

## Schwartzwalder 2nd Quarter WET Test DMR Submittal 2025

1 message

## pdelaney@blackfoxmining.com <pdelaney@blackfoxmining.com>

Mon, Jul 28, 2025 at 10:12 PM

To: Peter Hays - DNR <peter.hays@state.co.us>

All,

Attached is the Copy of Record (COR) for the Discharge Monitoring Report (DMR) for 2<sup>nd</sup> Quarter WET Test for the Schwartzwalder Mine site.

Let me know if you have any questions.

Thanks.

Patrick Delaney

**Environmental Manager** 

Black Fox Mining, LLC

Cell: 315-414-6986



www.blackfoxmining.com



2025 2ndQ Schwartzwalder Outfall 001A WET Test DMR COR.zip 4800K



July 2, 2025

Jared Buck
Linkan Engineering
400 Corporate Circle Suite H
Golden, CO 80401

Dear Jared:

Enclosed is the report for chronic biomonitoring tests performed for Linkan Engineering on effluent from the Schwartzwalder Mine 001A outfall. There was no statistically significant toxicity to either test species at any effluent concentration. The effluent passes WET (Whole Effluent Toxicity) testing requirements for this sampling period.

If you have any questions or concerns, please do not hesitate to contact me at (303) 661-9324.

Best regards,

Ethan White

Aquatic Toxicologist II

# REPORT OF CHRONIC BIOMONITORING TESTS CONDUCTED FOR LINKAN ENGINEERING ON EFFLUENT FROM THE SCHWARTZWALDER MINE 001A OUTFALL

# Prepared for:

Jared Buck
Linkan Engineering
400 Corporate Circle Suite H
Golden, CO 80401

Prepared by:

Ethan White
SeaCrest Group
500 S Arthur Ave. Suite 450
Louisville, Colorado 80027-3065
(303) 661-9324

July 2, 2025

SCG Project No.: 525317.B Project: Quarterly WET

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Client: Linkan Engineering Site: 001A SCG Project No.: 525317.B Project: Quarterly WET CO-0001244

# **Chronic Toxicity Test Summary**

	7-day static renewal using <i>Ceriodaphnia dubia</i>
Test:	7-day static renewal using fathead minnow ( <i>Pimephales promelas</i> )
Client:	Linkan Engineering
Test Procedure	Ceriodaphnia dubia: EPA/821/R-02-013. Method 1002.0 (2002)
Followed:	fathead minnow: EPA/821/R-02-013. Method 1000.0 (2002)
Sample Number:	525317.B
<b>Dilution Water:</b>	moderately hard laboratory reconstituted water
<b>Test Organism Source:</b>	SeaCrest Group
<b>Reference Toxicant:</b>	Sodium Chloride

Sample	Time of Collection	Date of Collection	Time of Receipt	Date of Receipt
Effluent 1	1330	06-23-2025	1600	06-23-2025
Effluent 2	1400	06-24-2025	1530	06-24-2025
Effluent 3	1400	06-25-2025	1620	06-25-2025

	Ceriodaphnia dubia	fathead minnow
Test Initiation Time	1145	1620
Test Initiation Date	06-24-2025	06-23-2025
Test Completion Time	1205	1520
Test Completion Date	06-30-2025	06-30-2025

**Test Concentrations:** 

**Client: Linkan Engineering** CO-0001244 SCG Project No.: 525317.B **Site: 001A Project: Quarterly WET** 

Abstr	act with Results
	Control (0%), 20%, 40%, 60%, 80%, 100%
	10 for <i>Ceriodaphnia dubia</i>

Number of Organisms/Concentration: 40 for fathead minnow

10 for Ceriodaphnia dubia

**Replicates at each Concentration:** 4 for fathead minnow

	Ceriodaphnia dubia	fathead minnow
Test vessel size/Exposure volume	30ml/15ml	500ml/200ml
Lethal LOEL/LC25	>100%/>100%	>100%/>100%
Pass/Fail Status	PASS	PASS
Temperature Range (°C)	24.1 - 25.9	24.1 - 25.9
Dissolved Oxygen Range (mg/L)	6.4 - 8.0	3.8 - 8.1
pH Range	7.7 - 8.6	7.6 - 8.2
	Control (Cerio/FHM)	Effluent Sample
Hardness (mg/L as CaCO <sub>3</sub> )	96/100	0/0/2
Alkalinity (mg/L as CaCO <sub>3</sub> )	62/63	75/79/85
Total residual chlorine (mg/L)	< 0.01	<0.01/<0.01/0.02
Total ammonia (mg/L as NH <sub>3</sub> )	< 0.03	0.03/<0.03/<0.03

CO-0001244 SCG Project No.: 525317.B Site: 001A **Project: Quarterly WET** 

#### INTRODUCTION

Biomonitoring provides an effective means by which the toxicity of discharges from municipal, industrial, and mining operations can be tested. Among the advantages of biomonitoring is the ability to test complex effluents containing a broad range of contaminants. Biomonitoring, when used in conjunction with chemical analyses, can generate data capable of identifying a much wider range of contaminants.

The Colorado Water Quality Control Division requires certain NPDES permittees to perform acute and/or chronic biomonitoring tests. The chronic test measures significant differences in lethality and in reproduction (Ceriodaphnia dubia) or growth (fathead minnow – Pimephales promelas) between control and effluent-exposed organisms.

The present report discusses the results of chronic biomonitoring tests conducted on effluent from the Linkan Engineering Schwartzwalder Mine 001A discharge. These tests were conducted in accordance with EPA and State of Colorado procedures in June 2025.

#### MATERIALS AND METHODS

## Sample Collection

Two gallons of the effluent were collected on three separate dates as specified in Permit CO-0001244. Samples were delivered chilled to the SeaCrest lab where they were held at 0-6°C. Chain of custody forms showing sample collection and laboratory arrival times are included (Appendix 1).

#### Dilution Water

Laboratory reconstituted water was used as both the dilution water source and the control for the tests. Reconstituted water for the Ceriodaphnia dubia test was produced by adding sodium bicarbonate, calcium sulfate, magnesium sulfate, potassium chloride, and sodium selenate to deionized water. Reconstituted water for the fathead minnow test was produced by adding sodium bicarbonate, calcium sulfate, magnesium sulfate, and potassium chloride to deionized water.

#### Test Organisms

The biomonitoring test used *Ceriodaphnia dubia*, cultured in the SeaCrest laboratory. The organisms are cultured in brood culture boards from which individual females are monitored for survival and reproduction for periods of up to two weeks. Neonates less than 24-hours old, released from third or subsequent broods of eight or more within an 8-hour period, are collected from the brood chambers and used in tests. The animals are fed daily with a mixture of Yeast, Cereal Leaves, and Trout Chow (YCT), produced in-house. This is supplemented with cultured green algae (Selenastrum capricornutum) provided by Aquatic Biosystems.

Less than one-day-old fathead minnow, cultured in the laboratory, were also used in the test. Adult fish are maintained in 10-gallon aquaria where females deposit their eggs on the under-surface of split PVC pipe sections. The eggs are collected daily and transferred to aerated containers where they hatch after three to four days. The larval fish are fed newly hatched brine shrimp (Artemia sp.) at least twice per day.

CO-0001244 SCG Project No.: 525317.B Site: 001A **Project: Quarterly WET** 

In-house organisms are tested monthly in a reference toxicant test using sodium chloride to monitor overall health and test reproducibility. (Appendix 4).

#### Test Procedures

Upon receipt at the lab, samples were analyzed for alkalinity, ammonia, chlorine, conductivity, dissolved oxygen, hardness, and pH.

## Methods used in chemical analysis

Alkalinity	EPA 310.2	Hach 8203	I-2030-85.2
Ammonia	SM4500-NH <sub>3</sub> , C-E1997	ASTM D1426-08	
Chlorine	SM4500-Cl D	Hach 10026	
Conductivity	SM2510		
Dissolved Oxygen	SM4500-O	Electrode: G-2001	Winkler (QC): B-F-2001
Hardness	SM2340 B or C	Hach 8213	
pН	SM4500-H+ B-2000		

The test followed procedures in EPA<sup>3</sup> and CDPHE<sup>4</sup> guidelines. Exposure concentrations included control (0%), 20%, 40%, 60%, 80%, and 100% mixtures, diluted with moderately hard laboratory reconstituted water.

Individual Ceriodaphnia dubia were placed in 30ml plastic containers containing approximately 15ml of exposure medium. Ten replicates at each concentration were used. The animals were fed daily with the YCT mixture and an equal volume of the green algae (Selenastrum capricornutum). The exposure medium was changed daily in each container and the number of young released overnight were counted and recorded. Young were removed from the containers daily and discarded. Routine measurements were made each day of temperature, dissolved oxygen, and pH before and after the water changes.

Fathead minnow were exposed in 500ml plastic cups to which 250ml of media was replaced daily. Four replicates were used at each concentration. Ten fish, less than 24-hours old, were placed in each cup. The fish were monitored daily for survival and fed live brine shrimp at least twice per day. After seven days, the fish were removed from the cups, euthanized with isopropyl alcohol, and then placed in aluminum pans and dried in an oven for a minimum of six hours at 100°C. The pans were then weighed on a five-place analytical balance to determine the average dry weight of the fish from each replicate.

#### Data Analysis

Data from the tests were analyzed on a personal computer using the CETIS program (developed by Tidepool Scientific Software). Statistical tests used in the analyses are shown in Table 1. Test acceptability was determined using control survival and reproduction/growth criteria, concentration-response relationships, and percent minimum significant differences (USEPA 5,6).

Table 1. Statistical methods used in testing for significant differences in test parameters.

Variance	Distribution			
Bartlett Equality of Variance Test	Shapiro-Wilk W Normality Test			

Statistical Difference						
Species Survival Growth Reproduction						
Ceriodaphnia dubia	Fisher Exact/Bonferroni- Holm Test	N/A	Steel Many-One Rank Sum Test	ICp		
fathead minnow	Steel Many-One Rank Sum Test	Dunnett Multiple Comparison Test	N/A	ICp		

#### **RESULTS**

## Ceriodaphnia dubia Test Results

Test results for the *Ceriodaphnia dubia* are summarized in Table 2 and provided on the data sheets located in Appendix 2. Survival was 0% in the 100% effluent and ranged from 90-100% in the remaining effluent concentrations. Control survival was 100%. Statistically significant lethality was measured in the 100% effluent concentration when compared to the control. The LOEL (Lowest Observed Effect Level) for lethality was >100% and the LC<sub>25</sub> (Lethal Concentration 25) for lethality was 84.5%.

Average number of neonates was 0.4 in the 100% effluent concentration and ranged from 24.9-28.5 in the remaining effluent concentrations. Average number of neonates in the control was 25.3 for statistical analyses and test acceptability criteria. Statistically significant differences in the number of neonates were found between the control and the 100% effluent concentration. The LOEL for reproduction was >100% and the  $IC_{25}$  (Inhibition Concentration 25) for reproduction was 84.2%.

Table 2. Summary of *Ceriodaphnia dubia* test results. An asterisk (\*) denotes a statistically significant difference from the control.

	Domoont	Maan			Significant Difference	
Concentration	Percent Survival	Mean Neonates	Min.	Max.	Lethality	Reprod.
Control (0%)	100	25.3	16	34		
20%	100	28.5	23	32		
40%	90	24.9	0	39		
60%	100	25.3	16	35		
80%	100	26.3	20	31		
100%	0	0.4	0	3	*	*

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#### Fathead Minnow Test Results

Fathead minnow results are summarized in Table 3 and are provided on data sheets in Appendix 3. Survival was 72.5% in the 100% effluent concentration and ranged from 95% – 97.5% in the remaining effluent concentrations. Control survival was 97.5%. No statistically significant lethality was measured in any effluent concentration when compared to the control. The LOEL (Lowest Observed Effect Level) for lethality was >100% and the LC<sub>25</sub> (Lethal Concentration 25) for lethality was 99.5%.

Average weight in the 100% effluent concentration was 0.233mg and ranged from 0.553mg - 0.586mg per individual in the remaining effluent concentrations. Average weight for the control fish was 0.587mg for statistical analyses and test acceptability criteria. Statistically significant differences for growth were measured in the 100% effluent concentration when compared to the control. The LOEL for growth was 100% and the IC<sub>25</sub> for growth was 87%.

Table 3. Summary of fathead minnow test results. An asterisk (\*) denotes a statistically significant difference from the control.

significant unic	tence ii oin	the control.				
	Percent	Average			Significant	Difference
Concentration	Survival	Weight (mg)	Min.	Max.	Lethality	Growth
Control (0%)	98	0.587	0.544	0.644		
20%	95	0.586	0.564	0.614		
40%	98	0.565	0.442	0.675		
60%	98	0.562	0.522	0.610		
80%	98	0.553	0.501	0.601		
100%	73	0.233	0.151	0.308		*

## Test Acceptability

Acceptable control survival (80%) was achieved in both tests. Similarly, Ceriodaphnia dubia reproduction (average 15 neonates/organism) and fathead minnow growth (average 0.250mg/test container) in control organisms met required levels. PMSD was within the required limits for an acceptable test (Table 4).

Table 4. PMSD for chronic test parameters.

Tuble 4. I MBD for emome test parameters.							
	fathead min	now growth	C. dubia rep	oroduction			
	Lower bound Upper bound		Lower bound	Upper bound			
PMSD	12 30 16.5		13	47			
(% Minimum significant difference)			23.	3			

Client: Linkan Engineering CO-0001244 SCG Project No.: 525317.B Site: 001A Project: Quarterly WET

#### DISCUSSION

A failed test for this discharge occurs when there is a statistical difference and LC<sub>25</sub> less than the IWC (Instream Waste Concentration) of 100%. The LOEL represents the lowest effluent concentration at which a statistically significant effect is observed. The LC<sub>25</sub> represents an estimate of the effluent concentration that would cause a 25 percent reduction in survival. Since there was no statistically significant differences meeting this criterion, the effluent passes WET (Whole Effluent Toxicity) testing for this sampling period.

#### REFERENCES

- 1. **Hach Chemical Company.** 2008. *Hach's Water Analysis Handbook*. Fifth Edition. Hach Chemical Company, Loveland, Colorado. Digital Medium.
- 2. **APHA/AWWA/WEF.** 1998. *Standard Methods for the Examination of Water and Wastewater*. 20<sup>th</sup> Edition. American Public Health Association, Washington, D.C.
- 3. **USEPA.** 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA-821-R-02-013. 335 pp.
- 4. **CDPHE** (Colorado Department of Public Health and Environment). 1998. *Laboratory Guidelines for Conducting Whole Effluent Toxicity Tests.* Water Quality Control Division.
- 5. **USEPA.** 2000. Method of Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136). EPA/821/B-00/004.
- 6. **USEPA**. 2000. Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the National Pollutant Discharge Elimination System Program. EPA/833/R-00/003.

Client: Linkan Engineering CO-0001244 SCG Project No.: 525317.B Site: 001A Project: Quarterly WET

**Appendix 1 – Chain of Custody with Sample Receipt Forms** 

Client: Linkan Engineering Site: 001A SCG Project No.: 525317.B Project: Quarterly WET CO-0001244

CO-0001244

SCG Project No.: 525317.B Project: Quarterly WET

	SeaCrest Group Louisville, CO	. B	ample R	eceipt F	orm		Effectiv	Form #: 42 e: January 2024
	Project # 525	B			Sample	#-		
	Date: 010 23 2-S	. 0		-	Initials:	"HT		
	Samples Were:			_				
	1. FedEx UPS Notes:		Courier	(	Hand De	elivery	(circle	one)
	2. Chilled to Ship					Ambie	nt Chilled	
	Cooler Received Broke     Notes:	en or Leaking				Υ	N	NA
	Sample Received Brok     Notes:	en or Leaking	L			Υ	N	
	5. Received Within 36hr Notes:	Holding Time				Y	N	
	6. Aeration necessary					Υ	$\widehat{\mathbb{N}}$	
	7. pH adjustment necess	ary				Υ	(N)	
	8. Sample Received at Te Notes: Samu			°C.		Υ	N	NA
	9. Description of Sample Effluent: () (600	(Color, Odor, a	and/or Pre	sence of	Particulate	e Matter)	:	
	Receiving: Ŋ ₽ Presence of na					Υ	N	
525	Lab # Temp D.0	-	Cond					
	Custody Seals:							
	1. Present on Outer Packa	3 -		Υ	N)			
	2. Unbroken on Outer Pac	kage		Υ	N	(NA)		
	<ol><li>Present on Sample</li></ol>			Υ	N			
	<ol><li>Unbroken on Sample</li></ol>			Υ	N	NA		

SeaCrest Group 12

Ν

Custody Documentation (Chain of Custody):

1. Present Upon Receipt of Sample

SCG Project No.: 525317.B

Site: 001A **Project: Quarterly WET** (303) 661.9324 - FAX (303) 661.9325 500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027 Total Volume Other (List Below) @ linken.com @ linkan.com Number of Containers state. 6.95 Received By (2) Daphnia magna Daphnia pulex Other Analysis (List Below) applicable) adam. billin peter. hays a BOD/COD (Circle) Coliform (Total/Fecal/E-Coli) (Circle) Analysis (Check all Oil and Grease Chromium III/VI (Circle) Date/Time (wol98 tziJ) snoinA Solids (TS/TDS/TSS) (Circle) Relinquished By (2) Metals (List Below) Email results Cerio daphnia WET: PTI/TIE/TRE (Indicate Below) CHAIN OF CUSTODY Se WET: Accelerated (Indicate Below) WET: Chronic (Indicate Below) Test Species: Teathead Minnow Special Instructions/Comments: WET: Acute (Indigate Below) \$25**3**1子。B# Schryavewaldo Min E-Mail: alex. schwiebetchia 1980 Lab ID Received By (1) Comp Comp Grab/ Sampler: Sryan 9071 Time FAX 1-2 Day 6-9 Day Client/Project Name: Linkow Turnaround Requirements (Analytical Testing Only) Date PDF X Relinquished By (1) Standard (10 days) Sample Location or ID 27.30 Mail Requested Report Date: P. O./Project Number: Alex 3-5 Day

SeaCrest Group 13

Phone # **719** 

Address: Contact:

Report By:

Fax #

SCG Project No.: 525317.B Project: Quarterly WET

Seat	Crest Grou	ıρ
Louis	sville, CO	
	*******	

# Sample Receipt Form

Form #: 42 Effective: January 2024

Project # Date: Samples 1. FedEx	062425 Were:		Courier		Sample # Initials:	EI	(circle c	one)
2. Chilled	to Ship					Ambien	t Chilled	
3. Cooler	Received Notes:	Broken or Leaking				Υ		NA
4. Sample	e Received Notes:	d Broken or Leaking				Y	(N)	
5. Receive	ed Within Notes:	36hr Holding Time				ÿ	N	
6. Aeratio	n necessa	ary				Υ	(N)	
7. pH adju	ustment ne	ecessary				Υ	N	
8. Sample	Received Notes:	d at Temperature be Me day	tween 0-6° C			Υ	N	NA
	otion of Sa Effluent:\ Receiving	mple (Color, Odor, a dw fine fm I:N/A	and/or Prese	nce of I	Particulate	Matter):		
		of native species:				Υ	(N)	

Lab#	Temp	D.O.	рН	Cond
317,842	10.5	7.2	7.8	158

# **Custody Seals:**

1. Present on Outer Package	Υ	(A)	
2. Unbroken on Outer Package	Y	N	NA
3. Present on Sample	Υ	OD	
4. Unbroken on Sample	Υ	N	NA

# Custody Documentation (Chain of Custody):

1. Present Upon Receipt of Sample

Q N

2

SCG Project No.: 525317.B Project: Quarterly WET

Client: Linkan Engineering Site: 001A

661.9325				S	ajners			odmuN V lstoT	x 292	>				ist Below)					Date/Time
(303) 661.9324 - FAX (303) 661.9325	Analysis (Check all applicable)	(ələ)	oviO) (Ciro		(	Tal/F	oT) m	Oil and Colifori Other A						Daphnia magna Daphnia pulex Other (List Below)	chris prosperalintan-com	adam billing Intan-com	DENO. MAYS & STATE. CO. US	Received by (2)	Signature Dat
	s (Check			(a			975	snoinA mo1dD			-			nia magna	s-pras	1.0. n	·nal		ime
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	line	)		NV 89861	E-Mail: alex. schwieber bintenca	Acordo	2000	Lab ID (LAB Use Only)	525317.BHS					Test Species: Teathead Minnow	actions/Comme	5 4			Date/Time
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	-	-	wiebut		E-Mi	Sam	N POF	Date	C/25/25					quirements					Time Signature
ENVIRONMENTAL SERVICES CHOOKATORY	Client/Project Name: ( in Cay)	Number:	Contact: Alex Schwiebert	Address: 2720 Ruby Vista	Phone #735-357-(3-74)		Mail	ation or ID	00/4					Turnaround Requirements (Analytical Testing Only)	Standard (10 days)	ay	port Date:	(T) Ag nausinhuiau	Date/Time
	lient/Project	P. O./Project Number:	ontact:	Address: 2;	Hone #7	Fax #	Report By:	Sample Location or ID	Juffall					4	Stand	3-5 Day	Kequested Keport Date:	Vellu	Signature

CO-0001244

SCG Project No.: 525317.B Project: Quarterly WET

Υ

SeaCrest Louisville,		Sa	mple Receipt F	orm		Effective: J	Form #: 42 anuary 2024
Project # Date: Samples 1. FedEx	06252 Were:		Courier	Sample : Initials:	EW	(circle or	_ _ ne)
	Notes:			Tidild Bo		(011010)	10)
2. Chilled	to Ship				Ambient	Chilled	
3. Cooler	Received Notes:	Broken or Leaking			Υ	N	NA
4. Sample	e Received Notes:	Broken or Leaking			Υ	(N)	
5. Receiv	ed Within 3 Notes:	36hr Holding Time			(F)	N	
6. Aeratio	n necessa	ry			Υ	N	
7. pH adjı	ustment ne	ecessary	*		Υ	N	
8. Sample		at Temperature bet	ween 0-6° C .		Υ	N	NA
9. Descrip	otion of Sar Effluent:C	mple (Color, Odor, a	nd/or Presence of	Particulate	Matter):		

Temp	D.O.	pН	Cond
10.8	7.8	7.8	151
	Temp	Temp D.O.	Temp D.O. pH

Presence of native species:

Receiving:N/A

#### **Custody Seals:**

cucion, coulo.			
1. Present on Outer Package	Υ	(N)	
2. Unbroken on Outer Package	Υ	Ň	NA
3. Present on Sample	Υ	N	
4. Unbroken on Sample	Υ	N	NA

# Custody Documentation (Chain of Custody):

Present Upon Receipt of Sample
 N

Client: Linkan Engineering CO-0001244 SCG Project No.: 525317.B Site: 001A Project: Quarterly WET

Appendix 2 – Data Sheets for the Ceriodaphnia dubia Test

**Client: Linkan Engineering** 

CO-0001244

SCG Project No.: 525317.B Site: 001A **Project: Quarterly WET** 

# WET TEST REPORT FORM – CHRONIC

**Permittee:** Linkan Engineering-Schwartzwalder Mine

**Permit No.:** CO-0001244

**Outfall:** 001A – IWC: 100%

**Test Type:** Routine | Accelerated Screen

**Test Species:** Ceriodaphnia dubia

Test Start Time	Test Start Date	Test End Time	Test End Date
1145	06-24-2025	1205	06-30-2025

Test Results	Lethality/TCP3B	Reproduction/TKP3B
S code: LOEL	100%	100%
	PASS	N/A
P code: LC <sub>25</sub> /IC <sub>25</sub>	84.5%	84.2%
	PASS	N/A
T code:	100%	100%

**Test Summary** 

		1 000 0	umma y			
Measurements	Control (0%)	20%	40%	60%	80%	100%
Exposed organisms	10	10	10	10	10	10
Survival for day 1	10	10	10	10	10	10
Survival for day 2	10	10	10	10	10	6
Survival for day 3	10	10	9	10	10	2
Survival for day 4	10	10	9	10	10	0
Survival for day 5	10	10	9	10	10	0
Survival for day 6	10	10	9	10	10	0
Mean 3 Brood Total	25.3	28.5	24.9	25.3	26.3	0.4

Hardness (mg/L) – Receiving Water: N/A Effluent: 0/0/2 Recon Water: 96 Alkalinity (mg/L) – Receiving Water: N/A Effluent: 75/79/85 Recon Water: 62

Chlorine (mg/L) – Effluent: <0.01/<0.01/0.02 pH (initial/final) – Control: 7.9/8.3 100%: 7.8/7.8

Total Ammonia as NH<sub>3</sub> (mg/L) - Effluent: 0.03/<0.03/<0.03

Were all Test Conditions in Conformance with Division Guidelines? YES NO

If **NO**, list deviations from test specifications: N/A

Laboratory: SeaCrest Group

Comments:

Analyst's Name: Haley West, Cat Cash, Hannah Tiede, and Katie Maranowski

Signature *Date* July 2, 2025

**Client: Linkan Engineering** 

Site: 001A

SCG Project No.: 525317.B Project: Quarterly WET CO-0001244

0 0 0 0 5 0 10 10 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SeaCre Louisvil	est Group lle, CO		C	eriodaphnia	a Chronic B	enchsheet			Form #: 1 e: March 2	
We share   100   Template #: 5   Dilution Water: M.H. 26   N.H. Sample Date: 106   336   N.H. Sample Date: 106   N.H.	Permitte	e liv	IKAN Er	men	cina	Lah#: 57	5317. R	Site	DOLA		
Test Conditions:    197   0/201436   Test Start (1/201436   1146   Test End (1/201436   Test End (1/201436					Dilution	Water: NALL	36-6111	Sample Date:		16	-
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SeaCrest Group 19

SCG Project No.: 525317.B Project: Quarterly WET CO-0001244 Site: 001A

SeaCre: Louisvill	st Group le, CO		C	eriodaphnia	Chronic B	enchsheet				Form #: 10 : March 20	
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H <sub>2</sub> O	1/2 /	3	- 6	2	3	3	-				
Initials	KM	KM	CC	HW	HT	KM	K	M			
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Hardness		0		0		7		96		1	
Alkalinity		75		9	7	5	-	102		4	
Chlorine		0.01	20.	-	0.	02	_	20.01	,		
Ammonia		0.03	20.	0.3		0.03		20.03	5	J	
Total C	ure Cham apacity: 3 ion Volum	0mL	Feeding Sch Fed dail Food used: YC	у		DO: mg/L Temp: °C pH: N/A Cond: μS/cm <sup>3</sup>	Alka Chlo	ness: mg/L linity: mg/L orine: mg/L nonia: mg/L			
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SeaCrest Group **20** 

CC

**Client: Linkan Engineering** 

**Site: 001A** 

Report Date: 30 Jun-25 15:55 (p 1 of 1) **CETIS Analytical Report** 525317cd / 11-5089-2388 Test Code/ID: Ceriodaphnia 7-d Survival and Reproduction Test SeaCrest Group Analysis ID: 06-7225-8130 Endpoint: 7d Survival Rate **CETIS Version: CETIS v2.1.6** Analysis: STP 2xK Contingency Tables 30 Jun-25 15:54 Status Level: Analyzed: MD5 Hash: 26D148ECA29703B9A09023057D92E2A4 000-346-492-2 Edit Date: 30 Jun-25 0:00 Editor ID: Batch ID: 19-1490-5435 Test Type: Reproduction-Survival (7d) Analyst: Mod-Hard Synthetic Water Protocol: EPA/821/R-02-013 (2002) Diluent: Start Date: 24 Jun-25 Ending Date: 30 Jun-25 Species: Ceriodaphnia dubia Brine: Not Applicable In-House Culture Branchiopoda Source: Test Length: 6d 0h Taxon: Age: TOEL Tox Units **Data Transform** NOEL LOEL C > T 100 89.44 1.2 Untransformed Fisher Exact/Bonferroni-Holm Test Control Conc-% Test Stat P-Type P-Value Decision(a:5%) Dilution Water 1.0000 1.0000 Non-Significant Effect 20 Exact Non-Significant Effect 0.5000 1.0000 40 Exact 60 1.0000 Exact 1.0000 Non-Significant Effect 80 1.0000 1.0000 Non-Significant Effect Exact Significant Effect 100\* 0.0000 Exact 2.7E-05 Test Acceptability Criteria **TAC Limits** Attribute Test Stat Lower Upper Overlap Decision Control Resp Passes Criteria 0.8 Yes >> 7d Survival Rate Frequencies Conc-% Code NR R NR + R Prop NR Prop R %Effect 0 10 0 1.0000 0.0000 0.00% 10 0.00% 0.0000 20 10 0 10 1.0000 40 9 10 0.9000 0.1000 10.00% 60 10 0 10 1.0000 0.0000 0.00% 1.0000 0.0000 0.00% 80 10 0 10 100.00% 0 10 0.0000 1.0000 100 10 7d Survival Rate Summary CV% Conc-% Code Count Mean 95% LCL 95% UCL Median Min Max Std Err %Effect 0 1.0000 1.0000 1.0000 1.0000 0.0000 0.00% 0.00% D 10 1.0000 1.0000 20 10 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000 0.00% 0.00% 1.0000 1.0000 0.0000 0.1000 35.14% 10.00% 40 10 0.9000 0.6738 1.0000 60 10 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000 0.00% 0.00% 1.0000 80 10 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.0000 0.00% 0.00%

Convergent Rounding (4 sf)

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CETIS™ v2.1.6.2 x64 (000-346-492-2)

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Analyst: EW QA:

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SCG Project No.: 525317.B

**Project: Quarterly WET** 

**Client: Linkan Engineering** SCG Project No.: 525317.B CO-0001244 **Site: 001A Project: Quarterly WET** 

100.00% 0/10

CETIS	S Ana	lytical Repo	ort					Report Test Co		3	30 Jun-25 15: 525317cd / 1		
Ceriod	aphnia	7-d Survival and	d Reproduc	ction Test								SeaC	rest Group
Analys		00-9292-1898		•	Survival Rate					IS Version		s v2.1.6	- 7
Analyz		30 Jun-25 15:54		•	near Interpola					us Level:	1		
Edit Da	ate:	30 Jun-25 0:00	MDS	Hash: 26	D148ECA297	703B9A0902	23057D9	2E2A4	Edito	or ID:	000-34	46-492-2	
Batch	ID:	19-1490-5435	Test	Type: Re	eproduction-S	urvival (7d)			Anal	yst:			
Start D	ate:	24 Jun-25	Prot	tocol: EF	PA/821/R-02-0	013 (2002)			Dilue	ent: Mo	d-Hard Sy	nthetic Wate	
Ending	Date:	30 Jun-25	Spe	cies: Ce	eriodaphnia di	ubia			Brine	e: No	t Applicab	le	
Test Le	ength:	6d 0h	Taxo	on: Br	ranchiopoda				Sour	rce: In-l	House Cul	ture	Age:
Linear	Interpo	lation Options											
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	CL M	ethod					
Linear		Linear	2140	0199	1000	Yes	Τ\	wo-Poin	t Interp	olation			
Test A	cceptal	oility Criteria	TAC L	imits									
Attribu	te	Test Stat	Lower	Upper	Overlap	Decision							
Control	Resp	1	0.8	>>	Yes	Passes Cr	riteria						
Point E	Estimat	es											
Level	%	95% LCL	95% UCL	Tox Unit	ts 95% LCL	95% UCL							
LC15	82.41	81.11	83	1.2	1.2	1.2							
LC20	83.45	82.22	84	1.2	1.2	1.2							
LC25	84.48	83.33	85	1.2	1.2	1.2							
LC40	87.59	86.67	88	1.1	1.1	1.2							
LC50	89.66	88.89	90	1.1	1.1	1.1							
7d Sur	vival R	ate Summary				Calculated	Variate	(A/B)				Isoto	nic Variate
Conc-9	%	Code	Count	Mean	Median	Min	Max	C١	/%	%Effect	ΣΑ/ΣΒ	Mean	%Effect
0		D	10	1.0000	1.0000	1.0000	1.0000	0.0	00%	0.00%	10/10	1.0000	0.00%
20			10	1.0000	1.0000	1.0000	1.0000	0.0	00%	0.00%	10/10	1.0000	0.00%
40			10	0.9000	1.0000	0.0000	1.0000	35	.14%	10.00%	9/10	0.9667	3.33%
60			10	1.0000	1.0000	1.0000	1.0000	0.0	00%	0.00%	10/10	0.9667	3.33%
80			10	1.0000	1.0000	1.0000	1.0000	0.0	00%	0.00%	10/10	0.9667	3.33%

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Convergent Rounding (4 sf)

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CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst:\_EW QA:\_\_\_\_

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100.00%

**Client: Linkan Engineering** 

**Site: 001A** 

SCG Project No.: 525317.B CO-0001244 **Project: Quarterly WET** 

CETIS Ana	lyti	cal Repo	rt							eport Datest Code			lun-25 15:5 5317cd / 11	
Ceriodaphnia	7-d	Survival and	l Repro	duc	tion Test								SeaCr	est Group
Analysis ID: Analyzed: Edit Date:	30 J	0611-3581 un-25 15:54 un-25 0:00	A	nal	ysis: No	production nparametric- EF43253810			6C4	CETIS V Status L Editor II	evel:	CETIS v2 1 000-346-4		
Batch ID: Start Date: Ending Date: Test Length:	24 J 30 J		F	rote	cies: Ce	production-S A/821/R-02- riodaphnia d anchiopoda	013 (2002)			Analyst: Diluent: Brine: Source:	Mod Not	-Hard Synth Applicable ouse Culture		Age:
Data Transfor	rm		Alt Hy	p				NOEL	LOE	L T	OEL	Tox Units	MSDu	PMSD
Untransformed			C > T					80	100	89	9.44	1.2	5.885	23.26%
Steel Many-O	ne R	ank Sum Te	st											
Control	vs	Conc-%		df	Test Stat	Critical	Ties	P-Type	P-Va	alue D	ecision(	α:5%)		
Dilution Water		20 40 60		18 18 18	119 111.5 108	75 75 75	2 4 3	CDF CDF	0.98 0.94 0.89	03 N	on-Signi	ficant Effect ficant Effect ficant Effect		
- 6	80 100*		18	113 55	75 75	1 0	CDF CDF	0.95	48 N		ficant Effect	)		
Test Accepta	bility	Criteria	TA	C Li	mits									
Attribute		<b>Test Stat</b>	Lower		Upper	Overlap	Decision							
Control Resp PMSD		25.3 0.2326	15 0.13		>> 0.47	Yes Yes	Passes Cr Passes Cr							
ANOVA Table	)													
Source		Sum Squa	res		Mean Sq	uare	DF	F Stat	P-Va		ecision(			
Between Error Total		5572.08 1784.1 7356.18			1114.42 33.0389		5 54 59	33.73	<1.0	E-05 S	ignifican	t Effect		
ANOVA Assu	mpti	ons Tests												
Attribute		Test					Test Stat	Critical	P-Va	alue D	ecision(	α:1%)		
Variance Bartlett Equality of Shapiro-Wilk W N							39.62 0.8851	15.09 0.9459	<1.0 3.9E			/ariances nal Distributio	on	
Reproduction	n Sur	nmary												
Conc-%		Code	Count		Mean	95% LCL	95% UCL	Median	Min	N	lax	Std Err	CV%	%Effect
0		D	10		25.3	20.69	29.91	24.5	16	3		2.039	25.48%	0.00%
20			10		28.5	26.28	30.72	29	23	3	2	0.9804	10.88%	-12.65%
40			10		24.9	17.53	32.27	27	0	3	9	3.257	41.37%	1.58%
60			10		25.3	21.5	29.1	26	16	3	1.0	1.68	21.00%	0.00%
			40		26.3	23.84	28.76	27	20	-		1.086	13.06%	-3.95%
80			10		26.3	23.04	20.70	0	0	3		0.3055	241.52%	98.42%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

**Client: Linkan Engineering** 

SCG Project No.: 525317.B **Site: 001A Project: Quarterly WET** 

CETIS	S Ana	lytic	cal Repo	rt						Report Test Co				55 (p 2 of 2) 1-5089-2388
Ceriod	aphnia	7-d S	Survival and	Reproduc	tion Tes	st						s	eaC	rest Group
Analys			463-6412			Reproduction					S Version:	CETIS v2.1.6		
Analyze Edit Da			un-25 15:54 un-25 0:00			Linear Interpolat 01EF432538107			67455C4		us Level: or ID:	1 000-346-492-2		
Batch I	ID:	19-14	490-5435	Test	Type:	Reproduction-S	urvival (7d)			Anal	yst:			
Start D	ate:	24 Ju	un-25	Prof	ocol:	EPA/821/R-02-0	13 (2002)			Dilue	ent: Mod-	Hard Synthetic W	/ater	
Ending	Date:	30 Ju	un-25	Spe	cies:	Ceriodaphnia du	ıbia			Brine	e: Not /	Applicable		
Test Le				Taxe		Branchiopoda				Sour	rce: In-Ho	ouse Culture		Age:
Linear	Interpo	olatio	n Options						- 41					
X Trans	sform	Υ	Transform	See	d	Resamples	Exp 95%	CL	Method					
Linear		L	inear	1118	5090	1000	Yes		Two-Poi	nt Interp	olation			
Test A	cceptal	oility	Criteria	TAC L	imits									
Attribu	ite		Test Stat	Lower	Upper	Overlap	Decision							
Control	Resp		25.3	15	>>	Yes	Passes Cr	riteria	Ę.					
Point E	Estimat	es												
Level	%		95% LCL	95% UCL	Tox Ur	nits 95% LCL	95% UCL							
IC15	82.1		38.35	83.07	1.2	1.2	2.6							
IC20	83.17	7	80.62	84.09	1.2	1.2	1.2							
IC25	84.24	1	81.86	85.12	1.2	1.2	1.2							
IC40	87.46	3	85.58	88.19	1.1	1.1	1.2							
IC50	89.6		88.07	90.24	1.1	1.1	1.1							
Repro	duction	Sum	ımary				Calculat	ed V	ariate			Is	oton	nic Variate
Conc-9	%		Code	Count	Mean	Median	Min	Max	x C	V%	%Effect	Mea	n	%Effect
0			D	10	25.3	24.5	16	34	2	5.48%	0.00%	26.9	0	0.00%
20				10	28.5	29	23	32	10	0.88%	-12.65%	26.9		0.00%
40				10	24.9	27	0	39	4	1.37%	1.58%	25.5		5.20%
60				10	25.3	26	16	35	2	1.00%	0.00%	25.5	0	5.20%
									200		0.000	05.5		E 000/

31

13.06% -3.95%

241.52% 98.42%

26.3

0.4

10

Convergent Rounding (4 sf)

100

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA:

25.5

0.4

5.20%

98.51%

Client: Linkan Engineering CO-0001244 SCG Project No.: 525317.B Site: 001A Project: Quarterly WET

Appendix 3 – Data Sheets for the Fathead Minnow Test

CO-0001244 SCG Project No.: 525317.B Site: 001A **Project: Quarterly WET** 

١	WET	TEST	<b>REPORT</b>	FORM _	CHRONIC
١	WEL	IESI	KEPUKI	FUKNI –	·CHKUNIC

**Permittee:** Linkan Engineering-Schwartzwalder Mine

**Permit No.:** CO-0001244

**Outfall:** 001A - IWC: 100%

**Test Type:** Routine | Accelerated Screen

**Test Species:** fathead minnow

Test Start Time	<b>Test Start Date</b>	Test End Time	Test End Date
1620	06-23-2025	1520	06-30-2025

Test Results	Lethality/TCP6C	Growth/TKP6C
S code: LOEL	>100%	100%
	PASS	N/A
P code: LC <sub>25</sub> /IC <sub>25</sub>	99.5%	87%
	PASS	N/A
T code:	>100%	100%

**Test Summary** 

Measurements	Control (0%)	12.5%	25%	50%	75%	100%
Exposed organisms	40	40	40	40	40	40
Survival for day 1	40	40	40	40	40	40
Survival for day 2	40	40	40	40	40	40
Survival for day 3	40	40	40	40	40	39
Survival for day 4	40	39	40	39	39	38
Survival for day 5	40	38	40	39	39	33
Survival for day 6	40	38	39	39	39	30
Survival for day 7	39	38	39	39	39	29
Mean Dry Wt. (mg)	0.587	0.586	0.565	0.562	0.553	0.233

Effluent: 0/0/2 Recon Water: 100 Hardness (mg/L) – Receiving Water: N/A Alkalinity (mg/L) – Receiving Water: N/A Effluent: 75/79/85 Recon Water: 63 Chlorine (mg/L) – Effluent: pH (initial/final) – Control: 8.1/7.6 100%: 7.9/7.8

< 0.01/< 0.01/0.02

Total Ammonia as NH<sub>3</sub> (mg/L) -Effluent: 0.03/<0.03/<0.03

Were all Test Conditions in Conformance with Division Guidelines? YES NO

If **NO**, list deviations from test specifications: N/A

Laboratory: SeaCrest Group

Comments:

Analyst's Name: Cat Cash, Ethan White, and Hannah Tiede

Signature *Date* July 2, 2025

103a 202																														_		_			_	_	
Form #: 103a : March 202		Ave wt	4	PS,		6	30	2.	1	50	3		2	9	5		5	Ñ	5		E,	3	2	-				١									
Form #: 103a Effective: March 202	540-	Fish Wt mg	hhor d	080	544	0.00	100	かれ	JA.	1860	1558	12461	010	1500	1527	1580	1001	.501	DS41	300	1229	0.15	304	0.43				1									
	1425	Tare F	1840TO,	DPSTTO,	,07634i	,0000S	Jhahso.	1,01274	00000	0.755 1	01940	.07484	005800	,07912	)[E0]OQ.	,010101U	.00 <del>6</del> 00	,07055	.08230	.0708IK	07240	.07034	1,07193	, 060g32				i Gina	10,00								
	Dilution H <sub>2</sub> O: MH2S - 043	Fish & Tare		-	-	-	-	0786	00000 The Octo	081341.07551	08498	-	074601.06850	08438	07/53 1	12851	1.07101	J. 27550,	1,08821	1849101	1074691		10750.	·01875					10001167+90								
	Dilutic	# Fis	# 5	#3	#4	#2	9#	4	9 9	#10	#11	#12	#13 1,	#14	#15	0 #16 1.	#17	#18	#19 1	#20	#21 1	#22	#23	V #24 1	#	#	# :	#	#	Comments:							
	Qitions:	9	0		001			7	F ?	_		0	01 01	01 01	6 6	21 01	10 10	01 01	6 6	10 10	5	20	0 01	9	Н	+	+	-	Isalaid	Comm							П
	IWC: 100	5	0100	00	0 0	010	6	2 0	0	000	010	010	0.10	010	9 9	0/10	0110	010	1 9	0110	00	B	0	5		4	7	1		Ī	Hard: mg/L	Alk: mg/L	Chlor: mg/L NH <sub>2</sub> : mg/L				П
sheet	325 IV	3	0	0 0	-	101		2 4		20	0	,0,	101	101	10	101	10	101	100	101	1 01	10 0	-	9			1	1		Units:		AK:	Chlor				П
Sench	Olo 12		01 01		1010	10 10	7	-	9 9	1-	010	010	010	1010	01 0	01 01	01 0	01 0	10 10	01 07	01 01	010	01 01	010	$\mathbb{H}$	+	+	+		5	DO: mg/L	Temp: °C	PH: N/A				
onic E	Sample Date: Oul	0	9 9	9 0	10			9	2 6	+	9	10	10	10	10	10	10	10	10	10	10			10	10	9	9	2			8	Ten	PH C				
/ Chrc	Sampl 75	~	0.58			0.8	250	2	0.47	70	1.7		4.8	H32-	し、こ		14.7	1.35.4	7.8		4.6	1254	7.8						T#		500 mL	250 mL	50.2 cm		lay	emia	
Fathead Minnow Chronic Benchsheet	0.1	9	8.71 2.	200	314	6.0) 4.	7.	900		12		3	57.1	1 25.2	.8 8.	70	S. 7 3.	LS. 7 25.4	8	99	4.62.4	2	98.0	63		-		1		ا ا		250	20.2		2x per day	<24hr artemia	
ead M	253(7)	-	789	3-		7	S	2.0	7		00	2	h 9	.025.1	7.87.	2	,8 4,	5.1 28	4	4		5.375.1	1			+	+	ſ	1	Chambe				Feeding Schedule			
Fath	Lab #: 525 Species Info:	2	4.26	40	311	1.37	2	0,0	4 4 3	675.274.8	4 47	239	1.57	25.2.25	4.77	210	· 6 7	25.32	7.8.7		1.78.1	-22	7.8 7	150	-	+	-	i	¥ ~	Exposure Chamber		me:	Test Solution Surface Area: Water Depth (constant):	Feed		ö	
			8.9	800	9	10.E	4	1 8 -	776	24.67	8 0		7.44	5	7.9			-	$\overline{}$	_	$\overline{}$	$\rightarrow$	60		1	1	1	t		ſ		Test Solution Volume:	Test Solution Surface A Water Depth (constant):		Fed:	Food Used:	1
	SES SES	4	4.3		30	4.7	25.0	7-4-18	4.60	75.0.24	44	233	4.51	25.024	7.87	206	ナナ	15.0 24.4	7.87.8	18	4.3	25.0 24.3	7.87	151		7	7	d	74	1	Total Capacity:	Test Solu	Fest Solu Nater De	7	٦		П
	Site:	3	00 -	1_	14	1.0	方	O. 88	0 1	147	0.6	38	7.5	1.4.7	7.9	90	7-8	1.47	1.80	14			4.8	6				1	36	MR			Í	9	>	Ŧ.	Ţ
	Xe30		14.4 6		31	7	古	200	4	3 746	4	7	4.5	124.7	44	20	4.5	74.	57.8.7	٦	4	21	4	- 4	4	1	$\perp$		20	Rcv 3	-		$\perp$	5	>	<u>₹</u>	11 2
	(IND)	2	4969	7.881	316	87.0	9 29.	700	がだけ、	3,420	7.879	270	いたしか	25.0 25	7.87.8	216	1.40	125.	2 t 8	87	2-1-9	125	7.77.6.3.0	28		-	-		N/	1 Rcv 2	L	4	$\perp$	4		1	EN EW
	JEE STEE	Н	4 1 74	0.	,	1.04	1.324		7	1425	4		34				44.6	4.628	4	1	5	4.8 25	7	1	+	+	+	f	+	con Rcv	00	w:	103	2 3	$\overline{}$		EW FY
dno	LOW GROWNERING	-	p.9 6.4	7.68	320	4.3 7.04.87.0	7 6 7	1680	4.7.7	24.5 24.4 25.074.8	7.67	240	4.07.3	24.5 24.5	7.7.7.8	714	3.97	24.5.24.625.125	7.4.7	83	03.87.54.67.2	45 2	7.7.7.7	157	+	+	-	14/3	3-	Eff 3 Recon Rcv 1 Rcv 2	2 12	25.00	200	-	-	Ž >	>
SeaCrest Group Louisville, CO	YOU	0	126	: -:-	513	5	70	-0	$\mathbf{r}$	1.16	0	9	7.5	24.	2.0	73	2.60	27.72	7	8	4	3	0.0	200	+	+	$\dagger$	12	}-	Eff 2	0	29	0.03 60 00 60 01	0	H	7	3
Sea	Client: UN LOW GRANDE CLINO Test Start: () (17875-1171) Test End:	Conc Read	DO	표	73		Temp		8	Temp		Cond 2				Cond	9	Temp	표	70	8	Temp	표	ъ	8	d :	E C	nitiale /	Water #	1_	0	15	200	Feeding	AM	PM	<b>"</b>
	Clier	Con	6	$\sim$			2	3		111	5			9	)		8	<	)			8	3					2	Wa		Hard	¥	Chlor NH3	Fee			Ē

**Client: Linkan Engineering** 

**Site: 001A** 

CO-0001244 SCG Project No.: 525317.B **Project: Quarterly WET** 

CETIS Ana	lyti	ical Repo	ort							Report est Co	Date: ode/ID:			Jul-25 12:3 317fhm / 14	
Fathead Minn	ow 7	7-d Larval S	urviva	l and	Growth 7	Test								SeaCı	rest Group
Analysis ID: Analyzed: Edit Date:	01 .	4636-1892 Jul-25 12:34 Jul-25 0:00		Anal	lysis: N	d Survival Rat lonparametric 178D78A35C	-Control vs 7			State	IS Versi us Level or ID:	l: 1	IS v2 -346-4		
Batch ID: Start Date: Ending Date: Test Length:	23 . 30 .			Prot	ocol: E	Frowth-Surviva PA/821/R-02- imephales pro ctinopterygii	013 (2002)		000	Anal Dilue Brine Sour	ent: I	Mod-Hard Not Applica	able		Age:
Data Transfor	rm		Alt F	Нур				NOEL	LO	EL	TOEL	Tox	Units	MSDu	PMSD
Angular (Corre	ected	)	C > T	Г				100	>10	00		1		0.1507	15.46%
Steel Many-O	ne R	ank Sum Te	est	,											
Control	vs	Conc-%		df	Test Sta	at Critical	Ties	P-Type	P-V	'alue	Decisi	ion(α:5%)			
Dilution Water		20		6	16	10	2	CDF	0.6	105	Non-S	ignificant E	ffect		
		40		6	18	10	2	CDF		333		ignificant E			
		60		6	18	10	2	CDF		333		ignificant E			
		80		6	18	10	2	CDF		333		ignificant E			
		100		6	12.5	10	1	CDF		834		ignificant E			
Test Accepta	bility	Criteria	т	AC Li	imits										
Attribute		Test Stat			Upper	Overlap	Decision								
Control Resp		0.975	8.0		>>	Yes	Passes C	riteria						77	
ANOVA Table	,														
Source		Sum Squa	ares		Mean S	quare	DF	F Stat	P-V	'alue	Decisi	ion(α:5%)			
Between		0.337039			0.06740	78	5	3.596	0.0	198	Signifi	cant Effect	9		
Error		0.337422			0.01874	57	18				-				
Total		0.674461					23	_							
ANOVA Assu	mpti	ons Tests													
Attribute		Test					Test Stat	Critical	P-V	'alue	Decisi	ion(α:1%)			
Variance		Bartlett Ed	uality (	of Var	riance Tes	st	9.263	15.09	0.0	990	Equal	Variances			
Distribution		Shapiro-W	/ilk W I	Norma	ality Test		0.8289	0.884	0.0	009	Non-N	lormal Dist	ributio	on	
7d Survival R	ate S	Summary													
Conc-%		Code	Cour	nt	Mean	95% LCL	95% UCL	Median	Mir	1	Max	Std E	Err	CV%	%Effect
0		D	4		0.9750	0.8954	1.0000	1.0000	0.9	000	1.0000	0.025	50	5.13%	0.00%
20			4		0.9500	0.8581	1.0000	0.9500	0.9	000	1.0000	0.028	39	6.08%	2.56%
40			4		0.9750	0.8954	1.0000	1.0000	0.9	000	1.0000	0.025	50	5.13%	0.00%
60			4		0.9750	0.8954	1.0000	1.0000	0.9	000	1.0000	0.025	50	5.13%	0.00%
80			4		0.9750	0.8954	1.0000	1.0000	0.9	000	1.0000	0.025	50	5.13%	0.00%
100			4		0.7250	0.3722	1.0000	0.7000	0.5	000	1.0000	0.110	09	30.58%	25.64%
Angular (Cori	ecte	d) Transfor	med S	umm	ary										
Conc-%		Code	Cour	nt	Mean	95% LCL	95% UCL	Median	Mir	1	Max	Std E	rr	CV%	%Effect
0		D	4		1.3710	1.2420	1.5010	1.4120	1.2	490	1.4120	0.040	07	5.94%	0.00%
20			4		1.3310	1.1810	1.4800	1.3310	1.2	490	1.4120	0.047	71	7.07%	2.97%
40			4		1.3710	1.2420	1.5010	1.4120	1.2	490	1.4120	0.040	07	5.94%	0.00%
60			4		1.3710	1.2420	1.5010	1.4120	1.2	490	1.4120	0.040	07	5.94%	0.00%
80			4		1.3710	1.2420	1.5010	1.4120	1.2	490	1.4120	0.040	07	5.94%	0.00%
100			4		1.0480	0.6059	1.4890	0.9966	0.7	854	1.4120	0.138	38	26.50%	23.60%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst:\_EW QA:\_\_\_\_\_

0.9750

0.9750

0.7250

1.0000

1.0000

0.7000

0.9000

0.9000

0.5000

1.0000

1.0000

1.0000

5.13%

5.13%

30.58%

0.00%

0.00%

25.64%

39/40

39/40

29/40

**Client: Linkan Engineering** 

80

100

Convergent Rounding (4 sf)

SCG Project No.: 525317.B CO-0001244 **Site: 001A Project: Quarterly WET** 

CETIS	Ana	lyti	cal Repo	rt							rt Date: Code/ID:			34 (p 1 of 2) 4-7334-1503
Fathead	d Minn	ow 7	-d Larval Sเ	ırvival and	Growth	Test							Sea	Crest Group
Analysis	s ID:	06-6	049-6880	End	point: 7	d Survival Rat	e			CE	TIS Version	CETIS	v2.1.6	
Analyze	ed:	01 J	ul-25 12:34	Anal	ysis: I	inear Interpola	tion (ICPIN)	)		Sta	tus Level:	1		
Edit Dat	te:	01 J	ul-25 0:00	MD5	Hash: 5	178D78A35C7	7343330178	2BCC	17BE660	C Edi	itor ID:	000-34	6-492-2	
Batch II	D:	01-7	884-4059	Test	Type: (	Growth-Surviva	I (7d)			Ana	alyst:			
Start Da	ate:	23 J	un-25	Prot	ocol: E	EPA/821/R-02-	013 (2002)			Dile	uent: Mo	d-Hard Syr	thetic Wate	r
Ending	Date:	30 J	un-25	Spec	cies: F	Pimephales pro	melas			Bri	ne: No	Applicable	9	
Test Le				Taxo	on: A	Actinopterygii				So	urce: In-l	House Cult	ure	Age:
Linear I	nterpo	olatio	n Options											
X Trans	form	Υ	Transform	Seed	i	Resamples	Exp 95%	CL	Method					
Linear		L	inear	5792	20	1000	Yes		Two-Po	int Inter	rpolation			
Test Ac	ceptal	bility	Criteria	TAC L	mits									
Attribut	e		Test Stat	Lower	Upper	Overlap	Decision							
Control	Resp		0.975	0.8	>>	Yes	Passes C	riteria						
Point E	stimat	es												
Level	%		95% LCL	95% UCL	Tox Un	its 95% LCL	95% UCL							
LC15	91.49	9	82.25		1.1		1.2							
LC20	95.49	9	84.13		1		1.2							
LC25	99.49	9	85.7		1		1.2							
LC40	>100	and on the last			<1									
LC50	>100				<1									
7d Surv	ival R	ate S	ummary				Calculated	l Varia	ate(A/B)				Isoto	nic Variate
Conc-%	ó		Code	Count	Mean	Median	Min	Max	C	:V%	%Effect	ΣΑ/ΣΒ	Mean	%Effect
0			D	4	0.9750	1.0000	0.9000	1.00	000 5	.13%	0.00%	39/40	0.9750	0.00%
20				4	0.9500	0.9500	0.9000	1.00	000 6	.08%	2.56%	38/40	0.9688	0.64%
40				4	0.9750	1.0000	0.9000	1.00	000 5	.13%	0.00%	39/40	0.9688	0.64%

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst. EW QA:

0.9688

0.9688

0.7250

0.64%

0.64%

25.64%

**Client: Linkan Engineering** 

SCG Project No.: 525317.B **Site: 001A Project: Quarterly WET** 

CETIS Ana	lyti	cal Repo	ort						Report Test Co	de/ID:	5253	317fhm / 14	4-7334-150
Fathead Minn	ow 7	-d Larval S	urvival	and	Growth To	est						SeaC	rest Group
Analysis ID:	17-5	089-0904		End	point: Me	an Dry Biom	ass-mg		CETI	S Version	: CETIS v2	.1.6	
Analyzed:	01 J	ul-25 12:34			-	rametric-Cor				ıs Level:	1		
Edit Date:	01 J	ul-25 0:00		MD5	Hash: C2	529A1E8077	70A100269D	EC1F3601	14B Edito	or ID:	000-346-4	192-2	
Batch ID:	01-7	884-4059		Test	Type: Gr	owth-Surviva	l (7d)		Anal	yst:			
Start Date:	23 J	un-25		Prot	ocol: EP	A/821/R-02-	013 (2002)		Dilue	ent: Mo	od-Hard Synth	etic Water	
Ending Date:	30 J	un-25		Spec	cies: Pir	nephales pro	melas		Brine	e: No	ot Applicable		
Test Length:	7d (	Oh		Taxo	on: Ac	tinopterygii			Sour	ce: In-	House Culture	)	Age:
Data Transfor	m		Alt H	ур				NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Untransformed	t		C > T					80	100	89.44	1.2	0.09674	16.49%
Dunnett Multi	ple C	omparison	Test		F								
Control	vs	Conc-%		df	Test Stat	Critical	MSD	P-Type	P-Value	Decisio	n(α:5%)		
Dilution Water		20		6	0.01876	2.407	0.09674	CDF	0.8278	Non-Sig	nificant Effect		
		40		6	0.5537	2.407	0.09674	CDF	0.6240	Non-Sig	nificant Effect		
		60		6	0.6221	2.407	0.09674	CDF	0.5934		nificant Effect		
		80		6	0.8524	2.407	0.09674	CDF	0.4883	THE RESERVE THE PERSON NAMED IN	nificant Effect		
		100*		6	8.809	2.407	0.09674	CDF	2.7E-05	Significa	int Effect		
Test Acceptal	bility	Criteria	TA	C Li	mits								
Attribute		Test Stat		r	Upper	Overlap	Decision						
Cantral Doon		0.5868	0.25		>>	Yes	Passes Cr	iteria					
Control Resp													
PMSD		0.1649	0.12		0.3	Yes	Passes Cr	riteria					
PMSD ANOVA Table		0.1649	0.12		0.3	Yes	Passes Cr				500	:8	
PMSD  ANOVA Table Source		0.1649 Sum Squa	0.12		0.3 Mean Sq	Yes	Passes Cr	F Stat	P-Value	Decision	,	34	
ANOVA Table Source Between		0.1649 Sum Squa 0.383565	0.12		0.3 Mean Sq 0.076713	Yes	Passes Cr DF		P-Value <1.0E-05	14.000000000000000000000000000000000000	n(α:5%) int Effect		
PMSD  ANOVA Table Source		0.1649 Sum Squa	0.12		0.3 Mean Sq	Yes	Passes Cr	F Stat		14.000000000000000000000000000000000000	,		
PMSD  ANOVA Table  Source  Between  Error  Total	5000	0.1649 Sum Squa 0.383565 0.0581447 0.44171	0.12		0.3 Mean Sq 0.076713	Yes	DF 5 18	F Stat		14.000000000000000000000000000000000000	,		
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur	5000	0.1649 Sum Squa 0.383565 0.0581447 0.44171 ons Tests	0.12		0.3 Mean Sq 0.076713	Yes	DF 5 18 23	F Stat 23.75	<1.0E-05	Significa	nnt Effect	4	
ANOVA Table Source Between Error Total ANOVA Assur	5000	0.1649  Sum Squa 0.383565 0.0581447 0.44171  ons Tests  Test	0.12 ares	f Var	0.3 Mean Sq 0.076713 0.003230	Yes uare	DF 5 18 23 Test Stat	F Stat 23.75	<1.0E-05	Significa	nnt Effect n(α:1%)		
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance	5000	0.1649  Sum Squa 0.383565 0.0581447 0.44171  ons Tests  Test	0.12  ares  7		0.3  Mean Sq 0.076713 0.003230	Yes uare	DF 5 18 23	F Stat 23.75	<1.0E-05	Significa Decision Equal Va	nnt Effect n(α:1%)		
PMSD  ANOVA Table  Source  Between  Error  Total  ANOVA Assur  Attribute  Variance  Distribution	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171  DOES TESTS  Test  Bartlett Eq. Shapiro-W	0.12  ares  7  quality o		0.3  Mean Sq 0.076713 0.003230	Yes uare	DF 5 18 23 Test Stat 6.105	F Stat 23.75  Critical 15.09	<1.0E-05  P-Value 0.2961	Significa Decision Equal Va	n(α:1%) ariances		
PMSD  ANOVA Table Source  Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171  DOES TESTS  Test  Bartlett Eq. Shapiro-W	0.12  ares  7  quality o	lorma	0.3  Mean Sq 0.076713 0.003230	Yes uare	DF 5 18 23 Test Stat 6.105	F Stat 23.75  Critical 15.09 0.884	<1.0E-05  P-Value 0.2961	Significa Decision Equal Va	n(α:1%) ariances	CV%	%Effect
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-%	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171 ons Tests  Test  Bartlett Eq Shapiro-Wes-mg Summ	0.12  ares  7  quality of Vilk W N	lorma	0.3  Mean Sq 0.076713 0.003230  iance Test	Yes uare 3	DF 5 18 23 Test Stat 6.105 0.986	F Stat 23.75  Critical 15.09 0.884	<1.0E-05  P-Value 0.2961 0.9766	Decision Equal Va Normal I	n(α:1%) ariances Distribution	CV% 7.22%	%Effect 0.00%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171 ons Tests  Test  Bartlett Eq Shapiro-W s-mg Summ Code	0.12 ares 7 quality of lik W N nary Count	lorma	Mean Sq 0.076713 0.003230 iiance Test ality Test	Yes uare 3 95% LCL	DF 5 18 23 Test Stat 6.105 0.986 95% UCL	F Stat 23.75  Critical 15.09 0.884  Median	<1.0E-05  P-Value 0.2961 0.9766  Min	Decision Equal Va Normal I	nn(a:1%) ariances Distribution  Std Err		
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 20	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171 ons Tests  Test  Bartlett Eq Shapiro-W s-mg Summ Code	0.12 ares 7 quality of lik W N nary Count	lorma	0.3  Mean Sq 0.076713 0.003230  iance Test ality Test  Mean 0.5868	Yes  uare  3  95% LCL  0.5193	DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542	F Stat 23.75  Critical 15.09 0.884  Median 0.5795	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544	Decision Equal Va Normal I	nn(a:1%) ariances Distribution  Std Err 0.0212	7.22%	0.00%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 20 40	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171 ons Tests  Test  Bartlett Eq Shapiro-W s-mg Summ Code	0.12  ares  7  quality of the W North Arry  Count 4 4	lorma	0.3  Mean Sq 0.076713 0.003230  iance Test ality Test  Mean 0.5868 0.586	Yes  uare  3  95% LCL  0.5193  0.5515	DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583	P-Value 0.2961 0.9766  Min 0.544 0.564	Decision Equal Va Normal I	nn(a:1%) ariances Distribution  Std Err  0.0212 0.01085	7.22% 3.70%	0.00% 0.13%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 20 40 60	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171 ons Tests  Test  Bartlett Eq Shapiro-W s-mg Summ Code	0.12  ares  7  quality of filk W Nonary  Count 4 4 4	lorma	0.3  Mean Sq 0.076713 0.003230  iance Test ality Test  Mean 0.5868 0.586 0.5645	Yes  uare  3  95% LCL  0.5193 0.5515 0.4119	Passes Cr DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442	Decision Equal Va Normal I	n(a:1%) ariances Distribution  Std Err  0.0212 0.01085 0.04796	7.22% 3.70% 16.99%	0.00% 0.13% 3.79%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 0 20 40 60 80	mptic	0.1649  Sum Squa 0.383565 0.0581447 0.44171 ons Tests  Test  Bartlett Eq Shapiro-W s-mg Summ Code	0.12  ares  7  quality of the W N nary  Count 4 4 4 4	lorma	0.3  Mean Sq 0.076713 0.003230  iance Test ality Test  Mean 0.5868 0.586 0.5645 0.5617	95% LCL 0.5193 0.5515 0.4119 0.491	Passes Cr DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522	Decision Equal Va Normal I Max 0.644 0.614 0.675 0.61	n(a:1%) ariances Distribution  Std Err 0.0212 0.01085 0.04796 0.02223	7.22% 3.70% 16.99% 7.91%	0.00% 0.13% 3.79% 4.26%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 20 40 60 80 1100	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Test Bartlett Eq Shapiro-W s-mg Summ Code	0.12 ares  7  Quality of Vilk W N nary  Count 4 4 4 4 4 4	lorma	0.3  Mean Sq 0.076713 0.003230  iiance Test ality Test  Mean 0.5868 0.5865 0.5645 0.5617 0.5525	95% LCL 0.5193 0.5515 0.4119 0.491 0.4853	DF 5 18 23 23 25 5 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  ariances Distribution  Std Err  0.0212 0.01085 0.04796 0.02223 0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio 20 40 60 80 100  Mean Dry Bio	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Test Bartlett Eq Shapiro-W s-mg Summ Code	0.12 ares  7  Quality of Vilk W N nary  Count 4 4 4 4 4 4	t	0.3  Mean Sq 0.076713 0.003230  iiance Test ality Test  Mean 0.5868 0.5865 0.5645 0.5617 0.5525	95% LCL 0.5193 0.5515 0.4119 0.491 0.4853	DF 5 18 23 23 25 5 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  ariances Distribution  Std Err  0.0212 0.01085 0.04796 0.02223 0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 20 40 60 80 100  Mean Dry Bio Conc-%	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Test Bartlett Eq Shapiro-Was-mg Summ Code	0.12 ares 7 quality o filk W N nary Count 4 4 4 4 4 4	t	Mean Sq 0.076713 0.003230 iiance Test ality Test Mean 0.5868 0.5645 0.5645 0.5647 0.5525 0.2327	95% LCL 0.5193 0.5515 0.4119 0.491 0.4853 0.1302	Passes Cr DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197 0.3353	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  ariances Distribution  Std Err  0.0212 0.01085 0.04796 0.02223 0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 40 60 80 100  Mean Dry Bio Conc-% 0	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Bartlett Eq Shapiro-W s-mg Summ Code D	0.12 ares 7 quality o //ilk W N nary Count 4 4 4 4 4 Rep 1	t	Mean Sq 0.076713 0.003230 iiance Test ality Test Mean 0.5868 0.5864 0.5645 0.5617 0.5525 0.2327	95% LCL 0.5193 0.5515 0.4119 0.491 0.4853 0.1302  Rep 3	Passes Cr DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197 0.3353	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  ariances Distribution  Std Err  0.0212 0.01085 0.04796 0.02223 0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 0 100  Mean Dry Bio Conc-% 0 0 20 40 60 80 100  Mean Dry Bio Conc-% 0 20 20 40 60 80 100	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Bartlett Eq Shapiro-W s-mg Summ Code D	o.12  ares  7  quality of file W N  nary  Count  4  4  4  4  7  Rep 1  0.644	t	Mean Sq 0.076713 0.003230 	95% LCL 0.5193 0.5515 0.4119 0.491 0.4853 0.1302  Rep 3 0.589	Passes Cr DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197 0.3353 Rep 4 0.544	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  ariances Distribution  Std Err  0.0212 0.01085 0.04796 0.02223 0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%
PMSD  ANOVA Table Source  Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 20 40 60 80 100  Mean Dry Bio Conc-% 0 0 20 40 60 80 100	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Bartlett Eq Shapiro-W s-mg Summ Code D	0.12  ares  7  quality of lik W N hary  Count 4 4 4 4 7 1 0.644 0.591	t	0.3  Mean Sq 0.076713 0.003230  iiance Test ality Test  Mean 0.5868 0.5865 0.58617 0.5525 0.2327  Rep 2 0.57 0.614	95% LCL 0.5193 0.5515 0.4119 0.4853 0.1302 Rep 3 0.589 0.575	Passes Cr DF 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197 0.3353 Rep 4 0.544 0.564	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  Ariances  Distribution  Std Err  0.0212  0.01085  0.04796  0.02223  0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%
PMSD  ANOVA Table Source Between Error Total  ANOVA Assur Attribute Variance Distribution  Mean Dry Bio Conc-% 0 0 20 40 60 80	mptic	Sum Squa 0.383565 0.0581447 0.44171 ons Tests Bartlett Eq Shapiro-W s-mg Summ Code D	0.12  ares  7  quality of filk W N nary  Count 4 4 4 4 4 7  Rep 1 0.644 0.591 0.675	t	Mean Sq 0.076713 0.003230 iiance Test ality Test Mean 0.5868 0.58617 0.5525 0.2327 Rep 2 0.57 0.614 0.583	95% LCL 0.5193 0.5515 0.4119 0.4853 0.1302 Rep 3 0.589 0.575 0.558	Passes Cr 5 18 23 Test Stat 6.105 0.986 95% UCL 0.6542 0.6205 0.7171 0.6325 0.6197 0.3353 Rep 4 0.544 0.564 0.442	F Stat 23.75  Critical 15.09 0.884  Median 0.5795 0.583 0.5705 0.5575 0.554	<1.0E-05  P-Value 0.2961 0.9766  Min 0.544 0.564 0.442 0.522 0.501	Decision Equal Vi Normal I Max 0.644 0.675 0.61 0.601	Int Effect  In(a:1%)  Ariances  Distribution  Std Err  0.0212  0.01085  0.04796  0.02223  0.02111	7.22% 3.70% 16.99% 7.91% 7.64%	0.00% 0.13% 3.79% 4.26% 5.84%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA:

**Client: Linkan Engineering** 

100

Convergent Rounding (4 sf)

SCG Project No.: 525317.B **Site: 001A Project: Quarterly WET** 

CETIS	S Ana	lytical Repo	rt						Report	Date: ode/ID:			38 (p 1 of 1 4-7334-150
Fathea	d Minn	ow 7-d Larval Su	rvival and	Growth	Test				1631 01	denib.	0200		rest Group
Analysi Analyze Edit Da	ed:	11-9556-5134 01 Jul-25 12:34 01 Jul-25 0:00	Anal	ysis:	Mean Dry Bioma Linear Interpolat C2529A1E8077	tion (ICPIN)		F360114B	Stati	S Version: us Level: or ID:	CETIS v2 1 000-346-4		
Batch I	D:	01-7884-4059	Test	Type:	Growth-Survival	(7d)			Anal	yst:			V
Start D	ate:	23 Jun-25	Prot	ocol:	EPA/821/R-02-0	13 (2002)			Dilue	ent: Mod	-Hard Synth	etic Water	
Ending	Date:	30 Jun-25	Spec	cies:	Pimephales pro	melas			Brin	e: Not	Applicable		
Test Le	ength:	7d 0h	Taxo	on:	Actinopterygii				Soul	ce: In-H	ouse Culture	)	Age:
Linear	Interpo	lation Options											
X Trans	sform	Y Transform	Seed	d	Resamples	Exp 95%	CL	Method		E			
Linear		Linear	1401	857	1000	Yes		Two-Point	Interp	olation			
Test Ac	ceptal	oility Criteria	TAC Li	imite									
Attribu	te	Test Stat		Upper	Overlap	Decision							
Control	Resp	0.5868	0.25	>>	Yes	Passes Ci	riteria						
Point E	stimat	es											
Level	%	95% LCL	95% UCL	Tox U	nits 95% LCL	95% UCL							
IC15	83.36	78.61	85.75	1.2	1.2	1.3							
IC20	85.2	80.8	87.67	1.2	1.1	1.2							
IC25	87.03	82.8	89.66	1.1	1.1	1.2							
IC40	92.54	88.4	96.62	1.1	1	1.1							
IC50	96.21	91.75	101.7	1	1	1.1							
Mean [	Ory Bio	mass-mg Summ	ary			Calculat	ted Va	ariate				Isoton	ic Variate
Conc-9	6	Code	Count	Mean	Median	Min	Max	c CV	%	%Effect		Mean	%Effect
0		D	4	0.5868	0.5795	0.544	0.64	4 7.2	2%	0.00%		0.5868	0.00%
20			4	0.586	0.583	0.564	0.61	4 3.7	0%	0.13%		0.586	0.13%
40			4	0.5645	0.5705	0.442	0.67	5 16.	99%	3.79%		0.5645	3.79%
60			4	0.5617	0.5575	0.522	0.61	7.9	11%	4.26%		0.5617	4.26%
80			4	0.5525	0.554	0.501	0.60	1 7.6	4%	5.84%		0.5525	5.84%
100			4	0.2327	0.236	0.151	0.30	18 27	.69%	60.33%		0.2327	60.33%
Mean [	Ory Bio	mass-mg Detail											
Conc-%	6	Code	Rep 1	Rep 2	Rep 3	Rep 4							
0		D	0.644	0.57	0.589	0.544							
20			0.591	0.614	0.575	0.564							
40			0.675	0.583	0.558	0.442							
60			0.61	0.526	0.522	0.589							
80			0.601	0.501	0.541	0.567							

0.229

0.151

0.308

0.243

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst\_EW QA:

Client: Linkan Engineering CO-0001244 SCG Project No.: 525317.B Site: 001A Project: Quarterly WET

Appendix 4 – QA/QC and Reference Toxicant Test Chart

CO-0001244

SCG Project No.: 525317.B Project: Quarterly WET

# **Quality Assurance Check List – Chronic Whole Effluent Toxicity Test**

	Linkan Engineering-Schwartzwalder I	Mine
SeaCrest Sample No:	525317.B	
Species Tested:	Ceriodaphnia dubia and fathead minn	ow
Sample Dates	Start Date of Test (Ceriodaphnia dubia)	Start Date of Test (fathead minnow)
06-23-2025 06-24-2025 06-25-2025	06-24-2025	06-23-2025
Sample received in lab prop	erly preserved (0-6°C)?	N*
Sample received at laborato	ry within 36 hours of collection?	Y
Sample delivered on ice or	equivalent?	Y
Test initiated within 36-hou	rs of collection?	$\mathbf{Y}$
Test protocol conforms to C	DPHE guidelines (Ceriodaphnia dubia)?	$\mathbf{Y}$
Test protocol conforms to C	DPHE guidelines (fathead minnow)?	$\mathbf{Y}$
Average test temp. ±1°C (Ce	eriodaphnia dubia)?	$\mathbf{Y}$
Average test temp. ±1°C (far	thead minnow)?	$\mathbf{Y}$
DO level ≥4.0mg/L; no sup	er-saturation (Ceriodaphnia dubia)?	Y
DO level ≥4.0mg/L; no sup	er-saturation (fathead minnow)?	Y
Survival in control ≥80% (€	Ceriodaphnia dubia)?	Y
Survival in control ≥80% (f	athead minnow)?	Y
Ceriodaphnia dubia neonate	es <24-hours old?	$\mathbf{Y}$
Fathead minnow larvae <24	-hours old?	$\mathbf{Y}$
Appropriate reference toxic	ity test conducted?	$\mathbf{Y}$
	ts within the confidence limits for the lab?	Y

Author Date July 2, 2025

Position: Aquatic Toxicologist II

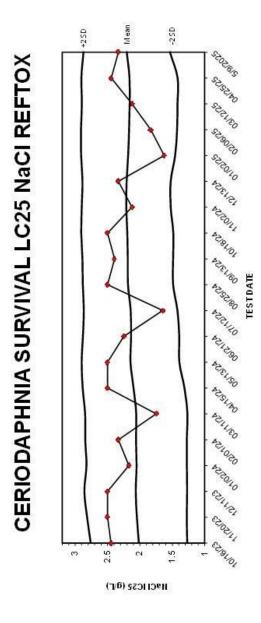
Quality Control Cat (ash Date July 2, 2025

METHOD QC

	allogo	and an	RATORY	
	CEACDECT	SEACALS!	<b>ENVIRONMENTAL SERVICES LAB</b>	

Method	Analyte	Date	LCS (rec)	%REC	%RPD	QC LIMITS
				7007	7440	
2320 B	Alkalinity - Total	2/8/2023	104.80%	100.19%	-0.74%	H 0.00%
2320 B	Alkalinity - Total	5/14/2025	104.80%	100.97%	2.79%	± 2.00%
2320 B	Alkalinity - Total	5/22/2025	104.00%	101.03%	0.84%	± 5.00%
2320 B	Alkalinity - Total	5/28/2025	103.60%	101.97%	-1.92%	± 5.00%
4500 NH <sub>3</sub> D		5/7/2025	%09'96	86.77%	1.01%	± 10.00%
4500 NH <sub>3</sub> D	Ammonia	5/14/2025	%00'96	95.17%	0.80%	± 10.00%
4500 NH <sub>3</sub> D	Ammonia	5/23/2025	104.00%	95.80%	-2.26%	± 10.00%
4500 NH <sub>3</sub> D	Ammonia	5/27/2025	%00.36	97.84%	-2.17%	± 10.00%
4500 CI D	Chlorine	5/29/2025	97.48%	100.00%	0.00%	± 5.00, ± 20.00%
2340 B	Hardness - Total	5/9/2025	96.49%	102.97%	-2.32%	± 5.00%
2340 B	Hardness - Total	5/16/2025	%05'96	103.00%	4.72%	± 5.00%
2340 B	Hardness - Total	5/23/2025	82.00%	103.00%	-1.83%	± 5.00%
2340 B	Hardness - Total	5/29/2025	103.51%	98.14%	-1.12%	± 2.00%
			LCS (rec)	%REC M1	%REC M2	QC Limits
4500 O	DO - Winkler	5/8/2025	N/A	100.00%	98.57%	± 5.00%
4500 O	DO - Winkler	5/16/2025	N/A	95.77%	98.55%	± 5.00%
4500 O	DO - Winkler	5/24/2025	N/A	95.77%	98.55%	± 5.00%
4500 O	DO - Winkler	5/30/2025	N/A	%89.86	%00'96	± 5.00%
			Blank	<b>%REC MR S</b>	%RPD	QC Limits
2540 D	Suspended Solids (TTL)	5/26/2025	100.00%	108.11%	0.00%	± 15%
2540 C	Dissolved Solids (TTL)	5/26/2025	100.00%	114.50%	0.00%	± 15%
	-					9
Signature:	WALLEY WE	m			Signature:	(attast
	11100 00 0011					2000 1 0001
Date.	JUM K CIVIL				Date.	-

SeaCrest Group 500 S Arthur Ave. Suite 450 Louisville, CO 80027 (303) 661.9324 FAX (303) 661.9325



Mean		no.	A:		30			2.1471 1.3927			2.1860 1.488				2.2075 1.5266		- 201		2.1628 1.4197	
1C25	2.4480	2.5000	2.5000	2.1720	2.3330	1.7500	2.5000	2.5000	2.2500	1.6500	2.5000	2.3930	2.5000	2.1250	2.3330	1.6250	1.8330	2.1250	2.4440	2 3330

BOK SORO ORBO COSO OND SORO LARO

TEST DATE

Oles O Pet O Pet O OS O OS O STO

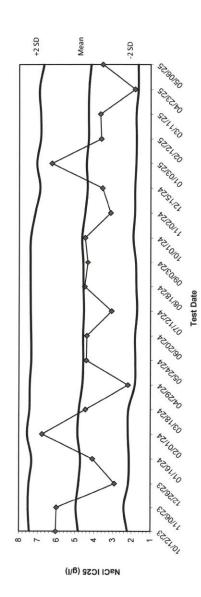
0.2

N9CHC52 (B√F)

Mean -2 SD CERIODAPHNIA REPRODUCTION IC25 NaCI REFTOX 4 1.2 0.8 9.0 4.0

Mean -2 SD +2 SD	0.8164 0.5450 1.0878	5.0	0.8049 0.5440 1.0658	0.5477	0.5736	0.5734	0.5644	0.5384	0.5315	0.5279	0.5160	0.7810 0.5161 1.0458	0.5324	0.5208	0.5311	0.5133	0.4866		0.8175 0.5094 1.1256	
IC25	0.8875	0.9757	0.7500	0.9119	0.8302	0.7944	0.9781	0.5970	0.6995	0.7430	1.0180	0.8050	0.8281	1.0932	1.0770	0.6303	0.6042	0.6646	0.8031	0011
Date	10/16/23	11/20/2023	12/11/23	01/02/24	02/01/24	03/11/24	04/15/24	05/13/24	06/21/24	07/12/24	08/25/24	09/13/24	10/18/24	11/02/24	12/13/24	01/02/25	02/06/25	03/12/25	04/25/25	10,00,10

FHM SURVIVAL LC25 NaCI REFTOX

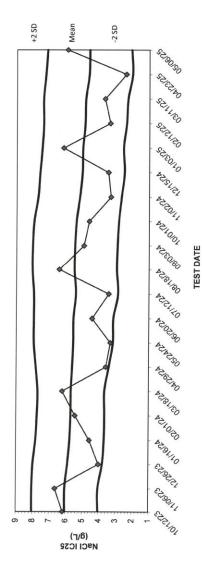


+2 SD	7.4487	7.5142	7.4725	7.3289	7.5596	7.4374	7.4222	7.3461	7.3510	7.3739	7.3867	7.3926	7.3779	7.1450	6.8841	7.0552	6.8545	6.8534	6.9172	8 6748
-2 SD	2.2221	2.4111	2.1721	2.1284	2.1868	2.1625	1.8268	1.8037	1.8168	1.7090	1.7560	1.7805	1.9181	1.8336	1.8292	1.7718	1.7493	1.7635	1.6502	1 6533
Mean	4.8354	4.9627	4.8223	4.7287	4.8732	4.7999	4.6245	4.5749	4.5839	4.5415	4.5714	4.5865	4.6480	4.4893	4.3567	4.4135	4.3019	4.3085	4.2837	4 1641
IC25	6.0360	6.0000	2.9120	4.0800	6.7670	4.4550	2.1900	4.4090	4.3800	3.0670	4.5000	4.3333	4.4760	3.1230	3.5620	6.2500	3.6250	3.6670	1.8150	3 5380
Date	10/12/23	11/06/23	12/26/23	01/16/24	02/01/24	03/18/24	04/29/24	05/24/24	06/20/24	07/12/24	08/18/24	09/03/24	10/01/24	11/02/24	12/15/24	01/03/25	02/12/25	03/11/25	04/23/25	05/06/25

SCG Project No.: 525317.B

**Project: Quarterly WET** 

FHM GROWTH IC25 NaCI REFTOX



	Г																			_
+2 SD	8.0354	8.0330	7.9799	7.8186	7.7345	7.7017	7.8170	7.9377	7.9437	7.9433	8.0376	8.0194	7.9423	7.7066	7.5935	7.4674	7.3809	7.3927	7.2567	1
-2 SD	4.0372	4.0375	3.7796	3.6808	3.6572	3.6624	3.4072	3.1637	3.1435	2.8641	2.9474	2.9061	2.8281	2.6657	2.4899	2.5449	2.3681	2.2844	2.0116	0.000
Mean	6.0363	6.0352	5.8797	5.7497	5.6958	5.6820	5.6121	5.5507	5.5436	5.4037	5.4925	5.4628	5.3852	5.1862	5.0417	5.0062	4.8745	4.8385	4.6342	1000
IC25	6.1750	6.6360	4.0036	4.5690	5.4310	6.2100	3.5807	3.3150	4.4150	3.4180	6.4180	4.9290	4.6060	3.3070	3.4660	6.1720	3.3550	3.6790	2.3840	2 0010
Date	10/12/23	11/06/23	12/26/23	01/16/24	02/01/24	03/18/24	04/29/24	05/24/24	06/20/24	07/12/24	08/18/24	09/03/24	10/01/24	11/02/24	12/15/24	01/03/25	02/12/25	03/11/25	04/23/25	05/08/25



Permits and Enforcement Section Water Quality Control Division CPDHE 4300 Cherry Creek Dr. South Denver, CO 80246-1530 07/27/2025 25US0221

Re: Discharge Monitoring Report for June 2024 Schwartzwalder Mine CO0001244

# TO WHOM IT MAY CONCERN:

On February 10th, 2025 the operations contract for the Schwartzwalder Mine was awarded and the contract started on April 1st, 2025.

During the month of June 2025, there was an exceedance for Total Recoverable arsenic at Outfall 001A. Section 7 of *Amendment Number One to Compliance Order on Consent, Number: IC-150123-1*, amended the Total Recoverable arsenic value to "Report" for the 30-day average. As a new permit has not been issued and discussions with the State indicated no deviation from the "Report" only at this time.

A WET test was taken in June. This resulted in a pass.

Best regards, Linkan

Patale Doly

Patrick M. Delaney Operator Responsible in Charge (ORC) Black Fox Mining, LLC



#### **Enclosures:**

June 2025 DMR Submittal 2<sup>nd</sup> Quarter 2025 TDS Submittal 2<sup>nd</sup> Quarter 2025 WET Test Submittal

#### CC List:

Electronic Copy sent to the following:

Peter Hays, CDNR, peter.hays@state.co.us
Quinn Westmoreland, Linkan, quinn.westmoreland@linkan.com
Adam Billin, Linkan, adam.billin@linkan.com
Chris Prosper, Linkan, chris.prosper@linkan.com
Sam Billin, Linkan, sam.billin@linkan.com
Jared Buck, Linkan, jared.buck@linkan.com
Brandy Wadford, Linkan, brandy.wadford@linkan.com
Alex Schwiebert, Linkan, alex.schwiebert@linkan.com

DMR Copy of Record

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the <a href="https://www.npde.com/npack-need-to-the-

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-0004). Responses to this collection of information are mandatory in accordance with this permit and EPA NPDES regulations 40 CFR 122.41(I)(4)(i). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information are estimated to average 2 hours per outfall. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Permit																	
Permit #:	CO0	0001244	Permit	ttee:			Colo Div of	Reclamation, M	ining and S	afety		Fac	ility:	S	CHWAF	TZWALDER MINE	
Major:	No		Permit	ttee Addre	ess:		1001 E 62 Denver, C0	Ave Room 215 0 80216				Fac	ility Location			NCOE VALLEY RD , CO 80402	
Permitte	d Feature: 001 Exte	ernal Outfall	Discha	arge:			<b>001-X</b> Chronic WI	ET Testing for 00	)1A								
Report D	ates & Status																
Monitorii	ng Period: Fron	m 04/01/25 to 06/30/25	DMR D	Due Date:			07/28/25					Sta	tus:	١	NetDMR	Validated	
Consider	rations for Form Completion		·									·					
Rpt lowes	st % at which statistically signif diff	f in lethality control (LOEC) & any cond	centration less tha	an or equal	to the IWC	using test of	code "S". R	pt IC25 using tes	t code "P".	Use test c	ode "T" to report high	est % lethality re	eported for IC	25 and stat signif dif	f for ceric	odaphnia & pimephale	es.
Principal	Executive Officer																
First Nan	ne:		Title:									Tele	ephone:				
Last Nan	ne:											•					
No Data	Indicator (NODI)																
Form NO	DI:																
	Parameter	Mo	nitoring Location	Season # F	Param. NODI			Quantity or Loadin	ıg			Quality or Concent	ration		# of Ex.	Frequency of Analysis	Sample Type
Code	Nan	me					Qualifier 1	Value 1 Qualifier 2	Value 2 Uni	ts Qualifier	1 Value 1	Qualifier 2 Value	2 Qualifier 3	/alue 3 Units			
						Sample				=	84.5			2G - tox chronic		•	3C - 3 Composite Samples
61426	Toxicity [chronic] Ceriodanhnia d	dubia P - S	See Comments	0 -		Permit Req.					Req Mon MN VALUE			2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples

Form N	ODI:												
	Parameter	Monitoring Location	Season #	Param. NODI		Quantity or Loading			Quality or Concentration	#	of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1 Value 1 Qualifier 2 Value	ue 2 Units Qualifier 1	Value 1	Qualifier 2 Value 2 Qualifier 3 Va	lue 3 Units			
					Sample		=	84.5		2G - tox chronic		01/90 - Quarterly	3C - 3 Composite Samples
61426	Toxicity [chronic], Ceriodaphnia dubia	P - See Comments	0		Permit Req.			Req Mon MN VALUE		2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
01420	Toxicity [cirrotile], deriodaprilia dubia	1 Occ Comments			Value NODI						Ü		
					Sample			100.0		2G - tox chronic		•	3C - 3 Composite Samples
61426	Toxicity [chronic], Ceriodaphnia dubia	S - See Comments	0		Permit Req.			Req Mon MN VALUE		2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI								
					Sample		=	99.5		2G - tox chronic		01/90 - Quarterly	3C - 3 Composite Samples
61400	Toxicity [chronic], Pimephales promelas [Fathead Minnow]	P - See Comments	0		Permit Req.			Reg Mon MN VALUE		2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
61428	Toxicity [chronic], Plinephales prometas [Pathead Minnow]	P - See Comments	U		Value NODI						U		
					value NODI								
					Sample			100.0		2G - tox chronic			3C - 3 Composite Samples
61428	Toxicity [chronic], Pimephales promelas [Fathead Minnow]	S - See Comments	0		Permit Req.			Req Mon MN VALUE		2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI								
					Sample		=	84.2		23 - %		01/90 - Quarterly	3C - 3 Composite Samples
TOPOD	WEW 404 1 B 1 T B 01 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Permit Reg.			Reg Mon MN VALUE		22 0/			3C - 3 Composite Samples
TCP3B	%Effect Static Renewal 7 Day Chronic Ceriodaphnia dubia	P - See Comments	0								0	.,,,,	
					Value NODI								
					Sample		>	100.0		23 - %		01/90 - Quarterly	3C - 3 Composite Samples
ТСР3В	%Effect Static Renewal 7 Day Chronic Ceriodaphnia dubia	S - See Comments	0		Permit Req.			Req Mon MN VALUE		23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
	, ,, , ,, , ,, , ,, , ,, , ,, ,, ,, ,, ,, ,, ,, ,, ,, ,				Value NODI								
					Sample		>	100.0		23 - %		01/90 - Quarterly	3C - 3 Composite Samples
T0000					Permit Reg.			100.0 MN VALUE		23 - %		-	3C - 3 Composite Samples
TCP3B	%Effect Static Renewal 7 Day Chronic Ceriodaphnia dubia	T - See Comments	0				,-	100.0 10114 171202		20 70	0	01/00 Quartony	oo o composite campios
					Value NODI								
					Sample		=	87.0		23 - %		01/90 - Quarterly	3C - 3 Composite Samples
TCP6C	%Effect Static Renewal 7Day Chronic Pimephales promelas	P - See Comments	0		Permit Req.			Req Mon MN VALUE		23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
	,oopopopopop				Value NODI						ŭ		
								100.0		22 0/		04/00 Overterby	20. 2 Composite Com-1
					Sample Barreit Barr					23 - %			3C - 3 Composite Samples
TCP6C	%Effect Static Renewal 7Day Chronic Pimephales promelas	S - See Comments	0		Permit Req.			Req Mon MN VALUE		23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI								
					Sample		=	100.0		23 - %		01/90 - Quarterly	3C - 3 Composite Samples
TCDCC	9/ Effect Static Beneval 7Dev Chronic Bimonholes	T - See Comments	0		Permit Req.		>=	100.0 MN VALUE		23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
TCP6C	%Effect Static Renewal 7Day Chronic Pimephales promelas	i - See Comments	U								U		

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

Name

Type
Size

2025\_2ndQ\_Schwartzwalder\_Outfall\_001A\_WET\_Test\_Results.pdf

242956.0

pdf

Report Last Saved By

Colo Div of Reclamation, Mining and Safety

2025\_06\_Schwartzwalder\_Outfall\_001A\_Cover\_Letter.pdf

User: pdelaney@alexcoresource.com

Name: Patrick Delaney

E-Mail: pdelaney@blackfoxmining.com

Date/Time: 2025-07-28 21:46 (Time Zone: -06:00)

Report Last Signed By

User: pdelaney@alexcoresource.com

Name: Patrick Delaney

E-Mail: pdelaney@blackfoxmining.com

Date/Time: 2025-07-28 21:47 (Time Zone: -06:00)