRONIC TOPSMELT SURVIVAL AND GROWTH BIOASSAY

Survival NOEC = 100.00TUc = 1.00

> EC25 = >100.00 % EC50 = >100.00 %

Biomass NOEC = 100.00 %

TUc = 1.00

IC25 = >100.00 % IC50 = >100.00 %

Yours very truly,

Scott Johnson

Laboratory Director

Report Date:

21 Apr-22 08:56 (p 1 of 2)

Test Code/ID:

VCF0322.210tops / 05-8162-0738

	nelt 7-d Surviv	al and G	rowth Test						Aquati	c Bioassay &	Consulting	Labs, I	lnc.
Batch ID: Start Date: Ending Date: Test Length:	05-0635-9414 29 Mar-22 11:0 05 Apr-22 11:0 7d	30 08	Test Type: Protocol: Species: Taxon:	Growth-Surviva EPA/600/R-95/ Atherinops affir Actinopterygii	136 (1995)			Dilu Brin	ie: N	aboratory Sea Not Applicable Aquatic Biosyst		Age:	
	19-7331-8746 28 Mar-22 12: 28 Mar-22 16:0 23h (6.5 °C)	15 03	Code: Material: CAS (PC): Client:	VCF0322.210to Sample Water VCWPD	ops				rce: E	NPDES Stormv Bioassay Repo ME-SCR		ason (Con
Multiple Com	parison Summ	ary											
Analysis ID	Endpoint		Comp	arison Method			✓	NOEL	LOEL	TOEL	PMSD	TU	S
07-8864-3711	7d Survival Ra	te	Steel	Many-One Rank	Sum Test			100	>100		***	1	-
09-1330-1152	Mean Dry Bion	nass-mg		ett Multiple Com		t		100	>100	***	2.26%	1	
Point Estimat	e Summary												
Analysis ID	Endpoint		Point	Estimate Metho	od		√	Level	%	95% LCL	95% UCL	TU	5
18-3070-5691	7d Survival Ra	te	Linea	Interpolation (IC	CPIN)		√	EC15	>100			<1	
							✓	EC20	>100			<1	
							✓	EC25	>100			<1	
							✓	EC40	>100	***		<1	
							✓	EC50	>100			<1	
08-2988-3575	Mean Dry Bion	nass-mg	Linea	Interpolation (10	CPIN)		✓	IC15	>100			<1	2
									>100	***		<1	
							✓		>100		***	<1	
							√ /	IC40 IC50	>100 >100	***		<1 <1	
T4 A4-1	. 1114						-		>100				_
Test Acceptat	•		A 44*!	4	T4 84-4	TAC	Li		0	D1-1-1			
Analysis ID	Endpoint		Attrib		Test Stat	Lower		Upper <<	Overla Yes	p Decision Passes C			
		1 -	04-		4	0.0							
			Contro	•	1	0.8							
18-3070-5691	7d Survival Ra	te	Contro	ol Resp	1	0.8		<<	Yes	Passes C	riteria		
18-3070-5691 08-2988-3575	7d Survival Ra Mean Dry Bion	te nass-mg	Contro Contro	ol Resp ol Resp	1 1.427	0.8 0.85		<< <<	Yes Yes	Passes C Passes C	riteria riteria		
18-3070-5691 08-2988-3575 09-1330-1152	7d Survival Ra Mean Dry Bion Mean Dry Bion	te nass-mg	Contro Contro	ol Resp	1	0.8		<<	Yes	Passes C	riteria riteria		
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary	te nass-mg nass-mg	Contro Contro	ol Resp ol Resp ol Resp	1 1.427 1.427	0.8 0.85 0.85		<< <<	Yes Yes Yes	Passes C Passes C Passes C	riteria riteria riteria	0/ E##	o o t
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R Conc-%	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code	te nass-mg nass-mg Coun	Contro Contro Contro t Mean	ol Resp ol Resp ol Resp 95% LCL	1 1.427 1.427 95% UCL	0.8 0.85 0.85 Min		<< << << Max	Yes Yes Yes	Passes C Passes C Passes C r Std Dev	riteria riteria riteria CV%	%Effe	
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R : Conc-%	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary	te nass-mg nass-mg Coun	Contro Contro Contro t Mean	ol Resp ol Resp ol Resp 95% LCL	1 1.427 1.427 95% UCL 1.0000	0.8 0.85 0.85 Min		<< << << << << << Max 1.0000	Yes Yes Yes Std Er	Passes C Passes C Passes C r Std Dev 0.0000	riteria riteria riteria CV% 0.00%	0.00%	6
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R : Conc-% 0 6.25	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code	te nass-mg nass-mg Coun 5	t Mean 1.000	95% LCL 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000		<< << << << Max 1.0000 1.0000	Yes Yes Yes Yes Std Er 0.00000 0.00000	Passes C Passes C Passes C 7 Std Dev 0.0000 0.0000	riteria riteria CV% 0.00% 0.00%	0.00%	6 6
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R : Conc-% 0 6.25 12.5	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code	te nass-mg nass-mg Coun 5 5 5	Contro Contro Contro t Mean 1.000 1.000	95% LCL 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000		<< << << << Max 1.0000 1.0000 1.0000	Yes Yes Yes Yes Std Er 0.0000 0.0000 0.0000	Passes C Passes C Passes C 7 Std Dev 0.0000 0.0000 0.0000	CV% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00%	% %
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R Conc-% 0 6.25 12.5	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code	te nass-mg nass-mg Coun 5 5 5 5	Contro Contro t Mean 1.000 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000		<< << << <<	Yes Yes Yes Std Er 0.0000 0.0000 0.00000 0.00000	Passes C Passes C Passes C 7 Std Dev 0.0000 0.0000 0.0000 0.00000	CV% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00%	/6 /6 /6
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R Conc-% 0 6.25 12.5 25	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code	te nass-mg nass-mg Coun 5 5 5	Contro Contro Contro t Mean 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000		<< << << << Max 1.0000 1.0000 1.0000	Yes Yes Yes Yes Std Er 0.0000 0.0000 0.0000	Passes C Passes C Passes C	CV% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00%	% % % %
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R : Conc-% 0 6.25 12.5 25 50	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code	te nass-mg nass-mg Coun 5 5 5 5 5	Contro Contro Contro t Mean 1.000 1.000 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000		<< << << <<	Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.0000	Passes C Passes C Passes C	CV% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%	% % % %
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R Conc-% 0 6.25 12.5 25 50 100 Mean Dry Bio	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code N	te nass-mg nass-mg Coun 5 5 5 5 5	Contro Contro t Mean 1.000 1.000 1.000 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000		<< << << <<	Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.0000	Passes C Passes C Passes C	CV% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%	66 66 66 66
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R Conc-% 0 6.25 12.5 25 50 100 Mean Dry Biol	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code N	te nass-mg nass-mg Coun 5 5 5 5 5 mary	Contro Contro t Mean 1.000 1.000 1.000 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000 1.0000		<< << << <<	Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000	Passes C Passes C Passes C	CV% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%	% % % % %
08-2988-3575 09-1330-1152 7d Survival R : Conc-% 0 6.25 12.5 25 50 100	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code N	te nass-mg nass-mg Coun 5 5 5 5 mary Coun	t Mean 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000 1.0000		<< << << << << << << Max 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Max	Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.0000 Std Er	Passes C Passes C Passes C r Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 r Std Dev 31 0.02198	CV% 0.00% 0.00% 0.00% 0.00% 0.00% CV%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	% % % % %
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R Conc-% 0 6.25 12.5 25 50 100 Mean Dry Biol Conc-% 0	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code N	te nass-mg nass-mg Coun 5 5 5 5 5 mary Coun 5	t Mean 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.4000 0 1.4000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.454 1.429 1.472	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.41		Max 1.0000 1.0000 1.0000 1.0000 1.0000 Max 1.464	Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.0000 Std Er 0.0098	Passes C Passes C Passes C r Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 r Std Dev 31 0.02198 82 0.00555	CV% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	% % % % % %
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R: Conc-% 0 6.25 12.5 25 50 100 Mean Dry Bior Conc-% 0 6.25 12.5 25 50 25 50 100	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code N	te nass-mg nass-mg Coun 5 5 5 5 5 mary Coun 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	t Mean 1.000 1.000 1.000 1.000 1.427 1.422 1.43 1.431	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 95% UCL 1.454 1.429 1.472 1.441	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.41 1.41		Max 1.0000 1.0000 1.0000 1.0000 1.0000 Max 1.464 1.43 1.488 1.44	Yes Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Std Er 0.0098 0.0024 0.0150 0.0038	Passes C Passes C Passes C r Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 r Std Dev 31 0.02198 82 0.00555 9 0.03375 26 0.008556	CV% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.31% -0.20%	% % % ect % % %
18-3070-5691 08-2988-3575 09-1330-1152 7d Survival R: Conc-% 0 6.25 12.5 25 50 100 Mean Dry Biot Conc-% 0 6.25 12.5	7d Survival Ra Mean Dry Bion Mean Dry Bion ate Summary Code N	coun Coun 5 5 5 5 Coun Coun 5 5 5 5 5 5 5 5 5 5 5 5 5	t Mean 1.000 1.000 1.000 1.000 1.000 1.427 1.422 1.43	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.4000 0 1.4000 0 1.0000 0 1.0000	1 1.427 1.427 95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.454 1.429 1.472	0.8 0.85 0.85 Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.41 1.416 1.404		Max 1.0000 1.0000 1.0000 1.0000 1.0000 Max 1.464 1.43 1.488	Yes Yes Yes Std Er 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Std Er 0.0098 0.0024 0.0150	Passes C Passes C Passes C r Std Dev 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 r Std Dev 31 0.02198 82 0.00555 9 0.03375 26 0.008556	CV% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 2.36%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.31% -0.20%	% % % ect % % %

CETIS Summary Report

Report Date:

21 Apr-22 08:56 (p 2 of 2)

Test Code/ID:

VCF0322.210tops / 05-8162-0738

							rest Code/ID. VCF0322.210tops / 03-8102-0/38
Pacific Topsn	nelt 7-d Surviv	al and Grow	th Test				Aquatic Bioassay & Consulting Labs, Inc.
7d Survival R	ate Detail						MD5: 0DC5ABA07818A6ABCDE75EC39DEAA80
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	
6.25		1.0000	1.0000	1.0000	1.0000	1.0000	
12.5		1.0000	1.0000	1.0000	1.0000	1.0000	
25		1.0000	1.0000	1.0000	1.0000	1.0000	
50		1.0000	1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	1.0000	
Mean Dry Bio	mass-mg Deta	ii					MD5: 51123A41220B6D4236C1739152FEAD87
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	1.42	1.412	1.428	1.464	1.41	
6.25		1.42	1.43	1.426	1.416	1.42	
12.5		1.488	1.41	1.42	1.404	1.426	
25		1.422	1.438	1.422	1.44	1.432	
50		1.48	1.426	1.468	1.406	1.44	
100		1.414	1.428	1.402	1.432	1.41	
7d Survival R	ate Binomials						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	5/5	5/5	5/5	5/5	5/5	
6.25		5/5	5/5	5/5	5/5	5/5	
12.5		5/5	5/5	5/5	5/5	5/5	
25		5/5	5/5	5/5	5/5	5/5	
50		5/5	5/5	5/5	5/5	5/5	
100		5/5	5/5	5/5	5/5	5/5	

Report Date:

21 Apr-22 08:56 (p 1 of 4)

Test Code/ID: VCF0322.210tops / 05-8162-0738

. ace ropomen	t 7-d Survival	and Gro	wth Test					Aqua	tic Bio	assay &	Consultin	g Labs, Ind
Analysis ID: 07	-8864-3711	Er	dpoint:	7d Survival Ra	te		(CETIS Vers	sion:	CETISV	2.1.1	
-	Apr-22 8:55 Apr-22 8:54		ialysis:	Nonparametric 0DC5ABA0781				Status Lev	el:	1	0000	
						Editor ID:		008-463	-000-3			
	i-0635-9414 i Mar-22 11;30		st Type: otocol:	Growth-Surviva		Analyst:	1 - 5					
Ending Date: 05			ecies:	EPA/600/R-95/ Atherinops affir				Diluent:		atory Sea		
Test Length: 7d	•		xon:	Actinopterygii	Brine: Bource:		plicable c Riceve	tems, CO	٨٠٠٠			
		_		Actinopterygii			· ·	ouice.	Aquati	C Diosys	terns, co	Age:
•	-7331-8746		de:	VCF0322.210to	ops		F	Project:			water Wet S	Season (C
Sample Date: 28			aterial:	Sample Water				Source:		ay Repo	ort	
Receipt Date: 28			AS (PC):	VOWED				Station:	ME-SC	CR		
Sample Age: 23	n (6.5 °C)	CI	ient:	VCWPD								
Data Transform		Alt Hyp				NOEL	LOEL	TOE	L 1	ги		
Angular (Correcte	d)	C > T				100	>100	-	75			
Steel Many-One	Rank Sum Te	est										
Control vs	Conc-%		If Test S	Stat Critical	Ties	P-Type	P-Val	ue Deci	sion(α:	5%)		
Negative Control	6.25	8	27.5	16	1	CDF	0.833	3 Non-	Significa	ant Effec	:t	
	12.5	8	27.5	16	1	CDF	0.833	3 Non-	Significa	ant Effec	t	
	25	8		16	1	CDF	0.833		-	ant Effec		
	50	3		16	1	CDF	0.833		-	ant Effec		
	100	3	27.5	16	1	CDF	0.833	3 Non-	Significa	ant Effec	ot	
Test Acceptabilit	y Criteria	TAC	Limits									
Attribute	Test Stat	Lower	Uppe	Overlap	Decision							
Control Resp	1	8.0	<<	Yes	Passes Ci	riteria						
ANOVA Table												
Source	Sum Squa	aras	Mean	Square	DF	F Stat	P-Val	ue Deci	sion(α:	50/.)		
Between	0	103	0	Oquare	5	1 Otat	1 - 4 01		erminat			
Error			U		5			muei	Cililinat	C		
	0		0		24							
Total	0		0		24 29							
	0		0			-:						
ANOVA Assumpt	0 tions Tests		0		29	Critical	P-Val	ue Deci	sion(a:	1%\		
ANOVA Assumpt Attribute	0 tions Tests Test	uality of V		est		Critical	P-Val		sion(α:			
ANOVA Assumpt Attribute Variance	0 tions Tests		ariance T		29		P-Val	Indet	sion(α: erminat erminat	e		
ANOVA Assumpt Attribute Variance Distribution	0 tions Tests Test Bartlett Eq Shapiro-W		ariance T		29	Critical	P-Val	Indet	erminat	e		
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate	0 tions Tests Test Bartlett Eq Shapiro-W		ariance T		29 Test Stat	Critical	P-Val	Indet Indet	erminat erminat	e e	CV%	%Effect
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-%	0 tions Tests Test Bartlett Eq Shapiro-W Summary Code	Vilk W Nor	ariance T mality Tes Mean	95% LCL	29 Test Stat 95% UCL	Median	Min	Indet Indet Max	erminat erminat	e	CV% 0.00%	%Effect
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-%	0 tions Tests Test Bartlett Eq Shapiro-W	/ilk W Nor	ariance T mality Tes	95% LCL 0 1.0000	29 Test Stat			Indet Indet Max 0 1.000	erminat erminat	e e Std Err		
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25	0 tions Tests Test Bartlett Eq Shapiro-W Summary Code	Count	ariance T mality Tes Mean 1.0000	95% LCL 0 1.0000 0 1.0000	29 Test Stat 95% UCL 1.0000	Median 1.0000	Min 1.000	Max 0 1.000 0 1.000	erminat erminat	e e Std Err	0.00%	0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25	0 tions Tests Test Bartlett Eq Shapiro-W Summary Code	Count 5 5	ariance T mality Tes Mean 1.0000	95% LCL 0 1.0000 0 1.0000 0 1.0000	29 Test Stat 95% UCL 1.0000 1.0000	Median 1.0000 1.0000	Min 1.000	Max 0 1.000 0 1.000 0 1.000	erminat erminat 00 0 00 0	e e Std Err	0.00% 0.00%	0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5	0 tions Tests Test Bartlett Eq Shapiro-W Summary Code	Count 5 5 5	ariance T mality Tes Mean 1.0000 1.0000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000	29 Test Stat 95% UCL 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000	Min 1.000 1.000	Max 0 1.000 0 1.000 0 1.000 0 1.000	erminat	e e e	0.00% 0.00% 0.00%	0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25	0 tions Tests Test Bartlett Eq Shapiro-W Summary Code	Count 5 5 5 5	ariance T mality Tes Mean 1.0000 1.0000 1.0000	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	29 Test Stat 95% UCL 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000	Min 1.000 1.000 1.000	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000	erminat	e e e	0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 5	mality Tes Mean 1.0006 1.0006 1.0006 1.0006	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000	erminat	Std Err 0.0000 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100 Angular (Correcte	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 5 med Sum	mality Tes Mean 1.0006 1.0006 1.0006 1.0006	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000	erminat erminat	Std Err 0.0000 0.0000 0.0000 0.0000	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100 Angular (Correcte	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 5 med Sumi	mality Tes Mean 1.0000 1.0000 1.0000 1.0000 1.0000	95% LCL 95% LCL 95% LCL 95% LCL	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Min 1.0000 1.0000 1.0000 1.0000 1.0000	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 Max	erminat erminat	e e	0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100 Angular (Correcte Conc-%	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 5 med Sum	ariance T mality Tes Mean 1.0000 1.0000 1.0000 1.0000 mary Mean	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.3450	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median	Min 1.000 1.000 1.000 1.000 1.000 Min	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000	erminat	e e e	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100 Angular (Correcte Conc-% 0 6.25	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 count Count Count	ariance T mality Tes Mean 1.0000 1.0000 1.0000 1.0000 mary Mean 1.3450	95% LCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 95% LCL 1.3450 1.3450	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450	Min 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3450	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.345 0 1.345	erminat	e e e	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100 Angular (Correcte Conc-% 0 6.25 12.5 12.5	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 Count Count 5 5 5 5 5 5 5 5 5 6 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	maility Tes Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.3450 1.3450	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.3450 0 1.3450 0 1.3450	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450	Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3456 1.3450	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.345 0 1.345 0 1.345	erminat	e e e	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
Total ANOVA Assumpt Attribute Variance Distribution 7d Survival Rate Conc-% 0 6.25 12.5 25 50 100 Angular (Correcte Conc-% 0 6.25 12.5 25 50 100	tions Tests Test Bartlett Eq Shapiro-W Summary Code N	Count 5 5 5 5 5 med Sum Count 5 5 5 5 5 5 7 6 7 7 8 7 8 7 8 7 8 8 8 8 8 8 8 8 8 8	maity Tes Mean 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.3450 1.3450 1.3450	95% LCL 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.3450 0 1.3450 0 1.3450 0 1.3450	95% UCL 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.3460 1.3460 1.3460	Median 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Median 1.3450 1.3450 1.3450	Min 1.0000 1.0000 1.0000 1.0000 1.0000 Min 1.3456 1.3456	Max 0 1.000 0 1.000 0 1.000 0 1.000 0 1.000 0 1.345 0 1.345 0 1.345 0 1.345	erminat erminat	e e e	0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%



Report Date: Test Code/ID: 21 Apr-22 08:56 (p 2 of 4)

VCF0322.210tops / 05-8162-0738

Pacific Topsmelt 7-d Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 07-8864-3711 Analyzed: 21 Apr-22 8:55 Endpoint: 7d Survival Rate

Analysis:

Nonparametric-Control vs Treatments

CETIS Version: CETISv2.1.1

Edit Date: 21 Apr-22 8:54

MD5 Hash: 0DC5ABA07818A6ABCDE75EC39DEAA80 Editor ID:

Status Level:

008-463-000-3

7d Survival Rate Detail

Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
N	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	
	1.0000	1.0000	1.0000	1.0000	1.0000	
		N 1.0000 1.0000 1.0000 1.0000 1.0000	N 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	N 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	N 1.0000	N 1.0000

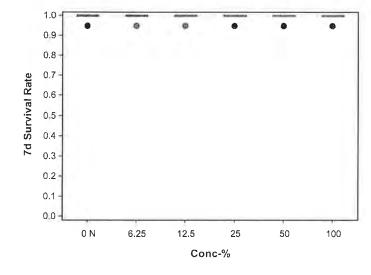
Angular (Corrected) Transformed Detail

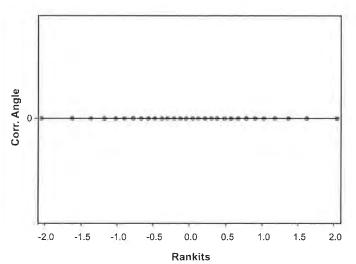
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	1.3450	1.3450	1.3450	1.3450	1.3450	
6.25		1.3450	1.3450	1.3450	1.3450	1.3450	
12.5		1.3450	1.3450	1.3450	1.3450	1.3450	
25		1.3450	1.3450	1.3450	1.3450	1.3450	
50		1.3450	1.3450	1.3450	1.3450	1.3450	
100		1.3450	1.3450	1.3450	1.3450	1.3450	

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	5/5	5/5	5/5	5/5	5/5
6.25		5/5	5/5	5/5	5/5	5/5
12.5		5/5	5/5	5/5	5/5	5/5
25		5/5	5/5	5/5	5/5	5/5
50		5/5	5/5	5/5	5/5	5/5
100		5/5	5/5	5/5	5/5	5/5

Graphics





Report Date:

21 Apr-22 08:56 (p 3 of 4)

Test Code/ID: VCF0322.210tops / 05-8162-0738

									res	t Code/IL	J:	VCF0322.	210tops / 0	5-8162-07
Pacific Topsn	nelt 7-d	Survival	and Grow	th Test						Aqu	atic B	ioassay & (Consulting	Labs, Inc
Analysis ID:	09-133			lpoint:		an Dry Bion	_			CETIS Version: CETISv2.1.1				
Analyzed:	•	22 8:55		alysis:			ntrol vs Trea			Status Le		1		
Edit Date:	21 Apr-	22 8:54	MID	5 Hasn:	51123A41220B6D4236C1739152FEAD87			.D87 E	ditor ID:		008 - 463-	000-3		
Batch ID:	05-063	5-9414	Tes	t Type:	Gro	wth-Surviva	al (7d)		1	Analyst:				
Start Date:	29 Mar-	-22 11:30	Pro	tocol:	EP/	A/600/R-95/	/136 (1995)		[Diluent:	Labo	oratory Seav	water	
Ending Date:	05 Apr-	22 11:08	Spe	ecies:	Ath	erinops affii	nis		E	Brine:		Applicable		
Test Length:	7d		Tax	on:	Acti	inopterygii			5	Source:	Aqu	atic Biosyst	ems, CO	Age:
Sample ID:	19-733	1-8746	Co	de:	VCI	F0322.210to	ops		F	roject:	NPF	ES Stormw	ater Wet S	eason (C
Sample Date:	28 Mar-	-22 12:15		erial:		nple Water	-			ource:		ssay Repor		000011 (0
Receipt Date:				S (PC):						station:		SCR		
Sample Age:				ent:	VCI	WPD			`	, tutioii.		0011		
Data Transfor	m		Alt Hyp					NOEL	LOEL	TO	=1	TU	MSDu	PMSD
Untransformed			C > T					100	>100	101		1	0.03225	2.26%
Dunnett Multi	nle Con	nnarison	Test										0.00220	2.2070
Control	•	onc-%	dı	Test	Stat	Critical	MSD	P-Type	P-Val	ue Dec	ision(a·5%)		
Negative Cont			8	0.322		2.362	0.03225	CDF	0.721			ficant Effect		
rioganio com	12		8	-0.205		2.362	0.03225	CDF	0.886		_	ficant Effect		
	25		8	-0.292		2.362	0.03225	CDF	0.905			ficant Effect		
	50		8	-1.26		2.362	0.03225	CDF	0.992		-	ficant Effect		
	10		8	0.703			CDF	0.555		_	ficant Effect			
Test Acceptat	ility Cri	iteria												
Attribute	-	est Stat	TAC L	imits. Uppe	r	Overlap	Decision							
Control Resp		.427	0.85	<<	_	Yes	Passes Ci	riteria						
ANOVA Table														
Source		um Squa	ıres	Mean	Sau	are	DF	F Stat	P-Val	ıa Dar	ision(a:5%)		
Between		.0020727		0.0004	_		5	0.8892	0.503			ficant Effect		
Error		.0020727 .0111888		0.000			24	0.0052	0.303	INOI	i-Sigi ili	iicani Eneci		
Total		.0132615		0.000	1002		29	-						
ANOVA Assur														
Attribute		est					Test Stat	Critical	P-Val	ie Dec	ision(a·1%)		
√ariance			uality of Va	riance T	est		14.78	15.09	0.011		al Vari			
			uality of Va				2.331	3.895	0.073	'	al Vari			
		•	e Equality			Test	1.606	4.248	0.209		al Vari			
Distribution			Darling A2				0.9389	3.878	0.0174			stribution		
			Kurtosis T				1.894	2.576	0.0582			stribution		
		-	Skewness				2.368	2.576	0.0179			stribution		
		_			bus -	Test	9.196	9.21	0.010			stribution		
		D'Agostino-Pearson K2 Omnibus Test 9.196 9.21 0.0101 Normal Distribution Kolmogorov-Smirnov D Test 0.1486 0.1853 0.0892 Normal Distribution												
		•	ilk W Norm		st		0.9261	0.9031	0.0388			stribution		
Mean Dry Bio	nass-m	g Summ	агу											
Conc-%	С	ode	Count	Mean		95% LCL	95% UCL	Median	Min	Max	(Std Err	CV%	%Effect
)	N		5	1.427		1.4	1.454	1.42	1.41	1.46	64	0.00983	1.54%	0.00%
6.25			5	1.422		1.416	1.429	1.42	1.416	1.43	3	0.002484	0.39%	0.31%
12.5			5	1.43		1.388	1.472	1.42	1.404	1.48	38	0.01509	2.36%	-0.20%
25			5	1.431		1.42	1.441	1.432	1.422	1.44		0.003828	0.60%	-0.28%
								-						



2.09%

0.01352

0.005607 0.88%

-1.21%

0.67%

1.482

1.433

1.44

1.414

1.406

1.402

1.48

1.432

5

1.444

1.417

1.406

1.402

50

100

Report Date:

21 Apr-22 08:56 (p 4 of 4) VCF0322.210tops / 05-8162-0738

Test Code/ID:

Aquatic Bioassay & Consulting Labs, Inc.

CETISv2.1.1

Pacific Topsmelt 7-d Survival and Growth Test

09-1330-1152

Endpoint: Mean Dry Biomass-mg CETIS Version:

Analyzed: 21 Apr-22 8:55 Analysis: Parametric-Control vs Treatments Status Level:

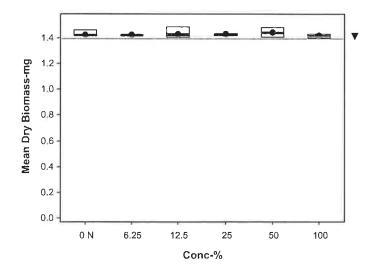
Edit Date: 21 Apr-22 8:54 MD5 Hash: 51123A41220B6D4236C1739152FEAD87 Editor ID: 008-463-000-3

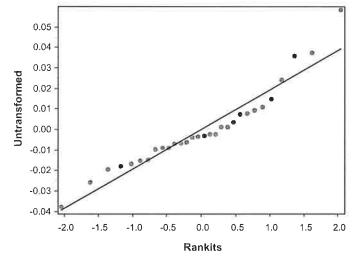
Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.42	1.412	1.428	1.464	1.41
6.25		1.42	1.43	1.426	1.416	1.42
12.5		1.488	1.41	1.42	1.404	1.426
25		1.422	1.438	1.422	1.44	1.432
50		1.48	1.426	1.468	1.406	1.44
100		1.414	1.428	1.402	1.432	1.41

Graphics

Analysis ID:





Report Date:

21 Apr-22 08:56 (p 1 of 4)

Test Code/ID: V

VCF0322.210tops / 05-8162-0738

Pacific	c Topsn	nelt 7-d Survival	and Grow	th Test					A	quatic E	Bioassa	y & Consulting	g Labs, Inc
Analys		18-3070-5691	End	point:	7d Survival Rat	te			CETIS V	ersion:	CET	TSv2.1.1	
Analyz		21 Apr-22 8:55	Ana	lysis:	Linear Interpola	ation (ICPIN	1)		Status L	evel:	1		
Edit D	ate:	21 Apr-22 8:54	MD	5 Hash:	0DC5ABA0781	Editor II):	-800	463-000-3				
Batch	ID:	05-0635-9414	Tes	t Type:	Growth-Surviva			Analyst:					
Start D	Date:	29 Mar-22 11:30	Pro	tocol:	EPA/600/R-95/	136 (1995)			Diluent:	Lab	oratory	Seawater	
Ending	g Date:	05 Apr-22 11:08	Spe	cies:	Atherinops affir	nis			Brine:	Not	Applica	able	
Test L	ength:	7d	Tax	on:	Actinopterygii				Source:	Αqι	ıatic Bio	systems, CO	Age:
Sampl	le ID:	19-7331-8746	Cod	le:	VCF0322.210to	ops			Project:	NPI	DES Sto	ormwater Wet S	Season (Co
Sampl	le Date:	28 Mar-22 12:15	Mat	erial:	Sample Water				Source:	Bio	assay R	eport	
		28 Mar-22 16:03	CAS	6 (PC):					Station:	ME	-SCR		
Sampl	le Age:	23h (6.5 °C)	Clie	nt:	VCWPD								
Linear	Interpo	lation Options											
X Tran	sform	Y Transform	See	d	Resamples	Exp 95%	CL Met	hod					
Linear		Linear	0		280	Yes	Two	-Point	Interpolat	ion			
Test A	cceptab	oility Criteria	TAC L	imits									
Attribu	ite	Test Stat	Lower	Upper	r Overlap	Decision							
Contro	l Resp	1	8.0	<<	Yes	Passes C	riteria						
Point E	Estimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
EC15	>100	***	***	<1		***							
EC20	>100	***		<1	***								
EC25	>100	***	***	<1	***	(20)							
EC40 EC50	>100 >100	***		<1		***							
_				<1									
		ate Summary		_		Calcu	ılated Vari					Isoto	nic Variate
Conc-	%	Code	Count	Mean	Median	Min	Max	CV%		Effect	A/B	Mean	%Effec
0		N	5	1.0000		1.0000	1.0000	0.00		00%	25/25		0.00%
6.25			5	1.0000		1.0000	1.0000	0.00		00%	25/25		0.00%
12.5			5	1.0000		1.0000	1.0000	0.00		00%	25/25		0.00%
25 50			5 5	1.0000		1.0000 1.0000	1.0000 1.0000	0.00		00% 00%	25/25 25/25		0.00% 0.00%
100			5	1.0000		1.0000	1.0000	0.00		00%	25/25		0.00%
	ndual Da	nto Dotail		1.0000	1.0000	1.0000	1.0000	0.00	7,0 0.	0070	20/20	1.0000	0.0070
7a Sur Conc-9		ate Detail Code	Dan 1	Rep 2	Rep 3	Don 4	Rep 5						
0	/0	N	1.0000	1.0000		1.0000	1.0000						
6.25		IN	1.0000	1.0000		1.0000	1.0000						
12.5			1.0000	1.0000		1.0000	1.0000						
25			1.0000	1.0000		1.0000	1.0000						
50			1.0000	1.0000		1.0000	1.0000						
			1.0000	1.0000		1.0000	1.0000						
100	vival Ra	ate Binomials											
100 7d Su r		ate Binomials Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5						
100 7d Sur Conc-%			Rep 1 5/5	Rep 2 5/5	Rep 3 5/5	Rep 4 5/5	Rep 5 5/5						-
100 7d Sur Conc- %		Code	_										
100 7d Sur Conc- 9 0 6.25		Code	5/5	5/5	5/5	5/5	5/5						
100		Code	5/5 5/5	5/5 5/5	5/5 5/5	5/5 5/5	5/5 5/5						
100 7d Sur Conc- 9 0 6.25 12.5		Code	5/5 5/5 5/5	5/5 5/5 5/5	5/5 5/5 5/5	5/5 5/5 5/5	5/5 5/5 5/5						



Report Date:

21 Apr-22 08:56 (p 2 of 4)

Test Code/ID:

VCF0322.210tops / 05-8162-0738

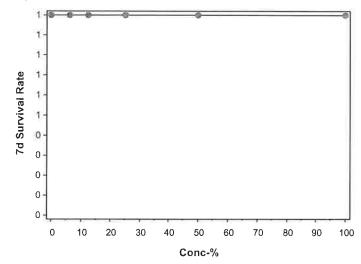
Pacific Topsmelt 7-d Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:18-3070-5691Endpoint:7d Survival RateCETIS Version:CETISv2.1.1Analyzed:21 Apr-22 8:55Analysis:Linear Interpolation (ICPIN)Status Level:1

Edit Date: 21 Apr-22 8:54 MD5 Hash: 0DC5ABA07818A6ABCDE75EC39DEAA80 Editor ID: 008-463-000-3

Graphics



Report Date:

21 Apr-22 08:56 (p 3 of 4)

Test Code/ID:

VCF0322.210tops / 05-8162-0738

Pacific	Topsn	nelt 7-d Survival	and Growt	h Test					. 501 90	Aquatic B	ioassay & Co		g Labs, Inc
Analys	_	08-2988-3575			Mean Dry Biom	nass-mg			CETI	S Version:	CETISv2.1		J ==30, 1110
Analyz	ed:	21 Apr-22 8:55	Ana	lysis:	Linear Interpola	ation (ICPI	N)		Statu	s Level:	1		
Edit Da	ate:	21 Apr-22 8:54	MD	Hash:	51123A41220B	86D4236C	173915	2FEAD87	Edito	r ID:	008-463-00	00-3	
Batch	ID:	05-0635-9414	Test	Type:	Growth-Surviva	al (7d)			Anal	/st:			
Start D	ate:	29 Mar-22 11:30	Prot	ocol:	EPA/600/R-95/	136 (1995)		Dilue	nt: Labo	oratory Seawa	ater	
Ending	Date:	05 Apr-22 11:08	Spe	cies:	Atherinops affir	nis			Brine	: Not	Applicable		
Test Le	ength:	7d	Tax	on:	Actinopterygii				Sour	ce: Aqu	atic Biosyster	ns, CO	Age:
Sample		19-7331-8746	Cod	e:	VCF0322.210to	ops			Proje	ct: NPD	ES Stormwa	ter Wet	Season (Co
		28 Mar-22 12:15		erial:	Sample Water				Sour		ssay Report		
-		28 Mar-22 16:03	CAS	(PC):					Stati	on: ME-	SCR		
Sample	e Age:	23h (6.5 °C)	Clie	nt:	VCWPD								
Linear	Interpo	olation Options											
X Tran	sform	Y Transform	See	d	Resamples	Exp 95	% CL	Method					
Linear		Linear	1578	3694	280	Yes		Two-Poir	nt Interpo	lation			
Test A	cceptal	bility Criteria	TAC L	imits									
Attribu	te	Test Stat	Lower	Uppe	r Overlap	Decisio	n						
Control	Resp	1.427	0.85	<<	Yes	Passes	Criteria						
Point E	stimat	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UC	L						
IC15	>100		242	<1		***							
IC20	>100			<1									
IC25	>100	***		<1									
IC40	>100	***	***	<1		***							
IC50	>100			<1									
Mean D	ry Bio	mass-mg Summ	ary			С	alculat	ed Variate				Isoto	nic Variate
Conc-%	6	Code	Count	Mean	Median	Min	Max	(C\	/%	%Effect		Mean	%Effec
0		N	5	1.427	1.42	1.41	1.46	34 1.	54%	0.00%		1.431	0.00%
6.25			5	1.422	1.42	1.416	1.43	0.3	39%	0.31%		1.431	0.00%
12.5			5	1.43	1.42	1.404	1.48	38 2.3	36%	-0.20%		1.431	0.00%
25			5	1.431	1.432	1.422	1.44		30%	-0.28%		1.431	0.00%
50			5	1.444	1.44	1.406	1.48	3 2.0	09%	-1.21%		1.431	0.00%
100			5	1.417	1.414	1.402	1.43	32 0.8	38%	0.67%		1.417	0.94%
Mean D	ry Bio	mass-mg Detail											
Conc-%	6	Code	Rep 1	Rep 2		Rep 4	Rep	5					
0		N	1.42	1.412	1.428	1.464	1.41						
			1.42	1.43	1.426	1.416	1.42	!					
6.25													
			1.488	1.41	1.42	1.404	1.42	.6					
6.25 12.5 25			1.488 1.422	1.41 1.438	1.42 1.422	1.404 1.44	1.42 1.43						
12.5								12					



Report Date:

21 Apr-22 08:56 (p 4 of 4)

Test Code/ID:

VCF0322.210tops / 05-8162-0738

Pacific Topsmelt 7-d Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: Analyzed:

08-2988-3575 21 Apr-22 8:55 21 Apr-22 8:54 Endpoint: Mean Dry Biomass-mg

Analysis: Linear Interpolation (ICPIN)
MD5 Hash: 51123A41220B6D4236C1739152FEAD87

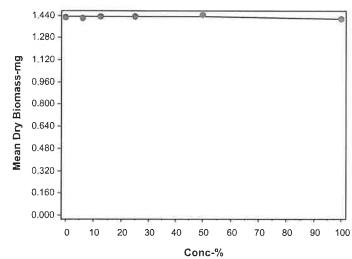
CETIS Version: Status Level:

Editor ID:

ion: CETISv2.1.1

008-463-000-3

Edit Date: Graphics



CETIS Measurement Report

Report Date:

21 Apr-22 08:56 (p 1 of 1)

Test Code/ID: VCF0322.210tops / 05-8162-0738

racine ropsn	nelt 7-d Surviv	ai aiiu G	nowth rest					Aquano	: Bioassay &	Consulting	g Labs, Inc.
Batch ID:	05-0635-9414		Test Type:	Growth-Surviv	al (7d)			Analyst:			
Start Date:	29 Mar-22 11:3	30	Protocol:	EPA/600/R-95	/136 (1995)			Diluent: L	aboratory Sea	awater	
Ending Date:	05 Apr-22 11:0	8	Species:	Atherinops affi	inis			Brine: N	ot Applicable		
Test Length:	7d		Taxon:	Actinopterygii				Source: A	quatic Biosys	tems, CO	Age:
Sample ID:	19-7331-8746		Code:	VCF0322.210	tops			Project: N	PDES Storm	water Wet	Season (Con
Sample Date:	28 Mar-22 12:1	15	Material:	Sample Water	-			Source: B	ioassay Repo	ort	
Receipt Date:	28 Mar-22 16:0	03	CAS (PC):					Station: N	IE-SCR		
Sample Age:	23h (6.5 °C)		Client:	VCWPD							
Dissolved Ox	ygen-mg/L										
Conc-%	Code	Coun	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	8	7.275	7.128	7.422	7	7.5	0.02191	0.1753	2.41%	0
6.25		8	7.35	7.183	7.517	7.1	7.7	0.025	0.2	2.72%	0
12.5		8	7.35	7.15	7.55	7	7.7	0.02988	0.239	3.25%	0
25		8	7.35	7.136	7.564	7	7.7	0.03204	0.2563	3.49%	0
50		8	7.35	7.131	7.569	7	7.7	0.03273	0.2619	3.56%	0
100		8	7.35	7.131	7.569	7	7.7	0.03273	0.2619	3.56%	0
Overall		48	7.337	7.273	7.402	7	7.7	0.03229	0.2237	3.05%	0 (0%)
pH-Units											
Conc-%	Code	Count	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	N	8	7.637	7.594	7.681	7.6	7.7	0.00646	9 0.05175	0.68%	0
6.25		8	7.637	7.594	7.681	7.6	7.7	0.00646	9 0.05175	0.68%	0
12.5		8	7.637	7.594	7.681	7.6	7.7	0.00646	9 0.05175	0.68%	0
25		8	7.625	7.586	7.664	7.6	7.7	0.00578	6 0.04629	0.61%	0
50		8	7.612	7.559	7.666	7.5	7.7	0.00801	1 0.06409	0.84%	0
100		8	7.6	7.555	7.645	7.5	7.7	0.00668	1 0.05345	0.70%	0
Overall		48	7.625	7.61	7.64	7.5	7.7	0.00759	1 0.05259	0.69%	0 (0%)
Salinity-ppt											
Conc-%	Code	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	Ν	8	34	34	34	34	34	0	0	0.00%	0
6.25		8	34	34	34	34	34	0	0	0.00%	0
12.5		8	34	34	34	34	34	0	0	0.00%	0
25		8	34	34	34	34	34	0	0	0.00%	0
50		8	34	34	34	34	34	0	0	0.00%	0
100		8	34	34	34	34	34	0	0	0.00%	0
Overall		48	34	34	34	34	34	0	0	0.00%	0 (0%)
Temperature-	°C										
Conc-%	Code	Coun		95% LCL			Max	Std Err	Std Dev	CV%	QA Coun
0	N	8	21	21	21	21	21	0	0	0.00%	0
6.25		8	21	21	21	21	21	0	0	0.00%	0
12.5		8	21	21	21	21	21	0	0	0.00%	0
25		8	21	21	21	21	21	0	0	0.00%	0
50		8	21	21	21	21	21	0	0	0.00%	0
100		8	21	21	21	21	21	0	0	0.00%	0
·		4.0			- 1	0.4	0.4		•	0.000/	0 (00/)



0.00%

0 (0%)

21

21

21

48

Overall

21



Chain of Custody Record

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE20-007)

Most Sensitive Species Testing - Toxicity - ABC Laboratories

Side 1 of 1

Sampling Date:	3/28/2027	/			_	Project Number: <u>2021/22-3</u> (Wet)								
Sampling Team:	Jon Bridge	man.	n,	Sau	140	Project Number: 2021/22-3 (Wet)								
	1	1	,		,	1				,	i			
SAMPLE ID	DATE/TIME COLLECTED	Chronic toxicity - <i>Pimephales promelas</i> (fathead minnow)	Chtonic toxicity - Ceriodaphnia dubia (daphnid)	Chronic toxicity - Hyalella azteca (Amphipod)	Chronic toxicity - Chironomus dilutus (midge)	Chronic toxicity - Atherinops affinis (topsmelt)	Chronic toxicity - Macrocystis pyrifera (giant kelp)	Chronic toxicity - Strongylocentrotus purpuratus (purple sea urchin)	Number of 5-Gallon Buckets	LOI) LOI NOTES				
ME-CC	3/28 - 1255	X	X	X	X				3	Note 1, Note 2, Note 3	-102			
ME-VR2		X	X	X	X				3	Note 1, Note 2, Note 3				
ME-SCR						X	X	X	3	Note 1, Note 2, Note 3				
Relinquished	Printed Name	aw	el	Car	mo	~								
	Signature	5	3	/										
	Affiliation	Rin	con		_	Date/	Tim <u>e</u>	3/	28	12022 · 1420				
Received	Printed Name	19	DI	11	on									
	Signature 11	m	/	00 0					met i		0.7			
	Affiliation	36	LA	35	_	Date/	Time	3/2	8/3	WU 1920				
Other Notes:	Note 1: Dilutions - 6.25	%, 12.5	%, 25%	% , 50%,	100%.			4						
									ct > :	50%. TIE may be needed.				
	Note 3: Notify District	within 2	24 hour	s if sign	iificant	toxicit	y is obs	served.						



Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE20-007)

Most Sensitive Species Testing - Toxicity - ABC Laboratories

Side 1 of 1

		Pimephales promelas	Ceriodaphnia dubia	la azteca	omus dilutus	ops affinis	cystis pyrifera	ylocentrotus rchin)	kets	
SAMPLE ID	DATE/TIME COLLECTED	Chronic toxicity - Pimep. (fathead minnow)	Chronic toxicity - Ceriod (daphnid)	Chronic toxicity - Hyalella azteca (Amphipod)	Chronic toxicity - Chironomus dilutus (midge)	Chronic toxicity - Atherinops affinis (topsmelt)	Chronic toxicity - Macrocystis pyrifera (giant kelp)	Chronic toxicity - Strongylocentrotus purpuratus (purple sea urchin)	Number of 5-Gallon Buckets	NOTES
ME-CC		X	X	Х	X				3	Note 1, Note 2, Note 3
ME-VR2		X	X	X	X				3	Note 1, Note 2, Note 3
ME-SCR	3/28/22 1215					X	X	X	3	Note 1, Note 2, Note 3 LS, KB
Relinquished	Printed Name Signature Affiliation V	Sh uar JPD	selves Sl	nba	_		l'ime	3/28	122	16:02
Received	Printed Name Signature Affiliation	is the	li	184	_	Date/	Гіт <u>е</u>	3	28	-22 1623
Other Notes:	Note 1: Dilutions - 6.25% Note 2: Please contact K Note 3: Notify District w	elly Ha	hs 805	-658-43	75 if le	770		7	ct > :	50%. TIE may be needed.



Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE20-007)

Most Sensitive Species Testing - Toxicity - ABC Laboratories

Side 1 of 1

Sampling Date:	2 Pave 1	Laak +	dill	Jenning
	1/	8/2027		,

Project Number: 2021/22-3 (Wet)

Sampling Team:	V	3/2	8/2022	

SAMPLE ID	DATE/TIME COLLECTED	Chronic toxicity - Pimephales promelas (fathead minnow)	Chronic toxicity - Ceriodaphnia dubia (daphnid)	Chronic toxicity - Hyalella azteca (Amphipod)	Chronic toxicity - Chironomus dilutus (midge)	Chronic toxicity - Atherinops affinis (topsmelt)	Chronic toxicity - Macrocystis pyrifera (giant kelp)	Chronic toxicity - Strongylocentrotus purpuratus (purple sea urchin)	Number of 5-Gallon Buckets	VO) NOTES
ME-CC	COLLECTED	Х	Х	Х	Х	00	•		3	Note 1, Note 2, Note 3
ME-VR2	3/28/22 13:10	X	Х	Х	Х				3	Note 1, Note 2, Note 3
ME-SCR						X	Х	X	3	Note 1, Note 2, Note 3

Relinquished	Printed Name	David Laak	
	Signature	11/2	

Affiliation Date/Time

Printed Name Signature Browssoy Aguntic 0 Affiliation Date/Time

Note 1: Dilutions - 6.25%, 12.5%, 25%, 50%, 100%. Other Notes:

Note 2: Please contact Kelly Hahs 805-658-4375 if lethal or sublethal effect > 50%. TIE may be needed.

Note 3: Notify District within 24 hours if significant toxicity is observed.

Received



CHRONIC SEA URCHIN FERTILIZATION BIOASSAY

DATE:

29 March 2022

STANDARD TOXICANT:

Copper Chloride

NOEC =

18.00 ug/l

EC25 =

34.33 ug/l

EC50 =

44.89 ug/l

Yours very truly

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date: Test Code/ID: 26 Apr-22 15:19 (p 1 of 1) URC032922 / 05-5305-9675

Purple Sea Urchin Sperm Cell Fertilization Test Aquatic Bioassay & Consulting Labs,											Labs, Inc.		
Batch ID: Start Date: Ending Date: Test Length:	18-9286-6481 29 Mar-22 17:0 29 Mar-22 17:4	00 Pro 10 Sp	st Type: otocol: ecies: xon:	Fertilization EPA/600/R-95/ Strongylocentro Echinoidea		itus		Anal Dilu Brin	ent: L e: N	Not A	ratory Seav	water	A - n i
rest Length:	40M	ı a:	xon:	Echinoidea				Sou	rce: \	/ent	ura Dive		Age:
Sample ID: Sample Date: Receipt Date: Sample Age:		00 Ma	de: iterial: AS (PC): ent:	URC032922 Copper chloride Internal Lab	Э			Proj Sou Stati	rce: F		rence Toxio TOX	cant	
Multiple Com	parison Summa	агу											
Analysis ID	Endpoint		Comp	arison Method			√	NOEL	LOEL		TOEL	PMSD	8
13-0762-8578	Fertilization Ra	te	Dunne	ett Multiple Com	parison Test	t		18	32		24	3.74%	
Point Estimat	e Summary												
Analysis ID	Endpoint		Point	Estimate Metho	od		√	Level	μg/L		95% LCL	95% UCL	
15-1485-3555	Fertilization Ra	te	Linear	Interpolation (IC	CPIN)			EC15	28.78		26.75	30.65	
								EC20	32.22		29.76	33.47	
								EC25	34.33		32.67	35.49	
								EC40	40.67		39.33	41.61	
								EC50	44.89		43.73	46.01	
Test Acceptat	oility					TAC	Li	mits					
Analysis ID	Endpoint		Attrib	ute	Test Stat	Lower		Upper	Overla	р	Decision		
13-0762-8578	Fertilization Ra	te	Contro	ol Resp	0.935	0.7		<<	Yes		Passes Ci	riteria	
15-1485-3555	Fertilization Ra	te	Contro	ol Resp	0.935	0.7		<<	Yes		Passes Ci	riteria	
13-0762-8578	Fertilization Ra	te	PMSD		0.03743	<<		0.25	No		Passes Ci	riteria	
Fertilization R	0762-8578 Fertilization Rate 1485-3555 Fertilization Rate 0762-8578 Fertilization Rate rtilization Rate Summary												
Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min		Max	Std Er	r	Std Dev	CV%	%Effect
0	N	4	0.935	0.9019	0.9681	0.9100		0.9600	0.0104		0.0208	2.23%	0.00%
18		4	0.965	0.9445	0.9855	0.9500		0.9800	0.0065	i	0.0129	1.34%	-3.21%
32		4	0.765	0.7250	0.8050	0.7300		0.7900	0.0126	i	0.0252	3.29%	18.18%
56		4	0.225	0.1871	0.2629	0.2100		0.2600	0.0119)	0.0238	10.58%	75.94%
100		4	0.050	0.0110	0.0890	0.0300		0.0800	0.0123	,	0.0245	48.99%	94.65%
180		4	0.000	0.0000	0.0000	0.0000		0.0000	0.0000)	0.0000	642	100.00%
Fertilization R	Rate Detail							MD	5: E03E	F556	697A483E4	7BFD5A81	C683B00
Conc-µg/L	Code	Rep 1	Rep 2		Rep 4								
0	Ν	0.9100	0.9300	0.9400	0.9600								
18		0.9800	0.9700	0.9500	0.9600								
32		0.7700	0.730	0.7900	0.7700								
56		0.2600	0.210	0.2200	0.2100								
100		0.0800	0.0600	0.0300	0.0300								
180		0.0000	0.0000		0.0000								
Fertilization R	tate Binomials												
Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4								
0	N	91/100	93/100	94/100	96/100								
18		98/100	97/100	95/100	96/100								
32		77/100	73/100	79/100	77/100								
56		26/100	21/100	22/100	21/100								
100 8/100			6/100	3/100	3/100								

0/100

0/100

0/100

0/100

180

Report Date: Test Code/ID: 26 Apr-22 15:19 (p 1 of 3) URC032922 / 05-5305-9675

Purple Sea Ur	chin S	perm Cell	l Fertili:	zatio	n Test						Aquat	tic Bioassay	& Cons	ulting	Labs, Inc.
Analyzed:	26 Apr	2-8578 -22 15:18 -22 15:15	4	Anal	ysis:	Fertilization Ra Parametric-Co E03EF55697A	ntrol vs Trea		3B00		S Vers is Leve or ID:	l: 1	Sv2.1.1 -63-000-3	}	
	29 Mar 29 Mar	6-6481 -22 17:00 -22 17:40	· I		ocol: ies:	Fertilization EPA/600/R-95 Strongylocentr Echinoidea	, ,	tus		Analy Dilue Brine Sour	ent:	Laboratory S Not Applicat Ventura Dive	ole		Age:
Sample ID: Sample Date: Receipt Date: Sample Age:	29 Mar	0-7331 -22 17:00		Code Mate CAS Clien	rial: (PC):	URC032922 Copper chlorid Internal Lab	e			Proje Sour Statio	ce:	Reference T REF TOX	oxicant		
Data Transform	m		Alt Hy	VD				NOEL	LOE	L	TOEL	. TU	MS	Du	PMSD
Angular (Correc			C > T	,,				18	32	_	24			3499	3.74%
Dunnett Multip		nparison													0.7 170
		onc-μg/L		df	Test S	tat Critical	MSD	P-Type	P-Va	due	Decis	ion(α:5%)			
Negative Contro	ol 18 32 56	3 2*		6 6 6 6	-2.469 8.882 29.15 38.84	2.356 2.356 2.356 2.356 2.356	0.06642 0.06642 0.06642 0.06642	CDF CDF CDF CDF	0.999 <1.0 <1.0		Non-S Signif Signif	Significant Ef icant Effect icant Effect icant Effect	fect		
Test Acceptab	ility Cr	iteria	Τ.	C Li	ita										
Attribute	-	est Stat	Lower		Upper	Overlap	Decision								
Control Resp	_	.935	0.7		<<	Yes	Passes Ci	riteria							
PMSD		.03743	<<		0.25	No	Passes Ci								
ANOVA Table															
Source	S	ium Squa	ires		Mean S	Square	DF	F Stat	P-Va	lue	Decis	ion(α:5%)			
Between	4	.24665			1.0616	6	4	668	<1.0	E-05	Signif	icant Effect			
Error	C	.0238396			0.0015	893	15	4							
Total	4	.27049					19	17							
ANOVA Assum	nptions	Tests													
Attribute		est					Test Stat	Critical	P-Va		Decis	ion(α:1%)			
Variance	Е	artlett Eq	uality of	f Vari	ance Te	est	1.792	13.28	0.77	40	Equal	Variances			
		evene Eq	-				1.389	4.893	0.28			Variances			
Disable dates		od Leven				ce lest	1.229	4.893	0.34		•	Variances	_		
Distribution		Inderson-l	-				0.3526	3.878	0.47			al Distributio: al Distributio:			
)'Agostino)'Agostino					1.161 0.488	2.576 2.576	0.24			al Distribution			
)'Agostino				us Test	1.586	9.21	0.45			al Distribution			
		Colmogoro				40 1000	0.1194	0.2235	0.67			al Distribution			
		hapiro-W					0.9493	0.866	0.35			al Distributio			
Fertilization R	ate Su	nmary													
Conc-µg/L		ode	Count		Mean	95% LCL	95% UCL	Median	Min		Max	Std Er	r CV	%	%Effect
0	Ν		4		0.9350	0.9019	0.9681	0.9350	0.91	00	0.960	0.0104	2.23	3%	0.00%
					0.0050	0.0445	0.9855	0.0650	0.05	00	0.980	0.0065	1.34	1%	-3.21%
18			4		0.9650	0.9445	0.9055	0.9650	0.950	00	0.500	0.0000	1.0	770	0.2.70
18 32			4		0.7650		0.8050	0.7700	0.730		0.790				18.18%



48.99%

94.65%

100.00%

0.0890

0.0000

0.0400

0.0000

0.0300

0.0000

0.0800

0.0000

0.0123

0.0000

0.0500

0.0000

0.0110

0.0000

100

180

Report Date: Test Code/ID: 26 Apr-22 15:19 (p 2 of 3) URC032922 / 05-5305-9675

Purple Sea Urchin Sperm Cell Fertilization Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 13-0762-8578 Endpoint: Fertilization Rate CETIS Version: CETISv2.1.1

Analyzed: 26 Apr-22 15:18 Analysis: Parametric-Control vs Treatments Status Level: 1

Edit Date: 26 Apr-22 15:15 MD5 Hash: E03EF55697A483E47BFD5A81DC683B00 Editor ID: 008-463-000-3

Angular (Corrected) Transformed Summary

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.3150	1.2470	1.3840	1.3130	1.2660	1.3690	0.0215	3.27%	0.00%
18		4	1.3850	1.3280	1.4420	1.3830	1.3450	1.4290	0.0180	2.60%	- 5.29%
32		4	1.0650	1.0180	1.1120	1.0710	1.0240	1.0950	0.0147	2.76%	19.03%
56		4	0.4938	0.4492	0.5385	0.4801	0.4760	0.5351	0.0140	5.69%	62.46%
100		4	0.2206	0.1314	0.3098	0.1985	0.1741	0.2868	0.0280	25.41%	83.23%
180		4	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0000	0.00%	96.20%

Fertilization Rate Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	
0	N	0.9100	0.9300	0.9400	0.9600	
18		0.9800	0.9700	0.9500	0.9600	
32		0.7700	0.7300	0.7900	0.7700	
56		0.2600	0.2100	0.2200	0.2100	
100		0.0800	0.0600	0.0300	0.0300	
180		0.0000	0.0000	0.0000	0.0000	

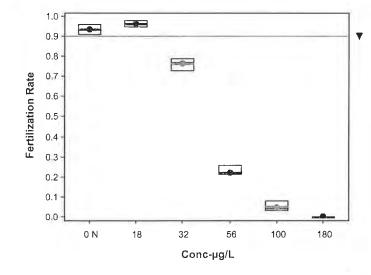
Angular (Corrected) Transformed Detail

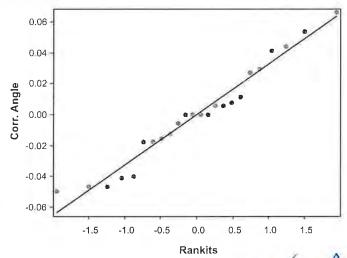
Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.2660	1.3030	1.3230	1.3690
18		1.4290	1.3970	1.3450	1.3690
32		1.0710	1.0240	1.0950	1.0710
56		0.5351	0.4760	0.4882	0.4760
100		0.2868	0.2475	0.1741	0.1741
180		0.0500	0.0500	0.0500	0.0500

Fertilization Rate Binomials

Code	Rep 1	Rep 2	Rep 3	Rep 4
N	91/100	93/100	94/100	96/100
	98/100	97/100	95/100	96/100
	77/100	73/100	79/100	77/100
	26/100	21/100	22/100	21/100
	8/100	6/100	3/100	3/100
	0/100	0/100	0/100	0/100
		N 91/100 98/100 77/100 26/100 8/100	N 91/100 93/100 98/100 97/100 77/100 73/100 26/100 21/100 8/100 6/100	N 91/100 93/100 94/100 98/100 97/100 95/100 77/100 73/100 79/100 26/100 21/100 22/100 8/100 6/100 3/100

Graphics





CET 899 Q12- 5966 x64

.

AAttachment D Appendix I

Report Date: Test Code/ID: 26 Apr-22 15:19 (p 1 of 2) URC032922 / 05-5305-9675

Purple Sea U	rchin Sperm Cell	l Fertilizati	on Test						Aquatio	Bio	oassay & (Consulting	Labs, Inc
Analysis ID:	15-1485-3555	End	lpoint:	Fertilization Ra	ite			CETI	S Versio	n:	CETISv2	.1.1	
Analyzed:	26 Apr-22 15:18	Ana	lysis:	Linear Interpola	ation (ICPII	۷)		Statu	ıs Level:		1		
Edit Date:	26 Apr-22 15:15	MD	5 Hash:	E03EF55697A	•	•	883B00	Edito	or ID:		008-463-	000-3	
Batch ID:	18-9286-6481	Tes	t Type:	Fertilization				Anal	yst:				
Start Date:	29 Mar-22 17:00		tocol:	EPA/600/R-95	/136 (1995))		Dilue	ent: La	abor	ratory Seav	water	
Ending Date:	29 Mar-22 17:40	Spe	cies:	Strongylocentr	otus purpur	atus		Brine	e: N	ot A	applicable		
Test Length:	40m	Tax	on:	Echinoidea				Sour	rce: V	entu	ıra Dive		Age:
Sample ID:	10-4570-7331	Cod	de:	URC032922				Proje	ect:				
Sample Date:	: 29 Mar-22 17:00	Mat	erial:	Copper chlorid	е			Sour	ce: R	efer	ence Toxic	cant	
Receipt Date:		CAS	S (PC):					Stati	on: R	EF	TOX		
Sample Age:		Clie	ent:	Internal Lab									
Linear Interp	olation Options												
X Transform	Y Transform		d	Resamples	Exp 95%		ethod						
Linear	Linear	0		280	Yes	Tw	vo-Point	Interpo	olation				
Test Accepta	bility Criteria	TAC L	imits.										
Attribute	Test Stat	Lower	Uppe	r Overlap	Decision	1							
Control Resp	0.935	0.7	<<	Yes	Passes (Oriteria							
Point Estimat	tes												
Level µg/L	95% LCL	95% UCL											
EC15 28.78	8 26.75	30.65											
EC20 32.22	2 29.76	33.47											
EC25 34.3	3 32.67	35.49											
EC40 40.6		41.61											
EC50 44.89	9 43.73	46.01											
Fertilization F	Rate Summary		_		Calc	ulated Vai	riate(A/i	В)				Isotor	ic Variate
Conc-µg/L	Code	Count	Mean		Min	Max	CV		%Effec	t	A/B	Mean	%Effec
0	N	4	0.935		0.9100	0.9600	2.2		0.00%		374/400	0.9500	0.00%
18		4	0.965		0.9500	0.9800	1.3		-3.21%		386/400	0.9500	0.00%
32		4	0.765		0.7300	0.7900	3.2		18.18%		306/400	0.7650	19.47%
56		4	0.225		0.2100	0.2600		58%	75.94%		90/400	0.2250	76.32%
100		4	0.050		0.0300	0.0800		99%	94.65%		20/400	0.0500	94.74%
180		4	0.000	0.0000	0.0000	0.0000			100.00%	% ——	0/400	0	100.009
Fertilization F	Rate Detail												
Conc-µg/L	Code	Rep 1	Rep 2		Rep 4								
0	Ν	0.9100	0.930		0.9600								
18		0.9800	0.970		0.9600								
32		0.7700	0.730		0.7700								
56		0.2600	0.210		0.2100								
100		0.0800	0.060		0.0300								
180		0.0000	0.000	0.0000	0.0000								
Fertilization F	Rate Binomials												
Conc-µg/L	Code	Rep 1	Rep 2	· · · · · · · · · · · · · · · · · · ·	Rep 4								
)	N	91/100	93/100		96/100								
18		98/100	97/100		96/100								
32		77/100	73/100	0 79/100	77/100								
56		26/100	21/10	0 22/100	21/100								
100		8/100	6/100	3/100	3/100								
400		0/400	0/400	0/400	01400								



0/100

0/100

0/100

0/100

180

Report Date:

26 Apr-22 15:19 (p 2 of 2)

Test Code/ID:

URC032922 / 05-5305-9675

Purple Sea Urchin Sperm Cell Fertilization Test

Aquatic Bioassay & Consulting Labs, Inc.

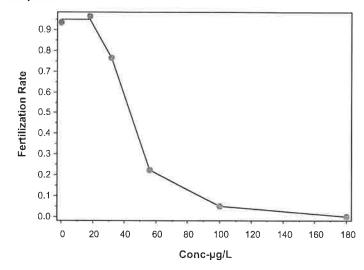
Analysis ID: 15-1485-3555 Endpoint: Fertilization Rate
Analyzed: 26 Apr-22 15:18 Analysis: Linear Interpolation (ICPIN)

Edit Date: 26 Apr-22 15:15 MD5 Hash: E03EF55697A483E47BFD5A81DC683B00

CETIS Version: CETISv2.1.1
Status Level: 1

Editor ID: 008-463-000-3

Graphics



CETIS Measurement Report

Receipt Date:

Overall

Report Date: Test Code/ID:

Station:

26 Apr-22 15:19 (p 1 of 1) URC032922 / 05-5305-9675

Purple Sea Urchin Sperm Cell Fertilization Test Aquatic Bioassay & Consulting Labs, Inc.

Batch ID: 18-9286-6481 Test Type: Fertilization Analyst:

Start Date: 29 Mar-22 17:00 EPA/600/R-95/136 (1995) Protocol: Diluent: Laboratory Seawater

Ending Date: 29 Mar-22 17:40 Strongylocentrotus purpuratus Species: Brine: Not Applicable Test Length: 40m Taxon: Echinoidea Source: Ventura Dive Age:

Sample ID: 10-4570-7331 Code: URC032922 Project:

Sample Date: 29 Mar-22 17:00 Material: Copper chloride Source: Reference Toxicant CAS (PC): **REF TOX**

Client: Sample Age: ---Internal Lab

12

7.833

7.802

Parameter Acceptability Criteria		TAC	Limits			
Parameter	Min	Max	Lower	Upper	Overlap	Decision
Salinity	34	34	32	36	Yes	Passes Criteria
Temperature	15.8	15.8	11	13	Yes	Above Criteria

Dissolved Oxygen-mg/L Std Err Conc-µg/L Code Count 95% LCL 95% UCL Min Std Dev CV% **QA Count** Mean Max 0 Ν 2 7 7 7 7 0 0 0.00% 0 18 2 6.9 6.889 6.911 6.9 6.9 0 0 0.00% 0 32 2 6.9 6.9 0 0 0 6.9 6.889 6.911 0.00% 2 56 6.8 0 0 0 6.8 6.788 6.812 6.8 0.00% 2 100 6.8 6.788 6.812 6.8 6.8 0 0 0.00% 0 2 180 6.8 6.788 6.812 6.8 6.8 0 0 0.00% 0 12 Overall 6.867 6.817 6.916 6.8 0.02247 0.07785 1.13% 0 (0%)

pH-Units											
Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
18		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
32		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
56		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
100		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
180		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0

7.8

7.9

0.01421

0.04924

0.63%

0 (0%)

7.865

Salinity-ppt											
Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.00%	0
18		2	34	34	34	34	34	0	0	0.00%	0
32		2	34	34	34	34	34	0	0	0.00%	0
56		2	34	34	34	34	34	0	0	0.00%	0
100		2	34	34	34	34	34	0	0	0.00%	0
180		2	34	34	34	34	34	0	0	0.00%	0
Overall		12	34	34	34	34	34	0	0	0.00%	0 (0%)

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
18		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
32		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
56		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
100		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
180		2	15.8	15.77	15.83	15.8	15.8	0	0	0.00%	0
Overall		12	15.8	15.8	15.8	15.8	15.8	0	0	0.00%	0 (0%)



CHRONIC KELP GERMINATION & GROWTH BIOASSAY

DATE: 30 March - 2022

STANDARD TOXICANT: Copper Chloride

ENDPOINT: GERMINATION

NOEC = 32.00 ug/l

EC25 = 103.80 ug/lEC50 = 137.50 ug/l

ENDPOINT: GROWTH-LENGTH

NOEC = 32.00 ug/l

IC25 = 105.20 ug/l IC50 = 158.10 ug/l

Yours very truly,

Scott Johnson

Laboratory Director

CETIS Summary Report

Report Date: Test Code/ID: 26 Apr-22 15:58 (p 1 of 2) KLP033022 / 17-7624-2080

Macrocystis (Germination and Ge	rm Tube Grow	th Test				Ad	quatic	Bioassay & 0	Consulting	Labs, Inc.
Batch ID:	06-5861-9827	Test Type:	Growth-Germi	nation			Analyst:				
Start Date:	30 Mar-22 17:11	Protocol:	EPA/600/R-95	/136 (1995)			Diluent:	Lal	oratory Seav	vater	
Ending Date:	01 Apr-22 17:11	Species:	Macrocystis py	/rifera			Brine:	No	t Applicable		
Test Length:	48h	Taxon:	Ochrophyta				Source:	Da	vid Gutoff		Age:
Sample ID:	09-7199-6670	Code:	KLP033022				Project:				
Sample Date:	: 30 Mar-22 17:11	Material:	Copper chlorid	e			Source:	Re	ference Toxic	ant	
Receipt Date:	:	CAS (PC):					Station:	RE	F TOX		
Sample Age:		Client:	Internal Lab								
Multiple Com	parison Summary										
Analysis ID	Endpoint	Comp	arison Method	1		NO	EL LO	DEL	TOEL	PMSD	
05-9834-3646	Germination Rate	Dunne	ett Multiple Com	parison Test	_	/ 32	10	00	56.57	2.8%	
12-0979-6117	Mean Length	Dunn	ett Multiple Com	parison Test		32	10	00	56.57	1.99%	
Point Estimat	te Summary										
Analysis ID	Endpoint	Point	Estimate Meth	od	v	′ Lev	el μς	g/L	95% LCL	95% UCL	
11-2357-6178	Germination Rate	Linea	r Interpolation (I	CPIN)		EC	15 77	7.23	69.86	82.42	
						EC	20 92	2.99	85.48	99.96	
						/ EC	25 10	3.8	100.4	106.8	
						/ EC	40 12	24	121.1	126.9	
						/ EC	50 13	37.5	134.6	141	
18-3917-4175	Mean Length	Linea	r Interpolation (I	CPIN)	_	/ IC1	5 76	6.7	73.25	80.04	
						/ IC2	0 92	2.11	88.63	95.89	
						IC2	5 10)5.2	102.8	107.7	
						IC4	0 13	36.9	133.7	140.3	
						IC5	0 15	58.1	153.9	163.2	
Test Acceptal	bility				TAC I	imits					
Analysis ID	Endpoint	Attrib	ute	Test Stat	Lower	Up	oer O	verlap	Decision		
05-9834-3646	Germination Rate	Contr	ol Resp	0.918	0.7	<<	Ye	es	Passes Cr	iteria	
11-2357-6178	Germination Rate	Contr	ol Resp	0.918	0.7	<<	Ye	es	Passes Cr	iteria	
	Mean Length	Contr	ol Resp	13.12	10	<<	Ye	es	Passes Cr	iteria	
12-0979-6117		Contr	ol Resp	13.12	10	<<	Ye	es	Passes Cr	iteria	
	Mean Length	Contr	-								
18-3917-4175	•	NOEL	•	32	<<	35	No	ס	Passes Cr	iteria	
18-3917-4175 12-0979-6117	•			32 0.02804	<< <<	35 0.2	No No		Passes Cr Passes Cr		

Report Date: Test Code/ID:

26 Apr-22 15:58 (p 2 of 2) KLP033022 / 17-7624-2080

Macrocystis Germination and Germ Tube Growth Test Aquatic Bioassay & Consulting Labs, Inc.

Germination R	ate Summary	1									
Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	5	0.9180	0.8976	0.9384	0.9000	0.9400	0.0073	0.0164	1.79%	0.00%
5.6		5	0.9180	0.8976	0.9384	0.9000	0.9400	0.0073	0.0164	1.79%	0.00%
10		5	0.9120	0.8958	0.9282	0.9000	0.9300	0.0058	0.0130	1.43%	0.65%
18		5	0.9180	0.8976	0.9384	0.9000	0.9400	0.0073	0.0164	1.79%	0.00%
32		5	0.9120	0.8958	0.9282	0.9000	0.9300	0.0058	0.0130	1.43%	0.65%
100		5	0.7140	0.6932	0.7348	0.7000	0.7400	0.0075	0.0167	2.34%	22.22%
180		5	0.1700	0.1288	0.2112	0.1300	0.2200	0.0148	0.0332	19.51%	81.48%
320		5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	***	100.00%
Mean Length S	Summary										
Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min_	Max	Std Err	Std Dev	CV%	%Effect
0	N	5	13.12	12.98	13.26	13	13.3	0.04899	0.1095	0.83%	0.00%
5.6		5	12.96	12.85	13.07	12.9	13.1	0.04	0.08944	0.69%	1.22%
10		5	13.08	12.9	13.26	12.9	13.3	0.06633	0.1483	1.13%	0.30%
18		5	13.12	12.96	13.28	13	13.3	0.05831	0.1304	0.99%	0.00%
32		5	13.06	12.92	13.2	12.9	13.2	0.05099	0.114	0.87%	0.46%
100		5	10.16	9.993	10.33	10	10.3	0.06	0.1342	1.32%	22.56%
180		5	5.2	4.779	5.621	4.9	5.7	0.1517	0.3391	6.52%	60.37%
320		5	0	0	0	0	0	0	0		100.00%
Germination R	ate Detail						MC	5: E65C9D	048B159C3	EF89EC231	1B3176D96
Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5					
0	N	0.9000	0.9300	0.9100	0.9100	0.9400					
5.6		0.9400	0.9100	0.9000	0.9300	0.9100					
10		0.9000	0.9300	0.9100	0.9200	0.9000					
18		0.9000	0.9100	0.9400	0.9300	0.9100					
32		0.9100	0.9000	0.9200	0.9300	0.9000					
100		0.7000	0.7200	0.7400	0.7100	0.7000					

320		0.0000	0.0000	0.0000	0.0000	0.0000	
180		0.1600	0.1800	0.2200	0.1600	0.1300	
100		0.7000	0.7200	0.7400	0.7100	0.7000	
32		0.9100	0.9000	0.9200	0.9300	0.9000	
18		0.9000	0.9100	0.9400	0.9300	0.9100	
10		0.9000	0.9300	0.9100	0.9200	0.9000	
5.6		0.9400	0.9100	0.9000	0.9300	0.9100	
0	N	0.9000	0.9300	0.9100	0.9100	0.9400	

Mean Length D	Detail						MD5: 082E7F953F6B98D1BE05205E9CFC1987
Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	13.1	13.1	13	13.1	13.3	
5.6		12.9	12.9	12.9	13	13.1	
10		13	13.3	13.1	13.1	12.9	
18		13	13	13.1	13.3	13.2	
32		13	13.1	13.1	13.2	12.9	
100		10.1	10.1	10.3	10	10.3	
180		5.4	5.7	4.9	5	5	
320		0	0	0	0	0	

Germination R	ate Binomial	Germination Rate Binomials												
Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5								
0	N	90/100	93/100	91/100	91/100	94/100								
5.6		94/100	91/100	90/100	93/100	91/100								
10		90/100	93/100	91/100	92/100	90/100								
18		90/100	91/100	94/100	93/100	91/100								
32		91/100	90/100	92/100	93/100	90/100								
100		70/100	72/100	74/100	71/100	70/100								
180		16/100	18/100	22/100	16/100	13/100								
320		0/100	0/100	0/100	0/100	0/100								

Report Date: Test Code/ID: 26 Apr-22 15:57 (p 1 of 5) KLP033022 / 17-7624-2080

Macrocystis G	Germ	nination and	Germ	Tub	e Growth	Test				Aquatio	Bioassay &	Consulting	Labs, In
Analysis ID:	05-9	9834-3646		End	point: (Germination R	ate		CET	IS Versio	n: CETISv2	2.1.1	
Analyzed:		Apr-22 15:56		Ana	lysis: F	Parametric-Co	ntrol vs Trea	tments	Stat	us Level:			
Edit Date:	26 /	Apr-22 15:53		MD5	Hash: E	65C9D048B1	59C3EF89E	C231B3176	D96 Edit	or ID:	008-463	-000-3	
Batch ID:	06-	5861-9827		Test	Type: (Growth-Germin	nation		Ana	lyst:			
Start Date:	30 1	Mar-22 17:11		Prot	ocol: E	PA/600/R-95/	(136 (1995)		Dilu	ent: L	aboratory Sea	water	
Ending Date:	01 /	Apr-22 17:11		Spe	cies: N	//acrocystis py	rifera		Brin	e: N	ot Applicable		
Test Length:	48h			Taxo	on: (Ochrophyta			Sou	rce: David Gutoff			Age:
Sample ID:	09-7	7199-6670		Cod	e: ŀ	(LP033022			Proj	ect:			
Sample Date:	30 M	Mar-22 17:11		Mate	erial: (Copper chlorid	е		Sou	rce: R	leference Toxi	cant	
Receipt Date:				CAS	(PC):				Stat	ion: R	EF TOX		
Sample Age:				Clie	nt: 1	nternal Lab							
Data Transfor	m		Alt ł	Тур				NOEL	LOEL	TOEL	TU	MSDu	PMSD
Angular (Corre	ected)	C > 1					32	100	56.57	-	0.02575	2.80%
Dunnett Multi	ple (Comparison	Test										
Control	vs	Conc-µg/L		df	Test St	at Critical	MSD	P-Type	P-Value	Decisio	on(a:5%)		
Negative Contr		5.6		8	0	2.407	0.04517	CDF	0.8571		gnificant Effec	t	
J		10		8	0.6006	2.407	0.04517	CDF	0.6365		gnificant Effec		
		18		8	0	2.407	0.04517	CDF	0.8571		gnificant Effec		
		32		8	0.6006	2.407	0.04517	CDF	0.6365	Non-Si	gnificant Effec	t	
		100*		8	14.65	2.407	0.04517	CDF	<1.0E-05	Signific	ant Effect		
		180*		8	45.72	2.407	0.04517	CDF	<1.0E-05	Signific	ant Effect		
Test Acceptab	oility	Criteria	Т	AC Li	mits								
Attribute		Test Stat			Upper	Overlap	Decision						
Control Resp		0.918	0.7		<<	Yes	Passes Ci	riteria					
PMSD		0.02804	<<		0.2	No	Passes Ci	riteria					
ANOVA Table													
Source		Sum Squa	ares		Mean S	quare	DF	F Stat	P-Value	Decisio	on(α:5%)		
Between		3.10541			0.51756	88	6	588	<1.0E-05		ant Effect		
Error		0.0246473	3		0.00088	303	28						
Total		3.13005					34						
ANOVA Assun	npti	ons Tests											
Attribute		Test					Test Stat	Critical	P-Value	Decisio	on(α:1%)		
/ariance		Bartlett Eq	uality	of Var	iance Te	st	3.387	16.81	0.7590	Equal V	/ariances		
		Levene Eq	uality	of Vai	riance Te	st	0.8635	3.528	0.5335	Equal \	/ariances		
		Mod Lever	ne Equ	ality o	of Variand	ce Test	0.3448	3.812	0.9050	Equal \	/ariances		
Distribution		Anderson-	Darling	3 A2 1	est		1.088	3.878	0.0076	Non-No	rmal Distribut	ion	
		D'Agostino	Kurto	sis Te	est		0.3169	2.576	0.7513	Normal	Distribution		
		D'Agostino	Skew	ness	Test		1.173	2.576	0.2406	Normal	Distribution		
		D'Agostino	-Pears	son K	2 Omnibı	ıs Test	1.478	9.21	0.4777	Normal	Distribution		
		Kolmogoro	ov-Smi	rnov [) Test		0.1882	0.1723	0.0030	Non-No	rmal Distribut	ion	
		Shapiro-W	'ilk W I	Vorma	ality Test		0.9437	0.9146	0.0726	Normal	Distribution		
Germination F	Rate	Summary											
Conc-µg/L		Code	Cour	nt	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effec
John pg/L		N	5		0.9180	0.8976	0.9384	0.9100	0.9000	0.9400	0.0073	1.79%	0.00%
			5		0.9180	0.8976	0.9384	0.9100	0.9000	0.9400	0.0073	1.79%	0.00%
)			5							0.0000			
5.6 10			5		0.9120	0.8958	0.9282	0.9100	0.9000	0.9300	0.0058	1.43%	0.65%
0 5.6							0.9282 0.9384	0.9100 0.9100	0.9000	0.9300	0.0058 0.0073	1.43% 1.79%	0.65% 0.00%
) 5.6 10			5		0.9120	0.8958							
0 5.6 10			5 5		0.9120 0.9180	0.8958 0.8976	0.9384	0.9100	0.9000	0.9400	0.0073	1.79%	0.00% 0.65%
5.6 10 18 32			5 5 5		0.9120 0.9180 0.9120	0.8958 0.8976 0.8958	0.9384 0.9282	0.9100 0.9100	0.9000 0.9000	0.9400 0.9300	0.0073 0.0058	1.79% 1.43%	0.00%

Attachment D Appendix I Analyst:

Report Date: Test Code/ID:

26 Apr-22 15:57 (p 2 of 5) KLP033022 / 17-7624-2080

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

05-9834-3646 Analysis ID: Endpoint: Germination Rate

Analyzed: 26 Apr-22 15:56

Analysis: Parametric-Control vs Treatments

CETIS Version:

Status Level:

008-463-000-3

CETISv2.1.1

Edit Date:	26 Apr-22 15:53	MD5 Ha
Angular (Co	rrected) Transforme	d Summary

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.2820	1.2440	1.3190	1.2660	1.2490	1.3230	0.0137	2.39%	0.00%
5.6		5	1.2820	1.2440	1.3190	1.2660	1.2490	1.3230	0.0137	2.39%	0.00%
10		5	1.2700	1.2410	1.2990	1.2660	1.2490	1.3030	0.0104	1.84%	0.88%
18		5	1.2820	1.2440	1.3190	1.2660	1.2490	1.3230	0.0137	2.39%	0.00%
32		5	1.2700	1.2410	1.2990	1.2660	1.2490	1.3030	0.0104	1.84%	0.88%
100		5	1.0070	0.9835	1.0300	1.0020	0.9912	1.0360	0.0083	1.85%	21.45%
180		5	0.4237	0.3693	0.4780	0.4115	0.3689	0.4882	0.0196	10.34%	66.94%
320		5	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0000	0.00%	96.10%

Germination Rate Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9000	0.9300	0.9100	0.9100	0.9400
5.6		0.9400	0.9100	0.9000	0.9300	0.9100
10		0.9000	0.9300	0.9100	0.9200	0.9000
18		0.9000	0.9100	0.9400	0.9300	0.9100
32		0.9100	0.9000	0.9200	0.9300	0.9000
100		0.7000	0.7200	0.7400	0.7100	0.7000
180		0.1600	0.1800	0.2200	0.1600	0.1300
320		0.0000	0.0000	0.0000	0.0000	0.0000

Angular (Corrected) Transformed Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.2490	1.3030	1.2660	1.2660	1.3230
5.6		1.3230	1.2660	1.2490	1.3030	1.2660
10		1.2490	1.3030	1.2660	1.2840	1.2490
18		1.2490	1.2660	1.3230	1.3030	1.2660
32		1.2660	1.2490	1.2840	1.3030	1.2490
100		0.9912	1.0130	1.0360	1.0020	0.9912
180		0.4115	0.4381	0.4882	0.4115	0.3689
320		0.0500	0.0500	0.0500	0.0500	0.0500

Germination Rate Binomials

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	90/100	93/100	91/100	91/100	94/100
5.6		94/100	91/100	90/100	93/100	91/100
10		90/100	93/100	91/100	92/100	90/100
18		90/100	91/100	94/100	93/100	91/100
32		91/100	90/100	92/100	93/100	90/100
100		70/100	72/100	74/100	71/100	70/100
180		16/100	18/100	22/100	16/100	13/100
320		0/100	0/100	0/100	0/100	0/100

Report Date: Test Code/ID: 26 Apr-22 15:57 (p 3 of 5) KLP033022 / 17-7624-2080

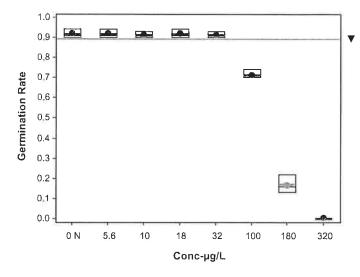
Macrocystis Germination and Germ Tube Growth Test

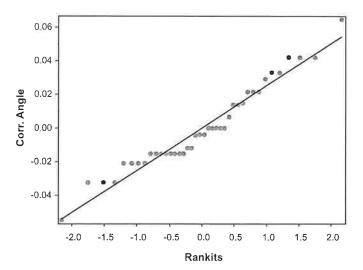
Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:05-9834-3646Endpoint:Germination RateCETIS Version:CETISv2.1.1Analyzed:26 Apr-22 15:56Analysis:Parametric-Control vs TreatmentsStatus Level:1

Edit Date: 26 Apr-22 15:53 MD5 Hash: E65C9D048B159C3EF89EC231B3176D96 Editor ID: 008-463-000-3

Graphics





Report Date: Test Code/ID: 26 Apr-22 15:57 (p 4 of 5) KLP033022 / 17-7624-2080

Macrocystis (Gern	nination and	Germ	Tub	e Growth	Test				Ad	uatic E	Bioassay & 0	Consulting	g Labs, Inc
Analysis ID: Analyzed: Edit Date:	26	0979-6117 Apr-22 15:56 Apr-22 15:53		Ana	lysis: Pa	ean Length arametric-Co 32E7F953F6			5	ETIS V tatus L	evel:	CETISv2 1 008-463-		
Batch ID:	06-	5861-9827		Test	Type: G	rowth-Germir	nation		A	nalyst:				
Start Date:	30	Mar-22 17:11		Prot	ocol: Ef	PA/600/R-95/	136 (1995)			iluent:	Lab	oratory Seav	water	
Ending Date:	01	Apr-22 17:11		Spe	cies: M	acrocystis py	rifera		Е	rine:	Not	t Applicable		
Test Length:	48h	1		Taxo	on: O	chrophyta			S	ource:	Dav	vid Gutoff		Age:
Sample ID:	09-	7199-6670		Cod	e: Kl	_P033022			P	roject:				
Sample Date:	: 30	Mar-22 17:11		Mate	erial: Co	opper chlorid	e		S	ource:	Ref	ference Toxic	ant	
Receipt Date:	:			CAS	(PC):				S	tation:	RE	F TOX		
Sample Age:				Clie	nt: In	ternal Lab								
Data Transfoi	rm		Alt F	Тур				NOEL	LOEL	TO	DEL	TU	MSDu	PMSD
Untransformed	d		C > 1	Γ				32	100	56	.57	***	0.2606	1.99%
Dunnett Multi	iple	Comparison	Test											
Control	vs	Conc-µg/L		df	Test Sta	t Critical	MSD	P-Type	P-Valu	ie De	cision	(a:5%)		
Negative Cont	trol	5.6		8	1.478	2.407	0.2606	CDF	0.2533	3 No	n-Sign	ificant Effect		
		10		8	0.3696	2.407	0.2606	CDF	0.7338	3 No	n-Sign	ificant Effect		
		18		8	1.76E-06	2.407	0.2606	CDF	0.857	l No	n-Sign	ificant Effect		
		32		8	0.5544	2.407	0.2606	CDF	0.6569) No	n-Sign	ificant Effect		
		100*		8	27.35	2.407	0.2606	CDF	<1.0E	.05 Si	gnificar	nt Effect		
		180*		8	73.18	2.407	0.2606	CDF	<1.0E		_	nt Effect		
Test Acceptal	bility	/ Criteria	т	AC Li	mits									
Attribute		Test Stat	Lowe		Upper	Overlap	Decision							
Control Resp		13.12	10		<<	Yes	Passes Ci	riteria						
NOEL		32	<<		35	No	Passes Ci	riteria						
PMSD		0.01986	<<		0.2	No	Passes Ci	riteria						
ANOVA Table														
Source		Sum Squa	res		Mean Sq	uare	DF	F Stat	P-Valu	ie De	cision	(a:5%)		
Between		268.951			44.8252		6	1531	<1.0E-	05 Si	gnifican	it Effect		
Error		0.820001			0.029285	7	28							
		269.771					34	-						
Total		203.771												
	mpti													
ANOVA Assur	mpti						Test Stat	Critical	P-Valu	ıe De	cision	(a:1%)		
ANOVA Assur Attribute	mpti	ons Tests	uality o	of Var	iance Test		Test Stat	Critical	P-Valu		_	(α:1%) riances		
ANOVA Assur Attribute	mpti	ons Tests Test	•							Ec	ual Vai			
ANOVA Assur Attribute	mpti	ons Tests Test Bartlett Eq	uality o	of Var	iance Tes	t	10.78	16.81	0.0955	E C	ual Vai	riances		
ANOVA Assur Attribute Variance	mpti	ons Tests Test Bartlett Eq Levene Eq	uality one Equ	of Var ality o	iance Test of Variance	t	10.78 4.455	16.81 3.528	0.0955	Ec Ur Ec	ual Var equal \ ual Var	riances Variances		
ANOVA Assur Attribute Variance	mpti	ons Tests Test Bartlett Eq Levene Eq Mod Leven	uality one Equi Darling	of Var ality o	riance Tes of Variance Test	t	10.78 4.455 1.149	16.81 3.528 3.812	0.0955 0.0028 0.3698	Ec Ur Ec	ual Var equal \ ual Var ormal D	riances Variances riances		
ANOVA Assur Attribute Variance	mpti	ons Tests Test Bartlett Eq Levene Eq Mod Leven Anderson-I	uality on the Equiparting Carling Kurtos	of Var ality o A2 7 sis Te	iance Tes of Variance est est	t	10.78 4.455 1.149 0.5443	16.81 3.528 3.812 3.878	0.0955 0.0028 0.3698 0.1656	Ec Ur Ec No	ual Vai nequal V nual Var ormal D ormal D	riances Variances riances istribution		
ANOVA Assur Attribute Variance	mpti	ons Tests Test Bartlett Eq Levene Eq Mod Leven Anderson-I D'Agostino D'Agostino	uality one Equipole Darling Kurtos Skew	of Var ality o A2 T sis Te ness	riance Tes of Variance Test est Test	t : Test	10.78 4.455 1.149 0.5443 1.883 2.104	16.81 3.528 3.812 3.878 2.576 2.576	0.0958 0.0028 0.3698 0.1656 0.0597 0.0353	Ec Ur Ec No No	ual Vai nequal Vai nual Vai nrmal D nrmal D	riances Variances riances istribution istribution		
ANOVA Assur Attribute Variance Distribution	mpti	ons Tests Test Bartlett Eq Levene Eq Mod Leven Anderson-I D'Agostino	uality of the Equi Darling Kurtos Skewi -Pears	of Var ality of A2 7 sis Te ness son K	riance Test of Variance Test est Test 2 Omnibus	t : Test	10.78 4.455 1.149 0.5443 1.883	16.81 3.528 3.812 3.878 2.576	0.0958 0.0028 0.3698 0.1656 0.0597	Ec Ur Ec No	ual Vai nequal Var prmal D prmal D prmal D prmal D	riances Variances riances istribution		



Report Date: Test Code/ID:

26 Apr-22 15:57 (p 5 of 5) KLP033022 / 17-7624-2080

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 12-0979-6117 Analyzed:

26 Apr-22 15:56 26 Apr-22 15:53 Endpoint: Mean Length Analysis:

Parametric-Control vs Treatments MD5 Hash: 082E7F953F6B98D1BE05205E9CFC1987 **CETIS Version:** Status Level:

Editor ID:

008-463-000-3

CETISv2.1.1

Mean	Length	Summary
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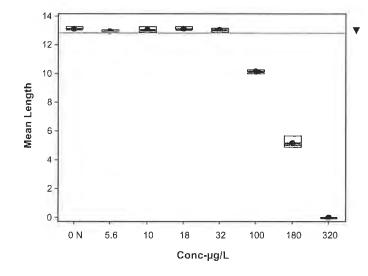
Edit Date:

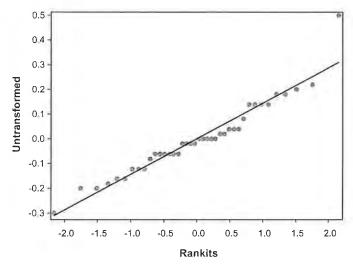
Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	13.12	12.98	13.26	13.1	13	13.3	0.049	0.84%	0.00%
5.6		5	12.96	12.85	13.07	12.9	12.9	13.1	0.04	0.69%	1.22%
10		5	13.08	12.9	13.26	13.1	12.9	13.3	0.06633	1.13%	0.30%
18		5	13.12	12.96	13.28	13.1	13	13.3	0.05831	0.99%	0.00%
32		5	13.06	12.92	13.2	13.1	12.9	13.2	0.05099	0.87%	0.46%
100		5	10.16	9.993	10.33	10.1	10	10.3	0.06	1.32%	22.56%
180		5	5.2	4.779	5.621	5	4.9	5.7	0.1517	6.52%	60.37%
320		5	0	0	0	0	0	0	0		100.00%

Mean Length Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	13.1	13.1	13	13.1	13.3
5.6		12.9	12.9	12.9	13	13.1
10		13	13.3	13.1	13.1	12.9
18		13	13	13.1	13.3	13.2
32		13	13.1	13.1	13.2	12.9
100		10.1	10.1	10.3	10	10.3
180		5.4	5.7	4.9	5	5
320		0	0	0	0	0

Graphics





Report Date:

26 Apr-22 15:57 (p 1 of 4) KLP033022 / 17-7624-2080

Test Code/ID:	ł

							T	est Code/ID:		KLP0330)22 / 17 - 7624-2080
Масго	cystis (Germination and	Germ Tube	Grow	th Test			Aquati	c Bi	oassay & Con	sulting Labs, Inc.
Analys	is ID:	11-2357-6178	End	ooint:	Germination Ra	ate		CETIS Version	on:	CETISv2.1.1	
Analyz		26 Apr-22 15:56		•	Linear Interpola	` '		Status Level	:	1	
Edit Da	ate:	26 Apr-22 15:53	MD5	Hash:	E65C9D048B1	59C3EF89EC23	1B3176D96	Editor ID:		008-463-000-	3
Batch	ID:	06-5861-9827	Test	Type:	Growth-Germin	ation		Analyst:			
Start D	ate:	30 Mar-22 17:11	Prote	ocol:	EPA/600/R-95/	136 (1995)		Diluent: L	abo	ratory Seawate	r
Ending	Date:	01 Apr-22 17:11	Spec	ies:	Macrocystis py	rifera		Brine: N	Not A	Applicable	
Test Le	ength:	48h	Taxo	n:	Ochrophyta			Source: [David	d Gutoff	Age:
Sample	e ID:	09-7199-6670	Code	e:	KLP033022			Project:			
Sample	e Date:	30 Mar-22 17:11	Mate	rial:	Copper chloride	Э		Source: F	Refer	rence Toxicant	
Receip	t Date:		CAS	(PC):				Station: F	REF	тох	
Sample	e Age:		Clier	ıt:	Internal Lab						
Linear	Interpo	olation Options									
X Tran	sform	Y Transform	Seed		Resamples	Exp 95% CL	Method				
Linear		Linear	0		280	Yes	Two-Point	Interpolation			
Test A	ceptal	bility Criteria	TAC Li	mits							
Attribu	te	Test Stat	Lower	Uppe	r Overlap	Decision					
Control	Resp	0.918	0.7	<<	Yes	Passes Criteria	1				
Point E	stimat	es									
Level	μg/L	95% LCL	95% UCL								
EC15	77.23	69.86	82.42								
EC20	92.99	85.48	99.96								
EC25	103.8	3 100.4	106.8								
EC40	124	121.1	126.9								
EC50	137.5	134.6	141								
Germin	ation I	Rate Summary				Calculated	l Variato/Δ/I	31			Isotonic Variate

Germination R	Germination Rate Summary			Calculated Variate(A/B)							
Conc-µg/L	Code	Count	Mean	Median	Min	Max	CV%	%Effect	A/B	Mean	%Effect
0	N	5	0.9180	0.9100	0.9000	0.9400	1.79%	0.00%	459/500	0.9180	0.00%
5.6		5	0.9180	0.9100	0.9000	0.9400	1.79%	0.00%	459/500	0.9180	0.00%
10		5	0.9120	0.9100	0.9000	0.9300	1.43%	0.65%	456/500	0.9150	0.33%
18		5	0.9180	0.9100	0.9000	0.9400	1.79%	0.00%	459/500	0.9150	0.33%
32		5	0.9120	0.9100	0.9000	0.9300	1.43%	0.65%	456/500	0.9120	0.65%
100		5	0.7140	0.7100	0.7000	0.7400	2.34%	22.22%	357/500	0.7140	22.22%
180		5	0.1700	0.1600	0.1300	0.2200	19.51%	81.48%	85/500	0.1700	81.48%
320		5	0.0000	0.0000	0.0000	0.0000		100.00%	0/500	0	100.00%

Germination Rate Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9000	0.9300	0.9100	0.9100	0.9400
5.6		0.9400	0.9100	0.9000	0.9300	0.9100
10		0.9000	0.9300	0.9100	0.9200	0.9000
18		0.9000	0.9100	0.9400	0.9300	0.9100
32		0.9100	0.9000	0.9200	0.9300	0.9000
100		0.7000	0.7200	0.7400	0.7100	0.7000
180		0.1600	0.1800	0.2200	0.1600	0.1300
320		0.0000	0.0000	0.0000	0.0000	0.0000



Report Date: Test Code/ID:

Editor ID:

26 Apr-22 15:57 (p 2 of 4) KLP033022 / 17-7624-2080

Macrocystis Germination and Germ Tube Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

11-2357-6178 Analysis ID: Analyzed: 26 Apr-22 15:56 Endpoint: Germination Rate

CETIS Version:

Edit Date: 26 Apr-22 15:53

Analysis: Linear Interpolation (ICPIN) MD5 Hash: E65C9D048B159C3EF89EC231B3176D96

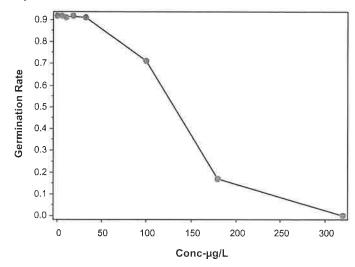
CETISv2.1.1 Status Level:

008-463-000-3

Germination Rate Binomials

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	90/100	93/100	91/100	91/100	94/100
5.6		94/100	91/100	90/100	93/100	91/100
10		90/100	93/100	91/100	92/100	90/100
18		90/100	91/100	94/100	93/100	91/100
32		91/100	90/100	92/100	93/100	90/100
100		70/100	72/100	74/100	71/100	70/100
180		16/100	18/100	22/100	16/100	13/100
320		0/100	0/100	0/100	0/100	0/100

Graphics



Report Date:

26 Apr-22 15:57 (p 3 of 4) KLP033022 / 17-7624-2080

Test Code/ID:

Macrocystis (Germination and Ge	rm Tube Grow	th Test	Aqu	atic Bi	oassay & Consultii	ng Labs, Inc.
Analysis ID:	18-3917-4175	Endpoint:	Mean Length	CETIS Ver	sion:	CETISv2.1.1	
Analyzed:	26 Apr-22 15:56	Analysis:	Linear Interpolation (ICPfN)	Status Lev	/el:	1	
Edit Date:	26 Apr-22 15:53	MD5 Hash:	082E7F953F6B98D1BE05205E9CFC1987	Editor ID:		008-463-000-3	
Batch ID:	06-5861-9827	Test Type:	Growth-Germination	Analyst:			
Start Date:	30 Mar-22 17:11	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Labo	ratory Seawater	
Ending Date:	01 Apr-22 17:11	Species:	Macrocystis pyrifera	Brine:	Not A	pplicable	
Test Length:	48h	Taxon:	Ochrophyta	Source:	David	l Gutoff	Age:
Sample ID:	09-7199-6670	Code:	KLP033022	Project:			
Sample Date:	30 Mar-22 17:11	Material:	Copper chloride	Source:	Refer	ence Toxicant	
Receipt Date:		CAS (PC):		Station:	REF	TOX	
Sample Age:		Client:	Internal Lab				

Linear interpola	ition Options					
X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method	

Linear 2058477 Linear 280 Two-Point Interpolation Yes **Test Acceptability Criteria TAC Limits** Attribute Test Stat Lower Upper Overlap Decision Control Resp

Passes Criteria

Control	Resp	13.12	10	<<	Yes
Point E	Stimates				
Level	μg/L	95% LCL	95% UCL		
IC15	76.7	73.25	80.04		

IC20 92.11 88.63 95.89 IC25 105.2 102.8 107.7 IC40 136.9 133.7 140.3 158.1 153.9 IC50 163.2

Mean Length S	Mean Length Summary					Isotonic Variate				
Conc-µg/L	Code	Count	Mean	Median	Min	Max	CV%	%Effect	Mean	%Effect
0	N	5	13.12	13.1	13	13.3	0.84%	0.00%	13.12	0.00%
5.6		5	12.96	12.9	12.9	13.1	0.69%	1.22%	13.06	0.50%
10		5	13.08	13.1	12.9	13.3	1.13%	0.30%	13.06	0.50%
18		5	13.12	13.1	13	13.3	0.99%	0.00%	13.06	0.50%
32		5	13.06	13.1	12.9	13.2	0.87%	0.46%	13.06	0.50%
100		5	10.16	10.1	10	10.3	1.32%	22.56%	10.16	22.56%
180		5	5.2	5	4.9	5.7	6.52%	60.37%	5.2	60.37%
320		5	0	0	0	0	1-2	100.00%	0	100.00%

Mean Length Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	13.1	13.1	13	13.1	13.3
5.6		12.9	12.9	12.9	13	13.1
10		13	13.3	13.1	13.1	12.9
18		13	13	13.1	13.3	13.2
32		13	13.1	13.1	13.2	12.9
100		10.1	10.1	10.3	10	10.3
180		5.4	5.7	4.9	5	5
320		0	0	0	0	0

Report Date: Test Code/ID: 26 Apr-22 15:57 (p 4 of 4) KLP033022 / 17-7624-2080

Macrocystis Germination and Germ Tube Growth Test

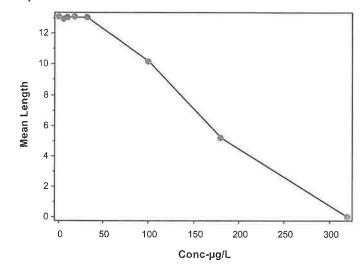
Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 18-3917-4175 Endpoint: Mean Length CETIS Version: CETIS v2.1.1

Analyzed: 26 Apr-22 15:56 Analysis: Linear Interpolation (ICPIN) Status Level: 1

26 Apr-22 15:53 MD5 Hash: 082E7F953F6B98D1BE05205E9CFC1987 Editor ID: 008-463-000-3

Edit Date: Graphics



CETIS Measurement Report

Report Date: Test Code/ID: 26 Apr-22 15:58 (p 1 of 1) KLP033022 / 17-7624-2080

Aquatic Bioassay & Consulting Labs, Inc.

Macrocystis	Germination	and Germ	Tube	Growth	Test
-------------	-------------	----------	------	--------	------

Batch ID: 06-5861-9827 Test Type: Growth-Germination Analyst:

 Start Date:
 30 Mar-22 17:11
 Protocol:
 EPA/600/R-95/136 (1995)
 Diluent:
 Laboratory Seawater

Ending Date:01 Apr-22 17:11Species:Macrocystis pyriferaBrine:Not ApplicableTest Length:48hTaxon:OchrophytaSource:David GutoffAge:

Sample ID: 09-7199-6670 **Code:** KLP033022 **Project:**

Sample Date: 30 Mar-22 17:11 Material: Copper chloride Source: Reference Toxicant

Receipt Date: CAS (PC): Station: REF TOX

Sample Age: --- Client: Internal Lab

Dissolved Oxygen-mg/L

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	6.5	2.688	10.31	6.2	6.8	0.2121	0.4243	6.53%	0
5.6		2	6.65	4.744	8.556	6.5	6.8	0.1061	0.2121	3.19%	0
10		2	6.45	4.544	8.356	6.3	6.6	0.1061	0.2121	3.29%	0
18		2	6.5	3.959	9.041	6.3	6.7	0.1414	0.2828	4.35%	0
32		2	6.55	2.103	11	6.2	6.9	0.2475	0.495	7.56%	0
100		2	6.6	4.059	9.141	6.4	6.8	0.1414	0.2828	4.29%	0
180		2	6.5	3.959	9.041	6.3	6.7	0.1414	0.2828	4.35%	0
320		2	6.5	3.959	9.041	6.3	6.7	0.1414	0.2828	4.35%	0
Overali		16	6.531	6.401	6.661	6.2	6.9	0.06105	0.2442	3.74%	0 (0%)

pH-Units

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
5.6		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
10		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
18		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
32		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
100		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
180		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
320		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
Overall		16	7.9	7.9	7.9	7.9	7.9	0	0	0.00%	0 (0%)

Salinity-ppt

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.00%	0
5.6		2	34	34	34	34	34	0	0	0.00%	0
10		2	34	34	34	34	34	0	0	0.00%	0
18		2	34	34	34	34	34	0	0	0.00%	0
32		2	34	34	34	34	34	0	0	0.00%	0
100		2	34	34	34	34	34	0	0	0.00%	0
180		2	34	34	34	34	34	0	0	0.00%	0
320		2	34	34	34	34	34	0	0	0.00%	0
Overall		16	34	34	34	34	34	0	0	0.00%	0 (0%)

Temperature-°C

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
5.6		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
10		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
18		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
32		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
100		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
180		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
320		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
Overall		16	14.85	14.82	14.88	14.8	14.9	0.01291	0.05164	0.35%	0 (0%)

CHEMICAL ANALYSIS DATA SHEET- NCF 2 Lab#: VF 0322.208 Start Date: 3 10 Date Rec'd: 3128 End Date: 🗸 YSI Used: Renewal Sample Used: 5 DAY 4 4/3 Initials 200 5737 Ke DISSOLVED OXYGEN mg/I CONTROL 73 22 10.25 72 72 70 7.1 2.8 12 7.1 73 7.1 7,~ 7.0 10 78 74 7.1 つつ 13 TEMPERATURE °C CONTROL mo tro mo MS 24.0 24,0 240 M. 2 201 Zunny 24.3 24.2 241 140 20 24.0 24.0 2407404 pН CONTROL 50 50 10.25 3 کل S 80 80 SUP No 50 79 80 ç 80 8 W 8.3 8.0 29 8.8 15 CONDUCTIVIT umohs CONTROL 362 365 10.25 485 MRID YRK 125 495 495 J46 T47 0 682 687 100 950 ALKALINITY CONTROL on and HARDNESS CONTROL 83 2nd Sample 3 Sample Residual Chlorine 1st Sample 1.0

Aquatic Bioassay & Consulting Laboratories, Inc. Lab #: VCF () 22. 71)8 Company: VCF Sample I.D.: Date & Time Start: 5 INITIAL FINAL Conc. Rep.# 4 / 5 m CONTROL CFUM.WA is U 6.25% is 12.5% i ((IT K 25% N C 50% (6 C 100% (4 ([REPL. **FISH** AVG. WT. PER **CHAMBER** EFF. NUMBER **BOAT** BOAT+ **FISH** WEIGHT (g) FISH (g) CONC. # **FISH TARE NUMBER** CONTROL 6.25% 12.5% U 25% 50% - 110512 100% Attachment D Appendix I

Chronic juvenile Fathead minnow (Pimephales promelas) toxicity test - Survival

Chronic Ceriodaphnia dubia survival and reproduction - VCF \(\)

Aquatic Bioassay & Consulting Laboratories, Inc.

Start Date: \(\frac{1}{2} \) | /22 \(\) Lab #: VCF \(\)

Lab #: VCF_1)3_22.208

End Date: U

Conc.	Day#	Initial		# YOUNG / REPLICATE								
			1 /	2	3	4	5	_ 6	_ 7	8	9	10
	3	TD					V					
	4	M			2			2		2		3
CON	5	KP	<u> </u>		5			7	6	,5	_ 7	2
	6	TO	-7	10	12			10	8	1,0	J	9
	7	TO		12	8	9	13	10	8	19	10	13
	Т-4-1		ΙΧ	07	K	n	78	- 76	73	31	2/1	21
	Total 3	_	10	37		14	10	17	1/	7/	04	133
	4	.=:	2	2	1		2	1		2	V	1
6.25%		Ē.	2	4	2	6	5		6	+	J	4
0.23%	6	-	1	X	1	10	V	7	7	(1)	9	8
	7	-	0	10/2	10	9	7	14	11/	8	13	14
[7 0							0.0	, ,
	Total		- 35	N	X	N	X	29	No	21	18	27
	3	**	V	V	V	V	X	X				
	4		2	2	2		12	1		2	l	1
12.5%	5	2	4	5	2	6	5	50	7	2	6	J
	6	-		-	1	1.7	1,0	7		8	1	8
	7	-	10	7	13	110	10	8	-+	//	7	9
1	Total	-	2/2	125	19	Ma	22	00	M	W	24	//
	3	_	23		1		7	13/	1	10	17	1
1 1	4	-	2			1	2	2	1	1	3	2
25%	5	_	7	5	2	6		T	7	6	8	7
23/0	6	1	10	11	11	10	9	.9	8	17	11)	10
[7	-	18	12	0	13	8	12	13	18	Ty	17,
[[#] £			00	-03-						
	Total		35	29	VX	34	- M	-2/8	-35	27	34	31
	3				V	V						1
	4	200	2	- (2	<u> </u>	4	2		1	2	2
50%	5	(0)	10	8	3	-6	7	8	5	50	-	7
}	6		13	-60		10	1.0	40	10	19	13	19
1	7	-	13	10	19	10	13	10	19	10	-//	10
k	Total	(#C)	35	31	32	N	-35	32	30	W	31	33
	3		77	3	75	- of	- 37	40	- 04	14	0)	1/
}	4	:52	2	(2		2	7	7	2	1
100%	5	36 5		, ct	7	2	6	J	4	<u></u>	7-	7
100%	6	(-)	197	10	n		in	110	10	a	,01	8
l t	7	-	10	10	12	12	14	15	97	12	12	10
] [**		. 0	, ,		7 /	27			-10	1
	Total	:=0	M	2/0	29	33	33	38	29	29	30	26



Chemical Analysis Data Sheet

Aquatic Bioassay & Consulting Laboratories, Inc.

Company: VCF >		Lab #: VCF	22.71)8
Start date and time	e:31191111 in 3	Sample ID:	
End date and time	:4hhz 1315	Date Rec'd: 4	98
YSI Used:	B R	8	3 6
Day	031791530	2 3 3 3 4	1 4/2
Analyst	To To	TO I	0 0
Time	1140 1136	1450 15	00 1316
Dissolved Oxygen			
Control	7.60 78	7.6 7.	+ 72
6.25%	7.9 /3	7.8 7	0 72
12.5%	7.8/73	78 7	7.1
25%	74 73	7.8 7	0 70
50%	77 72	7.8 7	0 70
100%	77 12	7-8 7	10 70
Temperature	/ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 9 1	
Control	1110 220	220 11	1) 20
6.25%	710 11.0	1110 11	1) 22 3
12.5%	77.0 72.3	720 92	0-23
25%		11.0 91	1 220
50%	Well This	920 92	1) 27.0
100%	(1.0) 200	920 92	1 220
рH			
Control	8.2 80	8.7 7	9 80
6.25%	7.70 7.9	1778	() 80
12.5%	7-10 79	7.7 8.	0 80
25%	7.70 75	7.8 7.	9 75
50%	770 25	7-8 7	-9 50
100%		7-8 7	-9 79
Conductivity		, , ,	
Control	364	369	169
6.25%	487	480	436
12.5%		487	478
25%	530	840	550
50%		(B97)	22680 d
100%	974	997	106% 995
Alkalinity	, , _N		
Control	(d)	(a)	X 60
S	116	116	116
Hardness	55974		
Control	83	83	83
m	23	1213	213
(

Acute *Hyalella azteca* survival test

Aquatic Bioassay & Consulting Laboratories, Inc.

Client: VCF >
Sample ID:
Start Date: 3 10 12

End Date: <u>4/2/12</u>

Conc.	Day#	Initials	# YOU	NG / RI	EPLICA	TE
			1	2	3	4
	0	i	6	5	5	5
	1	TVO	5		4	
CON	2	Th	5	5	2	5
CON	3	TO			5	
	4	7	8	~	7	6
	0	-			8	(
6.25	1	-		5	1	2,
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	4	<u> </u>	0	15		
	0	==	51	2	5	5
12.5	1		X	7	J	7
	2	•	5	5	- 5	
	3	~	5)(0
	4		0	9)	
	0		4	0	0	
25	1	.	5	7	6	5
	3	24	5	5	2	5
	3	-	2	5		
	4	-	5	6	6	~
	0	12	6	5	5	6
50	1	() + (5			
	2		5			5,
	3	Œ	5	7	5	
	4		0	0	0	2
	0	:::::::::::::::::::::::::::::::::::::::	5	8	0	6
100	1	-	0			1
	3	7=	5	S	5	5
	3	16	5	2	5	2
	4	-	2	4		6

ac: &M N



Chemical Analysis Data Sheet

Aquatic Bioassay & Consulting Laboratories, Inc.

^						
Company: VCF		_	Lab #: V	CF()/22!	1)8	
Start date and time	9:01/91/1		Sample I	D:	-	
End date and time	:4/2/22	1212	Date Red	c'd: 519	8	
YSI Used:	13	B	Bar	3	5	
Day	03129	13 30	253	3 47	442	
Analyst	TO	de	TO	To	W	
Time	1120	RIT	1459	1503	1212	
Dissolved Oxygen	S.					
Control	7.6	73	7.0	7.7	72	
6.25%	7.9	7.3	7.8	7.10	72	
12.5%	·7.8	7.3	7.8	7.60	7.1	
25%	7.7	73/	7.8	7.0	73	
50%	74	7.7	7.8	710	7.3	
100%	7.7	12	7.8	7.10	7.5	
Temperature		7	, 0	1 -		i i
Control	122.01	20.0	20	1200	220	
6.25%	4110	72.0	21.0	79.0	220	
12.5%	(1/1.1)	77.0	22-0	990	シ ジタ	
25%	122.0	27.0	220	79.0	から	
50%	77.0	22.0	200	920	ME	
100%	99.0	72-0	200	79-1)	22.5	
рН						
Control	8.2	80	8.1	7.9	60	
6.25%		79	7.7	80	80	
12.5%	770	75	7.7	8-D	80	
25%	770	79	7-8	7-9	79	
50%	770	79	7-8	7-9	40	
100%	:770	78	7-8	7-9	79	
Conductivity						
Control	13104		13104		369	
6.25%	487		487)		436	
12.5%			487		478	1
25%	530		SUD		220	
50%			(091)		G48-3	680
100%			ado		998	
Alkalinity	- 111		110		\sim	
Contro	(6)		(ei)		(90)	1
w	116		111		116	1
Hardness	. 1, -					20
Control	83		1 23		1 83	1
W	213	1	213	1	213	
			/			•0

Acute Chironomus' survival toxicity test Aquatic Bioassay & Consulting Laboratories, Inc

Company: VCF 🎾 Lab #: VCF0322.W8

Sample ID:
Date Time & Start: 2

	Conc.	Rep.#	INITIAL	1 ^	2 N	3 N	FINAL
ľ	1156	1					5_
1	CONTROL	2					5
	() ()	3					T
1	CONTROL SM. HT	4					7
ľ		1	8	6	0	T	0,
1	6.25	2	7	~			6
1		3	6	~		6	7
1		4	7	7	6		. 6
Î		1	<	5	7	~	6
	12.5	2	7	5	10		7
		3	2	5/	6	5	5
		4	6	5/	4	5	5
Î		1	5	X	5		6
	25	2	9	15	<	~	6
		3	9	6	0	~	
1		4	<	T	6	6	~
Î		1	5	~	6	5	6
	50	2	5	5	6	6	6
		3		5	T		5
		4	(5	2		5
		1		T	5	(5
	100	2	2	5	6	6	2
		3	7	5	6	8	-
		4	8	2	8	8	2

Start I	Date: 💪	129/21	2 1145			Lab#: <u>\ \ C \ </u>	F U322	207
End D	ate: V	115122	1312			Date Rec'd:	3128	
YSI Used:	B	13	V)	10	۸	Λ.		b
Renewal Sam	21 20 20	d:	0	<u> </u>	1 3	<u> </u>	<u> </u>	
DAY	3/29	3/3/1	3 3 2	410 3	7/2 4	4/3 5	414 6	MIS
Initials DISSOLVE	Thi	<u>1 b V930 l</u> YGEN mg/I	TP 11846	T10080+	esic M	6714 KR	To 1099	ITA
CONTROL	an OA	1 GEN High	JUDO Bad	7/19122	22 21 26	73 72 78	717171	1174
uls	10	12 4 41	2012	1 2011	76 71 78		71 11 1	110
12.5	17	12 70 70	792YXX	73 10 17			71 3 1 3	479
25	7 1	7 7 7	757.011	13 1V 11	77 72 77		71314	173
50	7.10	2 1 1 1 9	707177	73 10 10	כל לל לב	100		431
	-	11111	741114	73/10/70	ン7 J7 J5	7.50	7) 717	774
1001		12 7-11-11	70-11-	73TUTL	71 73	11 73 18	21 7.17.	1.14
TEMPERA	TURE	°C	0.50.000.00	0			THE OWN	
CONTROL	14.00	~ (40 /40	140144140	14.014.014.0		mo 64.5 MO	M. 2 14 0 14	4/40
0.25	Mil	43 14.019.0	14074 U142	14.0 24.0 14.L	(43 /4-3 M.)	moly-> 84.0	540 MO 4	29MD
1251	W 21	13940940	940140141	YHUMHUMI	Eugs En is Bus	いつかっという	m. 14 114	WHO
25 1	M.3 12	M3 24.074.01	940941	940 941 941	Ensky?		240 94.074.	WHU
50	74.40	73 740940	74.0840941	14084094	EUS WS MS		240 941094	19M-U
100	DM.St	13 74.0 742	940940941	141141841	213 243 7012	24.19	173 7/4.194	13/40
рH			2 - 10 - 012 - 18	7	MI	ė		
CONTROL	8.11	N 8.118.1	2117.8 8.1	8-07/8/81)	80 80 80	80 60 8n	8-47-881	181
10.25	ゴゴ	201181	7.8 4.7 7.8	QUA 27.9	08 4 08	81 82 81	80 7.78.1	18-0
12.5	14	19 70 81	202278	81227x	CO 81 79	FU 80 8.0	m 79 81	18-0
25	7.10	15 78 81)	18 02 24	a) 27 - 18			(W) 7.70.1	01
50	7	14 24 39	202220	811 22	80 79 78		81778	13.9
100	1.0	2 2029	787779	eu 20	807978	80 8079	51778	150
CONDUCT	TX/TTV	umoha	7817 717	0 1.077	3 0 7 7 3	1,0 0 17 1		1
CONTROL		3071	01-11	0101	212	365.	367	12104
W.25	100	341	364	340	362	445		130
-	103	130	130	437	444		449	11/3
12.5	149	470	411	409	473	477	480	1991
25	5311	550	549	552	575	565	500	1554
SO	714	710	+113	710	216	722	177	1-730
1001	DUDI	10591	1062	1047	1053	1266	1062	11050
ALKALINI	ITY							
CONTROL	B	60	60	(in)	(ev)	(av	(00)	Cal
100	96	qu	96	96	ale	94	96	96
HARDNES	S			· V				
CONTROL	X31	83	843	83	23	83	83	173
IN	340	340	3 400	340	342	340	340	34
Residual Chlo		Sample	LOJ 2	and Sample	- 00	3 rd Sample	V V	70

CHEMICAL ANALYSIS DATA SHEET- VCF

Chronic juvenile Fathead minnow (Pimephales promelas) toxicity test - Survival Aquatic Bioassay & Consulting Laboratories, Inc. Company: VCF \ Sample I.D.: Date & Time End: 46 20 Date & Time Start: w W 3 10 5 M FINAL Conc. Rep.# INITIAL 4 6~ (CONTROL Ir 6.25% ic 2, EC. (6 12.5% (2) 25% ((((50% (100% (6 **CHAMBER** EFF. REPL. NUMBER **BOAT** BOAT+ **FISH** AVG. WT. PER NUMBER CONC. **FISH TARE FISH** WEIGHT (g) # FISH (g) PB 11.82096 CONTROL 7.8U9(01) PB 6.25% 12.5% CB 25% (0 PB 50% PB 100% -100515

Attachment D Appendix I

Chronic *Ceriodaphnia dubia* survival and reproduction - VCF

Aquatic Bioassay & Consulting Laboratories, Inc.

Start Date: 3/10/22 Lab #: VCF_1)

Lab #: VCF_<u>US</u> 22. <u>207</u>

End Date: 1/

Conc.	Day#	Initial		# YOUNG / REPLICATE								
			1	_ 2	_3	4	5	6	7	8	9	10
	3	10	V									
	4	RP	2	1	2	2	2	1		2	2	1
CON	5	M	7	6	J	En	y	5	7	T	7	J
	6	70	0	7	5		1,0	10	9	(0		7
	7	-16	10	13	M	10	13	12	10	_//	13	10
	m . 1		0.4	// 0	Λ	O _A	() =	N		Ant		0.61
-	Total 3		7/2		M	1/6	19	7)	24	M	U,	23
	4	-			2			V				
6.0504		-			6				2	<u>ا</u>		1
6.25%	6	-	5	10	10	-	4	16	01	0	6	6
	7	-	17	72	-Of	9	111	15	10	~	11	10
			10	0.2	-	/	1-1	70			10	70
	Total	-	23	8	129	VI	10	-22	12.X	M	10	14
	3	-	9		1		1/			1	1	11
	4	:4:	2		(X	2	(1	2	1	(
12.5%	5		5	7	5	1	7	.6_	5	5	4	5
	6	.	10	//	y	Q	8	13	12	10	13	12
	7	=	13	12	X	12	13	10	'9	14	10	14
		-	7.3	11	0.0	-04-	~	0.0				
	Total	-	30	- 0A	73	14	30	_31	2+	_31	29	34
-	3		V		V	V				- i		
	5	-		2		t	2				1	2
25%	6	=	7	7	8	7	6	50	10	12	10	111
	7	- 5. - 2.	110	Th	2	10	1	10	1/1	10	1500	17
		_	10	10	7	10	10	10	19	12	-	10
1	Total	18-11	31	30	26	30	24	Ne	32	31	W	32
	3		1/	1/	1	70	V	1	1		V	1
	4	-	2				2			i	2	1
50%	5	940	3	7	6	σ	Time	7	6	5	5	
	6	: = ::	ita	12	10	10	9	7	13	10	10	14
	7	<u> </u>	13	19	12	10	12	12	14	14	11	17
		20	20	0.11	00	0.4	11/2	0.0	000	~~		
	Total	-	29	3,4	Ty	26	- 2/2	27	34	30	19	37
	3	-			V'	V			V	V		
1000/	5		2	_1	1	1		_			2	
100%	6	-	10	7/7	6	10	5	10	10	6	10	10
1	7		19	12	19	1/2	18	19	Pla	13	1,4	13
1	,	-	10	15	/ /	10	10	10	10	10	10	15
	Total	-	31	31	37	31	31	30	32	33	29	129
•			11		- -			70	<u> </u>			90



Chemical Analysis Data Sheet

Aquatic Bioassay & Consulting Laboratories, Inc.

Company: VCF			Lab #: V0		07
Start date and time		MIMI	Sample I	D:	
End date and time	9:4/2/22	1307	Date Rec	'd:3128)
YSI Used:	B	B	B	-10 3	B
Day	03179	13/30	2331	3514/1	44/2
Analyst	To	To	to	Tp.	in
Time	1145	1135	1441	1450	1300
Dissolved Oxyger	7		- Milatense		
Contro	7.70	73	7.70	3/3	77
6.25%	7.9	7.2	7.4	7.+	7.\
12.5%	7.7	72	7.4	4.4	7.0
25%	770	7.2	7.4	770	7,1
50%	7.70	77	4.4	710	7-1
100%	7.70	72	7.4	700	71
Temperature	1 -				
Contro	199:0	27.0	1220	991)	220
6.25%	72-0	220	991	1110	าาง
12.5%	(21-1)	220	9111)	711	22.0
25%		22.0	19110	and	27.3
50%	27.0	120/	920	1911	77. 3
100%		220	911	77.5	222
рН				110	
Contro	1 8.7/	80	8.9	8.1)	80
6.25%	6 77	१०	7.8	3.8	50
12.5%		80	1.0	20	₹ U
25%		8,0	7.8	7-8	75
50%		8.0	7.9	11	75
100%	- 11	4.0	3.0	4	79
Conductivity	1 4				
Contro	1264		12/04		369
6.25%			421	1	436
12.5%			437		475
25%			Sud		550
50%			3/2		226
100%			1500		1568
Alkalinity	01/0401		HUUC	<u> </u>	1000
Contro	[k ₀]		[(21)	1	(w)
w	10.0		91	1	91
Hardness	VI -(1)		1 14		1 1
Contro	JI 53		I Va		1/3
	TAND		2.0	-	2111
W	J. M.		147		1 240

Client: VCF \\
Sample ID: Start Date: \(\frac{4}{2} \right) \]

Lab #: VCF_0322.107

End Date: <u>4/2/20</u>

Conc.	Day#	Initials	# YOU	NG / RE	EPLICA	TE
			1	2	3	4
	0	m	5	-		5
	1	Th	7	2		5
CON	2	100	2	2	5	5
	3			1	5	5
ĺ	4	M	C /	~	6	C
	0	-	15	~		6
6.25	1	- /	7		1	2
	2	-/	5	2	0	2
	3	1	5	J	0,	7.
	4	/-	6			
	0	-	5	6		
12.5	1 /	<u> </u>	7	2	4	1
	2/	-	2	2	(A)	
	B	-	7		7.	7
	/ 4	-	6	1		5
/	0		5	60		5
25 /	1	 .		J		0
	2	-2.		Ch	8	
	3	-		0	7	7,
	4		8	-		0
	0	-	5	e	5	0
50	1		2		(A)	8
	2	-	2	4	4	4
	3	200	ئے ا	U	-	0
	4	-	6	6	0	4
	0	-	5	6	-	5
100	1	-	1	1		1
	2	-	1	2	S	2
	3	-	U	7	2	
	4	=	2	G	1	U



Chemical Analysis Data Sheet

Aquatic Bioassay & Consulting Laboratories, Inc.

0			Lab #: V0	CELIO22 (717
Company: VCF		1000			201
Start date and time			Sample I		<u> </u>
End date and time	:4/3/22		Date Red	2 a: 3 //	0
YSI Used:	In all a	12122	12 7121	2 /11	44/2
Day	03/19	13 30	2 3 3	3	4 110
Analyst	70	μ	16	ID	~
Time	1112	ni	1444	1482	1156
Dissolved Oxygen					
Control		73	7-10	1.7	72
6.25%		7.2	7.7	77	71
12.5%		72	7.7	7.7	7.0
25%	7.0	7.2	7.7	1.0	70
50%	70	7.2	77	9-10	7.0
100%	7.70	7.2	7.7	120	7.2
Temperature					
Control	111.1)	20	21/0	120	220
6.25%	72.0	22.9	40-0	TRU	25.0
12.5%	221)	12.0	MU	220	22.3
25%	27.0	22-3	(211)	720	22.0
50%	21.1)	220/	220	1920.	21.9
100%	72.0	22\$	(21)	22-1	22:3
рН					
Contro	8.7	80	8.1	8.0	50
6.25%	7.7	80	7-8	7-8	80
12.5%	7.7	79	7-8	9-8	8.0
25%	910	79	7-8	7.8	6-3
50%	-	7.8	7.9	34	\$979@
100%	1 4	77	7.9	7/4	8979 00
Conductivity	1. 4.		- 1		
Contro	13/04		12/04		365
6.25%		1	U21)	435
12.5%			1123		478
25%		1	cua		550
50%			372		725
100%		1	11700	7	1668
Alkalinity	1010	1	100		IOOK
Contro	1 (0)		T (W)		
u			91		91
Hardness	1 14	1	1 76	L	1-14
	11 33		1 1/2	Ť	T Xa
Contro		4	240	-	Aut
W.	1 340	1	1 3 W		740

Acute Chironomus survival toxicity test Aquatic Bioassay & Consulting Laboratories, Inc

Lab #: VCF0322.207

Company: VCF Sample ID: Date Time & Start: 2

Conc.	Rep.#	INITIAL	1 1	2 ~	300	FINAL
	1	7	5		6	5
CONTROL	2	5	5	<	7	
	3	5	6	5	6	•
	4	5	Q	6	5	6
	1	6	<	t		
6.25	2	5	2	8	2	
	3	2	0	6	(6
	4	<u></u>	(6	6	
	1	6	-	1/	5	6
12.5	2	6	1	K	-	(
	3	7	5/	5		
	4	2	5/	6	7000	5
	1		1	6		
25	2	5	1		5	C
	3	5	(-	r
	4	6	5	6		~
	1	<	5	-	6	6
50	2	5	I	6	5	C
	3	6	(-	6	(
	4		5	6	5	(
	1	5	5	6		8
100	2	C	5	6	6	6
	3	(2	6	5	5
	4	4	6	<		

CHEMICAL ANALYSIS VCF - Topsmelt

Lab #: VCF (322. 210) Start Date: 3MM Date Rec'd: End Date: YSI Used: 13 Sample used for renewal: 3/30 1 4 0945M Analyst Int. 1500 AU KU DISSOLVED OXYGEN (mg/L) CONTROL 7.5 70 7.5 6.25% 72 7.1 7.2 75 72 7.0 12.5% 7.1 76 72 25% 7.1 77 77 50% 76 70 100% 76 7.3 72 TEMPERATURE (°C) CONTROL 210 213 210 210 no 61.5 Us 21.3 6.25% 21.0 210 21.0 21.2 21.5 n.0 なら 012 us 12.5% 74.3 なっ 210 210 210 us Uis 21.0 UD 21.3 25% 700 21. 3 21.3 21.3 ない 21.3 213 210 50% 74 😘 71.5 21.5 21.5 4.0 0.0 210 100% 71. 9 210 11.0 21-3 212 210 u. рΗ CONTROL 76 6.25% 76 75 76 76 78 77 12.5% 7.6 70 76 77 17 7× 25% 76 75 76 76 77 28 77 50% 76 77 7.7 7.6 78 100% 9 7.6 SALINITY (ppt) CONTROL 54 34 34 6.25% 3 4 34 31 84 34 35 12.5% 34 74 34 25% 34 34 54 34 50% 34 34 14 100% 34 34 32 JU ·210 Oppt -V 37 put NOTES:

TOPSMELT SURVIVAL Company: VCF 3 Sample ID: Start Date: 3/29/22 End Date: UISIVA

	Daily # of Surviving Fish								
Concentration	Rep. #	Initial	1/~	2/0	3 V	46	5 /	6 KV	Final (
SUM RW	1	5	5	.5.	5	0	~		5.
	2		<	2		5	6	Ç	5
	3	C	6	1	S	0	٢	Ç	
	4	_	6	7	Z	\$	6	?	7
	5	7	6	7		9	6	6	
6.25%	1	8		7		9	C	5	
	2	~	5	7	5	X	2	S	5
	3	<	C	J	5			<u> </u>	
	4	•	ς	2		6	0		5
	5	C	<u> </u>		X	ς	2	8	
12.5%	1	8	6	2	15		6		
	2	5	2	6		0	6	9	
	3	5	3	37	2	0	6	6	7
	4		5	(X		6	6	ς	7
	5	(<u> </u>		7	6	5	(
25%	1		· C	12	6	5		5	T
	2		5	1		6		\$	2
	3	6	ς	4		6	5		1
	4	5	5	6	S	6	5	2	2
	5		5	7			-		
50%	1		5		8	6		6	7
	2	6	0		\$	C		8	5
	3	6		-	2	6	6	2	2
	4	ς		- D	6	6	6	5	4
	5	(U		8	6		
100%	1	5	5		(P)	2	5	6	2
	2	(6	2	9	6	6	8	()
	3		5	7	8	8	0	0	6
	4	5	5	7	7	\$	5	8	7
	5	5	<	J	5	6	-	6	
						Aquatic Bio	issay & Cons	aulting Labor	atories, Inc.

TOPSMELT GROWTH

Company: VCF 3 3 29 122 Lab#: VCF () 222. 210

Sample ID:

Chambei	r Eff	Rep.	Number	Boat	Boat +	Fish Wt.	Average Weight
#	Conc.	#	Fish	Tare	Fish	(mg)	Per Fish (mg)
EG 1	CON	1		0.89780	0.83496	MADO	
- 9	ر	2		0.80976	V.81482	infine	
2		3		U.80863	1181577	10714	
U		4		11.83514	0.84246	00732	
5		5		V-83492	11.84197	.WHIS	
EG (6.25%	1		0.83649	11.84359	.MTO	
7		2		11.83381	11.84096	.W71S	
8		3		0.82146	V.86859	100713	
		4		0.82949	0.83657	11118	10
		5		U.81989	0.82699	- 10110 1	10710
EG	12.5%	1		0.81200	1.87946	18744	
19		2		1.82997	1.83719	- UPTUS	
13	3	3		0.82787	U-83497	·MTW	
10	1	4		0.88499	183201	-UVTUZ	
F1 S		5		1.828/10/	0.84524	-UVT13	
	25%	1		11 82930	V.83L191	1171	2
1=		2		0.82543	0.84706	100719	
1.8		3		0.81186	0.81897	1011	
10	1	4		0.83302	0.84022	1070	
<u> </u>	0	5		U-83153	083809	10110	
th 2	50%	1		0.84641	0.88381	MININO	
		2		0.82269	186980	00713	
0	3	3		0.83523	1184.05.7	WT34	
H	7	<u>4</u> 5		11.89198	1.84701	·UUTUS	
El () 1	1000			V-X3 V37	11 000000	-00720	
to 2	100%	1		N-84587	11 9000	100707	
	7	2		U & VULLY	NOT IN	10714	
50		3		0.88344	D 874450	10171	
5		5		0.88736	1).84452	10110	
1		5		0.84192	U-87897	·WTUS	

Aquatic Bioassay & Consulting Laboratories, Inc.

DA	DATE CLIENT CONC TEMP PH D.O.					1	TT	6		CAT	INITITY
		CLIENT				p	Н	D	.0.		INITY
Initial Final		CORP MOV	(%)		g. C)		/				ppt)
3.29.22		STD TOX	CON	158		7.8	28	7.0	7.0	34	34
1700 YM	1740 VM	UF	18	15.8		7.8	7.8	6.9	6.9	34	34
	-		32	15.8	15.8	7.8	7.8	6.9	6.9	34	34
			56	15.8	15.8/	7.9	7.9	6.8	6.8	34	34
			100	15.8	18.8	7.9	7.9	6.8	6.5	34	34
			180	15.8	15.8	7.8	7.8	6.8.	6.9/	34	34
3.29.22	3.29.22 UF			0							
1702 VM		VCF	CON	15.8	15.8	7.8	7.8	7.00	7.0	34	34
		UF	6.25	15.8	15.8	7.6	7.6	6.8	6.8	34	34
		(.210)	12.5	15.8	15.8	7.7	7.7	69	69	34	34
			25	15.8	15.3	7.8	1.8	69	69	34	34
			50	15.8	15.9	7,5%	7.8	68	6.8	34	34
			100	15.8	15.2	48.0	8.0	6.7	6.7	34	34
									/		
Trahr	3/19/12	P6-E	Con	15.8	15.8	7.8	7.8	7.0	7.0	3-1	31
103	1743	uf	6.25	16%	15,8		7.9	68	6.3	24	24
-		.207	12.5	15.8	15.8		29	6.5	63	74	3-1
		1000	25.	15.8	15.8	29	791	6.7	6.1	3-1	71
		7	50		15.8	8-5	59	65	63	31	71
			150		16.8		7.5	6.6	GA	34	21
			700	1318	11.8	/5	7-1	تاءها	UA)-4	17
					/						
											1
					-1						
											-
											-
				-					-		
								-			
					-						
					1						-
-											

PURPLE URCHIN FERTILIZATION TEST DATA SHEET

Test Start Date:	3/29	22	1200	Com
Test End Date:	3/29	100	1740	Samj
Microscope: /		1		Lab l
Urchin Source:	Ventry 1.	22		Samp
Analyst: 0	_			Dilut

Company: STANDARD TOX.
Sample Rec'd: 3/29
Lab No.: Sample I.D.: UPCF032922
Dilution Water: Cm34pt

NOEC:

Test	Nominal	Number of FERTILIZED	Number of UNFERTILIZED	Proportion of Normal
Cont. No.	Conc.	Larvae	Larvae	Larvae
1	32	7.7	73	Daiveo
2	CON	91	19	
3	56	26	174	
4	32	73	27	
5	100	8	92	
6	56	21	79	
7	CON	93	7	
8	100	6	94	
9	CON	94	8	
10	100	3	7	
11	CON	96	4	
12	18	98	2	
13	18	97	3	
14	18	95	5	
15	32	79	21	
16	18	96	4	
17	56	22	78	
18	180	0	100	
19	180	0	(2)	
20	32	77	23	
21	100	3	97	
22	180	0	100	
23	180	0	(2C)	
24	56	21	79	

PURPLE URCHIN FERTILIZATION TEST DATA SHEET

1706	
Test Start Date: 3/29/22 17/02	Company: VCF
Test End Date: 3/29/12 1740 M	Sample Rec'd: 3/5/
Microscope: / 1742/5	Lab No.:
Urchin Source: Under Mar	Sample I.D.: VCF 3 2 2、 Z(じ
Analyst:	Dilution Water: (- / - / - / - / - / - / - / - / - / -
/	
	NOEC:

Test	Nominal	Number of	Number of	Proportion of
Cont.	Conc.	FERTILIZED	UNFERTILIZED	Normal
No.		Larvae	Larvae	Larvae
1	12.5	91	9	
2	CON	96	19	
3	25	94	16	
4	12.5	95	5	
5	50	93/	7	
6	25	96/	4	
7	CON	96	5	
8	50	93	7	1
9	CON	44	6	
10	50	97	3	
11	CON	93	7	
12	6.25	96	4	
13	6.25	94	6	
14	6.25	9.5	5	
15	12.5	93	7	
16	6.25	96	4	
17	25	94	6	
18	100	95	5	
19	100	97	3	
20	12.5	92	7	
21	50	96	4	
22	100	94	6	
23	100	95	5	
24	25	75	5	

Toxicity Test Data Sheet

D/A	TE	CLIENT	CONC	TEM	P	D	H	D.	0.	SALINITY			
Initial	Final	UZZZZ (Z	(%)	(Deg.						(ppt)			
3.30.22	4/1/12	STD TOX	CON			79	7.9	68	6.2	34	34		
1711	12/1	K	5.6	14.8 1-	4.9	79	7.9	68	65	74	34		
- 11	1 1 1 1		10	14.8 14	19	7.9	59	66	63	34	34		
1			18	148 1	4.9	7.5/	7.9	6.7	6.3	34	34		
			32	148 H	1.9	1.9	7.9	69	GZ	31	34		
			100	14.8 14	4/1	7.9 7	1,9	6.8	64	31	74		
			180	14.8 1	7.7	7.5	79	6.7	6.3	3A	34		
			320	148	4.9	7.5	7.9	6.7	6-3	34	34		
	1												
3/30/22	4/1/22	VCF	CON		4.9	7.9	7.4	6-81	G. L	34	3-4		
1710	1710	K	6.25	14.8 (4	1.9	7.9	7.9	616	6.7	34	34		
1.1.8		(.210)	12.5		19	7.9	79	65	6.6	34	324		
			25	148 1-	4,9	8.0	7.7/	6.7	6.3	74	34		
G			50	148 1	4.9	80	7/9	6-8	6.3	74	34		
			100	14.8 1-	19	8.1	なっ	66	6.3	3a	34		
						1					10		
4													
										-			
									1 _ 1				
							1						
							1						

	LIGHT	INTENSITII	ES BY QUAD	RANT	
START	2 86 2	77	29 START	6 28/	FINISH
STARI	277 Z	76 FINISH	26 8 START	RIGHT FRONT	FINISH

MACROCYSTIS TOXICITY TEST DATA SHEET

Test Start Date: 3/30/22 1711	Company: STANDARD TOX
Test End Date: # 172 (711	Sample Rec'd: 3 (3)
Microscope:	Lab No.:
Micrometer Conversion Factor:	Sample I.D.: 144033022
Kelp Source: Vuln Mul	Dilution Water:
Date Collected: 3/20	, , , , , , , , , , , , , , , , , , ,
Analyst:	NOEC TUBE LENGTH:
	NOEC GERMINATION:

Test Cont.	Nom. Conc.	Spores Germ.	Not Germ.	Prop. Germ.		Length Measurements Ocular Scale Units										
#	%	#	#	001111	Ll	L2	L3	L4	L5	L6	L7	L8	L9	L10	X	Length (um)
1	32	91	9		14	13	12	13	14	14	13	n	12	13		13/4
2	10	90	10		3	12	14	13	12	14	13	13	12	14		130
3	CON	90	10		14	13	10	14	13	13	K	14	13	13		13.1
4	100	70	30		12	10	10	8	10	N	11	10	9	(3)		(0,1
5	10	93	7		14	(3	12	14	4	13	15	n	14	14		13.3
6	5.6	94	6		13	12	14	13/	13	1	11	13	13	2		2.0
7	10	91	9		14	13	12	14	13	13	11	M	13	13		(3.1
8	100	72	28		10	11	N	10	8	9	11	10	10	11		10.1
9	18	aco	10		13	12/	14	13	12	1-1	14	13	13	n		13,0
10	10	92	8		14	13	12	14	13	13	12	11	13	13		3,1
11	18	91	9		13/	1 ~	14	14	14	13	12	11	13	~		13.V
12	CON	93	7		14	13	n	14	13	13	12	14	3	3		13.1
13	10	90	10		13	13	1	14	13	4	12	14	13	n		12.9
14	18	94	6		14	13	13	12	14	13	15	11	14	-3		13,1
15	CON	91	9		13	1	14	13	12	1 4	1-1	13	13	1		(3.0)
16	18	93	7		14	13	11	14	13	13	13	1-1	14	13		13.3
17	32	90	10		13	13	13	12	14	14	13	12	14	13		13,
18	32	91	8		13	n	14	14	13	10	14	13	13	13	7	131
19	CON	41	9		n	14	13	12	14	13	12	14	13	13		31
20	32	93	7		(4	14	13	n	14	13	ル	14	13	13		13.2
21	100	74	26		11	10	11	10	70	9	10	11	10	10		(D-3
22	5.6	91	9		12	14	14	13	ル:	1-1	13	13	10	H		12.9
23	CON	94	6		19	13	12	14	15	/3	14	13	17	13		(3.3
24	100	21	29		10	B	9	10	d	10	8	10	10	11		1000
25	5.6	90	10		14	13	12	14	13	12	12	11	13	12		12.9
26	18	91	9		14	13	12	14	13	13	14	14	14	13		13.2
27	5.6	93	7		13	12	10	13	13	12	14	13	13	13		(3,0
28	5.6	91	9		11	13	2	14	13	13	1	19	13	13		13/
29	100	10	30		11	a	CO	10	9	10	11	11	10	10		10.7
30	32	90	10		13	12	14	13	13	1	14	15	13	1		12,0
31	180	16	84		6	5	5	6	4	6	5	5	6	6		2.0
32	180	18	82		6	4	8	8	6	5	2	6	4	5		5.3
33	180	22	78		5	3	5	6	4	4	6	5	5	G		4.9
34	180	16	84		4	6	5	5	4	6	5	2	6	4		1-0
35	180	13	87		5	6	5	4	9	6	4	5	5	G		21
36	320	0	100		-			-								
37	320	0	(2)					_								
38	320	0	100				-									
39	320	0	100		-											
40Vei	ntura 20un	tywide Storn Program 202	water Qual	ity		Page	DI - 6	34					Atta	chment [App	endix I

MACROCYSTIS TOXICITY TEST DATA SHEET

Test Start Date: 3/30/22 1710 Test End Date: 4/1/12 1710	Company: VCF Sample Rec'd: 3/43
Microscope: _/	Lab No.:
Micrometer Conversion Factor: W	Sample I.D.: 1/40322.2(6)
Kelp Source: Vetu Mu	Dilution Water: Con 340K
Date Collected: 3/31	
Analyst:	NOEC TUBE LENGTH:
V	NOEC GERMINATION:

Test	Nom.	Spores	Not	Prop.	Length Measurements											Mean
Cont.	Conc.	Germ.	Germ.	Germ.		Ocular Scale Units										
#	%	#	#		L1	L2	L3	L4	L5	L6,	L7	L8	L9	L10	X	Length (um)
1	50	91	9		14	13	13	12	(4	13	13	14	(3	13		13.2
2	12.5	90	(0		13	13	14	13	1	13	15	c3	14	14		13.6
3	COW	93	7		14	13	12	1-4	13	13	14	(~	13	13		13.3
4	100	14	6		13	14	(4	18	12	14	14	13	13	13		12.3
	12.5	96	4		13	13	14	13	13	14	13	13	19	13		12.3
6	6.25	92	8		14	13	1	13	3	14	13	14	13	13		13,4
	12,5	91	9		13	13	1/9	/3	12	14	13	1	13	13		13-2
8	100	93	7		13	141	13	12	14	(3	13	n	14	19		13-2
	25	90	70		14	18	12	19	13	12	19	13	1	19		
10	12,5	94	6		13	'n	14	13	12	14	13	19	13	12		13.0
11	25	93	7		13	14	(4	13	12	14	13	14	13	12		13.2
	Col	96	4		14	13	13	n	14	15	13	٠.	14	(4		13.1
13	12.5	91	9		14	13	12	14	3	12	14	13	63	14		13-2
14	25	95	5		13	14	14	13	/3	1	1-4	13	12	14		13.2
	Cn	23	7		19	13	12	14	13	12	14	13	13	1-1		13.2
16	25	9.5	5		(3	12	14	(3	13	12	M	13	15	· L		12.9
17	50	96	7		(4	13	1	14	3	13	11	14		/3		13
18	50	93	フ		13	n	14	13	13	16	74	13	13	1		(3-1
		44	6		14	15	12	14	(3	13	-1	14		13		13-1
	50	96	4		13	12	14	13	12	14	A	3		r		13/0
	100	45	5		12	14	13	12	(4	M	13			14		13.2
	525	95	5		14	13	~	14	15	13			13	13		(3,1
23		93	7		13	13	n	19	15	12	14			19		13.0
24	130	96	1		14	13	12	14	(3	12	(-4		1	M		[3,1
	6.65	91	9		14	13	15	1	19		n	4-4	14	c3		13.2
26	25	94	6		13	13	12	14	13	1	14			.5		
27 6	ict	75	5				14	13	12		13		_	7		13.1
28	1.65	46	9		15	1			12					14		13.0
29	100	95	5			15	13	13	KA ,		1	14		+3		(3,2
30	50	75	5		3	4	_			1-7	-3	13		19		130