



ANALYTICAL REPORT

PREPARED FOR

Attn: Brandi Andrews
Jacobs Engineering Group, Inc.
1004 N. Freya Street
Spokane, Washington 99202

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JOB DESCRIPTION

Spokane County Water Q4 Acute

JOB NUMBER

192-15895-1

Eurofins Arkansas

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
John Overbey, Business Unit Manager
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Re: Acute Biomonitoring utilizing *Ceriodaphnia dubia*
Spokane County Water
Client NPDES Permit No. WA0093317
Control No. 275259-1

This report is the analytical results and supporting information for the samples submitted to Eurofins Arkansas. The following results are applicable only to the sample identified by the control number referenced above. Accurate assessment of the data requires access to the entire document. Each section of the report has been reviewed and approved by the Lab Manager or qualified designee.

Testing procedures and Quality Assurance were in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" EPA-821-R-02-012, Fifth Edition, October 2002. Test results are summarized below:

Acute *Ceriodaphnia dubia* Survival Test. The permit requirement is NOEC not less than 50%. The following were concluded from the test:

Survival:	NOEC	LOEC	LC50
	50	100	>100

The sample therefore **PASSED** the *Ceriodaphnia dubia* test.

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I. Introduction and Summary

Biomonitoring testing of 48-hour non-renewal definitive toxicity tests using *Ceriodaphnia dubia* were performed.

The *Ceriodaphnia dubia* test was conducted from October 08, 2024 at 1617 to October 10, 2024 at 1613.

The tests were performed in accordance with EPA-821-R-02-012. Statistical analyses were performed on the observed data.

The tests were conducted in temperature and light cycle controlled environmental chamber. The test temperature was 25 degrees C +/- 1 degree for the *Ceriodaphnia dubia*.

II. Control Acceptance Criteria

ORGANISM	CRITERIA	RESULTS	PASS/FAIL
<i>Ceriodaphnia dubia</i>	Control Survival $\geq 90\%$	100	PASS
<i>Ceriodaphnia dubia</i>	Control Dilution CV ≤ 40	0.00	PASS
<i>Ceriodaphnia dubia</i>	Critical Dilution CV ≤ 40	10.5	PASS

III. Outlined Report

A. Introduction

Permit Number: WA0093317

Test Requirements: 48-hour non-renewal definitive toxicity test using:
Ceriodaphnia dubia

B. Effluent Samples:

Sampling Point: Spokane County Water

Chemical Data:

Analysis	Result
Dissolved oxygen (mg/l)	8.8
pH (standard units)	6.4
Alkalinity (mg/l as CaCO ₃)	81
Hardness (mg/l as CaCO ₃)	200
Conductivity (umhos/cm)	860
Residual Chlorine (mg/l)	<0.05
Ammonia (mg/l)	0.30

C. Dilution Water Samples: Synthetic Moderately Hard
Chemical Data:

Analysis	192-15450-A-2
Dissolved oxygen (mg/l)	8.3
pH (standard units)	6.4
Alkalinity (mg/l as CaCO ₃)	62
Hardness (mg/l as CaCO ₃)	93
Conductivity (umhos/cm)	300
Residual Chlorine (mg/l)	<0.05
Ammonia (mg/l)	NA

D. Test Methods

Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, (Fifth Ed.), EPA-821-R-02-012, 48-hour acute definitive test.

Endpoints:

Death; the criteria employed to establish death are:

No movement

No reaction to gentle prodding

Criteria	<i>Ceriodaphnia dubia</i>
Type and Volume of Test Chamber	30 ml disposable beaker
Volume of Sample	15 ml
Organisms per chamber	5
Replicates per dilution	4
Test Temperature	25 deg. C
Test Initiated	October 08, 2024 at 1617
Test Terminated	October 10, 2024 at 1613
Feeding	None required
Age of Test Organisms	<24 hours

E. Test Organisms

Ceriodaphnia dubia

F. Quality Assurance - Toxicity Tests

Reference Toxicant: Sodium Chloride

Date of test:

Ceriodaphnia dubia: October 07, 2024 at 1543 to October 09, 2024 at 1521

Synthetic moderately hard dilution water used

Organism	LC50	Warning Limits
<i>Ceriodaphnia dubia</i>	1.88 g/l	1.68-2.21 g/l

G. Organism History

Ceriodaphnia dubia

Date: October 08, 2024 at 1617

Age: <24 hours

Source: In-house culture

IV. Results Summary

Ceriodaphnia dubia are exposed in a static non-renewal system to different concentrations of effluent and dilution water. Effluent dilutions for this test were 6.4%, 12.5%, 25%, 50%, 100%. The low-flow concentration was 50%. Test results were based on survival.

Ceriodaphnia dubia

The *Ceriodaphnia dubia* test was conducted from October 08, 2024 at 1617 to October 10, 2024 at 1613.

Concentration	24 hour % Survival	48 hour % Survival
Control	100	100
6.4%	100	100
12.5%	95.0	95.0
25%	90.0	90.0
50%	95.0	95.0
100%	95.0	55.0

Appendix (Data)

Ceriodaphnia dubia Survival Data

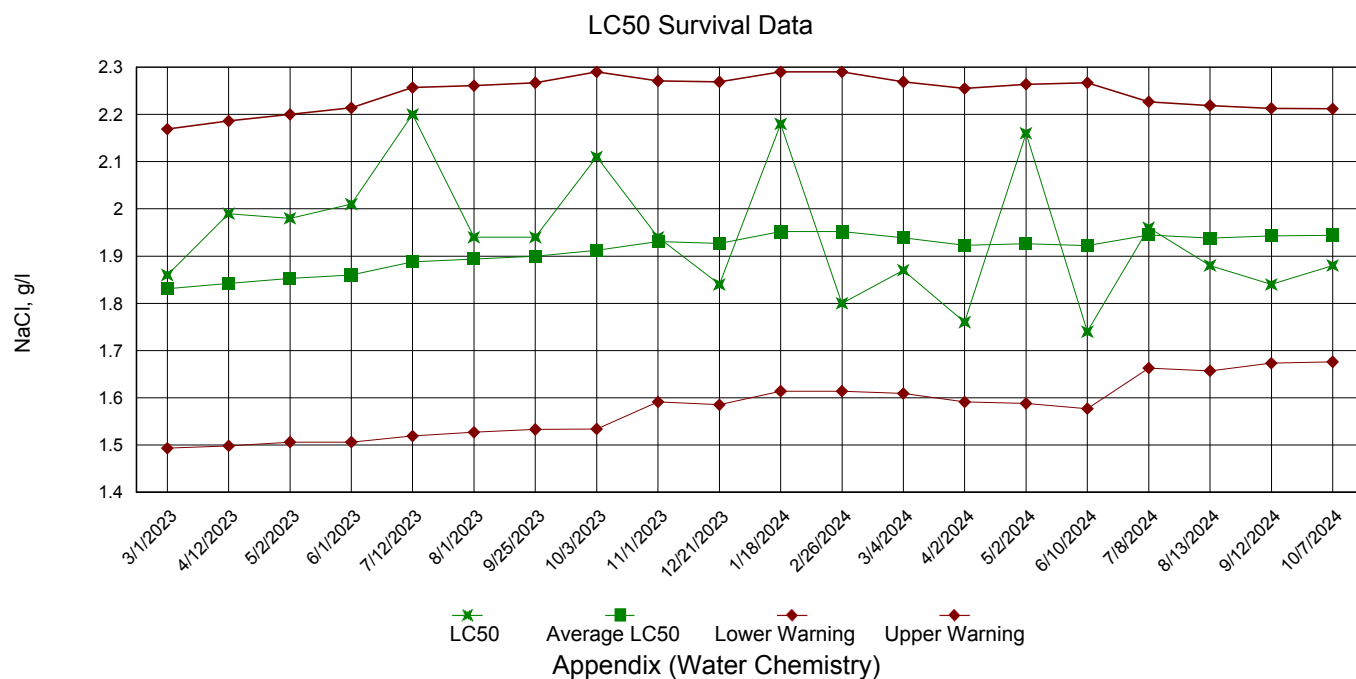
Number of organisms per chamber: 5
Volume of test chamber: 30 ml

Age of organisms: <24 hours
Volume of test solution: 15 ml

Effluent Concentration		Number of Survivors		% Survival	CV %
		24 Hours	48 Hours		
Control	rep. A	5	5	100	0.00
	rep. B	5	5		
	rep. C	5	5		
	rep. D	5	5		
6.4%	rep. A	5	5	100	0.00
	rep. B	5	5		
	rep. C	5	5		
	rep. D	5	5		
12.5%	rep. A	5	5	95.0	10.5
	rep. B	5	5		
	rep. C	4	4		
	rep. D	5	5		
25%	rep. A	5	5	90.0	12.8
	rep. B	4	4		
	rep. C	5	5		
	rep. D	4	4		
50%	rep. A	5	5	95.0	10.5
	rep. B	5	5		
	rep. C	5	5		
	rep. D	4	4		
100%	rep. A	4	3	55.0	18.2
	rep. B	5	3		
	rep. C	5	2		
	rep. D	5	3		

CV = Coefficient of variance = standard deviation X 100/mean

Appendix (Reference Toxicant)
Acute Reference Toxicant, *Ceriodaphnia dubia*



Chemical Data for
Ceriodaphnia dubia

Day 1		Control	6.4%	12.5%	25%	50%	100%
DO, mg/l	Initial	8.3	8.5	8.4	8.4	8.5	8.8
DO, mg/l	Final	8.0	8.0	7.9	8.0	8.1	7.9
pH, su	Initial	6.4	6.5	6.5	6.5	6.5	6.4
pH, su	Final	7.8	7.8	7.8	7.8	7.9	7.9
Alkalinity, mg/l		62	NA	NA	NA	NA	81
Hardness, mg/l		93	NA	NA	NA	NA	200
Conductivity, umho/cm		300	340	370	440	590	860
Residual Chlorine, mg/l		<0.05	NA	NA	NA	NA	<0.05
Day 2		Control	6.4%	12.5%	25%	50%	100%
DO, mg/l	Final	8.6	8.6	8.6	8.6	8.6	8.6
pH, su	Final	8.2	8.1	8.1	8.2	8.2	8.3

CETIS Summary Report

Report Date: 17 Oct-24 11:01 (p 1 of 1)
Test Code/ID: 275259_CD / 17-8194-1342

Ceriodaphnia 48-h Acute Survival Test				Eurofins Arkansas			
Batch ID:	04-1053-8170	Test Type:	Survival (48h)	Analyst:			
Start Date:	08 Oct-24 16:17	Protocol:	EPA/821/R-02-012 (2002)	Diluent:	Mod-Hard Synthetic Water		
Ending Date:	10 Oct-24 16:13	Species:	Ceriodaphnia dubia	Brine:			
Test Length:	48h	Taxon:	Branchiopoda	Source:	In-House Culture	Age:	<24
Sample ID:	20-6061-0605	Code:	275259	Project:			
Sample Date:	07 Oct-24 09:33	Material:	POTW Effluent	Source:	Jacobs Spokane County (WA0093317)		
Receipt Date:	08 Oct-24 07:50	CAS (PC):		Station:	BIO24100707		
Sample Age:	31h	Client:					

Multiple Comparison Summary

Analysis ID	Endpoint	Comparison Method	✓	NOEL	LOEL	TOEL	PMSD	TU	S
16-9144-8749	48h Survival Rate	Steel Many-One Rank Sum Test		50	100	70.71	14.6%	2	1

Point Estimate Summary

Analysis ID	Endpoint	Point Estimate Method	✓	Level	%	95% LCL	95% UCL	TU	S
06-8100-1553	48h Survival Rate	Linear Interpolation (ICPIN)		LC50	>100	---	---	<1	1

Test Acceptability

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits		Overlap	Decision
				Lower	Upper		
06-8100-1553	48h Survival Rate	Control Resp	1	0.9	<<	Yes	Passes Criteria
16-9144-8749	48h Survival Rate	Control Resp	1	0.9	<<	Yes	Passes Criteria

48h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	D	4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
6.4		4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
12.5		4	0.9500	0.7909	1.1090	0.8000	1.0000	0.0500	0.1000	10.53%	5.00%
25		4	0.9000	0.7163	1.0840	0.8000	1.0000	0.0577	0.1155	12.83%	10.00%
50		4	0.9500	0.7909	1.1090	0.8000	1.0000	0.0500	0.1000	10.53%	5.00%
100		4	0.5500	0.3909	0.7091	0.4000	0.6000	0.0500	0.1000	18.18%	45.00%

48h Survival Rate Detail

MD5: AB5DF45FD5C0653AC3195C0B854AFC41

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	1.0000	1.0000	1.0000	1.0000
6.4		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	0.8000	1.0000
25		1.0000	0.8000	1.0000	0.8000
50		1.0000	1.0000	1.0000	0.8000
100		0.6000	0.6000	0.4000	0.6000

48h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	5/5	5/5	5/5	5/5
6.4		5/5	5/5	5/5	5/5
12.5		5/5	5/5	4/5	5/5
25		5/5	4/5	5/5	4/5
50		5/5	5/5	5/5	4/5
100		3/5	3/5	2/5	3/5

CETIS Analytical Report

Report Date: 17 Oct-24 11:01 (p 1 of 2)
Test Code/ID: 275259_CD / 17-8194-1342

Ceriodaphnia 48-h Acute Survival Test					Eurofins Arkansas	
Analysis ID:	16-9144-8749	Endpoint:	48h Survival Rate	CETIS Version:	CETISv2.1.4	
Analyzed:	17 Oct-24 11:00	Analysis:	Nonparametric-Control vs Treatments	Status Level:	1	
Edit Date:	17 Oct-24 11:00	MD5 Hash:	AB5DF45FD5C0653AC3195C0B854AFC41	Editor ID:	005-847-680-2	
Batch ID:	04-1053-8170	Test Type:	Survival (48h)	Analyst:		
Start Date:	08 Oct-24 16:17	Protocol:	EPA/821/R-02-012 (2002)	Diluent:	Mod-Hard Synthetic Water	
Ending Date:	10 Oct-24 16:13	Species:	Ceriodaphnia dubia	Brine:		
Test Length:	48h	Taxon:	Branchiopoda	Source:	In-House Culture	Age: <24
Sample ID:	20-6061-0605	Code:	275259	Project:		
Sample Date:	07 Oct-24 09:33	Material:	POTW Effluent	Source:	Jacobs Spokane County (WA0093317)	
Receipt Date:	08 Oct-24 07:50	CAS (PC):		Station:	BIO24100707	
Sample Age:	31h	Client:				

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Angular (Corrected)	C > T	50	100	70.71	2	0.1459	14.59%

Steel Many-One Rank Sum Test									
Control	vs	Conc-%	df	Test Stat	Critical	Ties	P-Type	P-Value	Decision(α:5%)
Dilution Water		6.4	6	18	10	1	CDF	0.8333	Non-Significant Effect
		12.5	6	16	10	1	CDF	0.6105	Non-Significant Effect
		25	6	14	10	1	CDF	0.3451	Non-Significant Effect
		50	6	16	10	1	CDF	0.6105	Non-Significant Effect
		100*	6	10	10	0	CDF	0.0417	Significant Effect

Test Acceptability Criteria					
TAC Limits					
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.9	<<	Yes	Passes Criteria

ANOVA Table						
Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.750924	0.150185	5	15.7	<1.0E-05	Significant Effect
Error	0.172178	0.0095655	18			
Total	0.923103		23			

ANOVA Assumptions Tests						
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)	
Variance	Bartlett Equality of Variance Test				Indeterminate	
Distribution	Shapiro-Wilk W Normality Test	0.8437	0.884	0.0017	Non-Normal Distribution	

48h Survival Rate Summary											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
6.4		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	0.9000	0.7163	1.0000	0.9000	0.8000	1.0000	0.0577	12.83%	10.00%
50		4	0.9500	0.7909	1.0000	1.0000	0.8000	1.0000	0.0500	10.53%	5.00%
100		4	0.5500	0.3909	0.7091	0.6000	0.4000	0.6000	0.0500	18.18%	45.00%

Angular (Corrected) Transformed Summary											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	1.3450	1.3450	1.3460	1.3450	1.3450	1.3450	0.0000	0.00%	0.00%
6.4		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	1.2260	1.0070	1.4450	1.2260	1.1070	1.3450	0.0687	11.21%	8.85%
50		4	1.2860	1.0960	1.4750	1.3450	1.1070	1.3450	0.0595	9.26%	4.43%
100		4	0.8357	0.6755	0.9959	0.8861	0.6847	0.8861	0.0503	12.05%	37.88%

Ceriodaphnia 48-h Acute Survival Test Eurofins Arkansas

Analysis ID:	16-9144-8749	Endpoint:	48h Survival Rate	CETIS Version:	CETISv2.1.4
Analyzed:	17 Oct-24 11:00	Analysis:	Nonparametric-Control vs Treatments	Status Level:	1
Edit Date:	17 Oct-24 11:00	MD5 Hash:	AB5DF45FD5C0653AC3195C0B854AFC41	Editor ID:	005-847-680-2

48h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	1.0000	1.0000	1.0000	1.0000
6.4		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	0.8000	1.0000
25		1.0000	0.8000	1.0000	0.8000
50		1.0000	1.0000	1.0000	0.8000
100		0.6000	0.6000	0.4000	0.6000

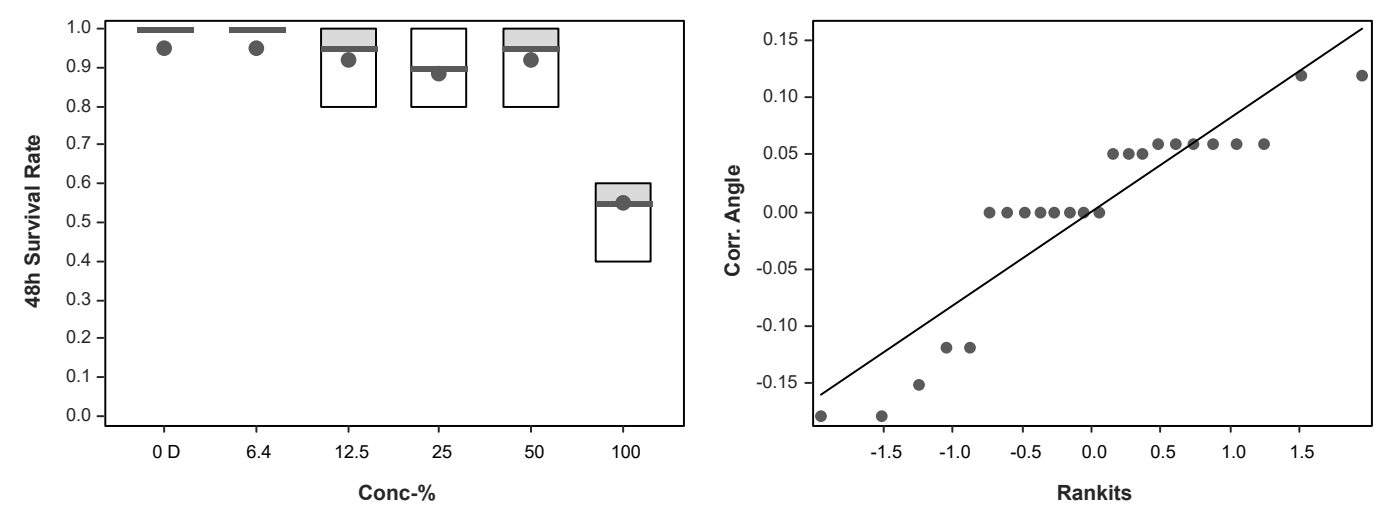
Angular (Corrected) Transformed Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	1.3450	1.3450	1.3450	1.3450
6.4		1.3450	1.3450	1.3450	1.3450
12.5		1.3450	1.3450	1.1070	1.3450
25		1.3450	1.1070	1.3450	1.1070
50		1.3450	1.3450	1.3450	1.1070
100		0.8861	0.8861	0.6847	0.8861

48h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	5/5	5/5	5/5	5/5
6.4		5/5	5/5	5/5	5/5
12.5		5/5	5/5	4/5	5/5
25		5/5	4/5	5/5	4/5
50		5/5	5/5	5/5	4/5
100		3/5	3/5	2/5	3/5

Graphics



CETIS Analytical Report

Report Date: 17 Oct-24 11:01 (p 1 of 2)
Test Code/ID: 275259_CD / 17-8194-1342

Ceriodaphnia 48-h Acute Survival Test				Eurofins Arkansas	
Analysis ID:	06-8100-1553	Endpoint:	48h Survival Rate	CETIS Version:	CETISv2.1.4
Analyzed:	17 Oct-24 11:00	Analysis:	Linear Interpolation (ICPIN)	Status Level:	1
Edit Date:	17 Oct-24 11:00	MD5 Hash:	AB5DF45FD5C0653AC3195C0B854AFC41	Editor ID:	005-847-680-2
Batch ID:	04-1053-8170	Test Type:	Survival (48h)	Analyst:	
Start Date:	08 Oct-24 16:17	Protocol:	EPA/821/R-02-012 (2002)	Diluent:	Mod-Hard Synthetic Water
Ending Date:	10 Oct-24 16:13	Species:	Ceriodaphnia dubia	Brine:	
Test Length:	48h	Taxon:	Branchiopoda	Source:	In-House Culture
					Age: <24
Sample ID:	20-6061-0605	Code:	275259	Project:	
Sample Date:	07 Oct-24 09:33	Material:	POTW Effluent	Source:	Jacobs Spokane County (WA0093317)
Receipt Date:	08 Oct-24 07:50	CAS (PC):		Station:	BIO24100707
Sample Age:	31h	Client:			

Linear Interpolation Options					
X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	616702	1000	Yes	Two-Point Interpolation
Test Acceptability Criteria					
		TAC Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.9	<<	Yes	Passes Criteria

Point Estimates						
Level	%	95% LCL	95% UCL	Tox Units	95% LCL	95% UCL
LC50	>100	---	---	<1	---	---

48h Survival Rate Summary			Calculated Variate(A/B)							Isotonic Variate	
Conc.-%	Code	Count	Mean	Median	Min	Max	CV%	%Effect	ΣA/ΣB	Mean	%Effect
0	D	4	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	20/20	1.0000	0.00%
6.4		4	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	20/20	1.0000	0.00%
12.5		4	0.9500	1.0000	0.8000	1.0000	10.53%	5.00%	19/20	0.9500	5.00%
25		4	0.9000	0.9000	0.8000	1.0000	12.83%	10.00%	18/20	0.9250	7.50%
50		4	0.9500	1.0000	0.8000	1.0000	10.53%	5.00%	19/20	0.9250	7.50%
100		4	0.5500	0.6000	0.4000	0.6000	18.18%	45.00%	11/20	0.5500	45.00%

48h Survival Rate Detail					
Conc.-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	1.0000	1.0000	1.0000	1.0000
6.4		1.0000	1.0000	1.0000	1.0000
12.5		1.0000	1.0000	0.8000	1.0000
25		1.0000	0.8000	1.0000	0.8000
50		1.0000	1.0000	1.0000	0.8000
100		0.6000	0.6000	0.4000	0.6000

48h Survival Rate Binomials					
Conc.-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	5/5	5/5	5/5	5/5
6.4		5/5	5/5	5/5	5/5
12.5		5/5	5/5	4/5	5/5
25		5/5	4/5	5/5	4/5
50		5/5	5/5	5/5	4/5
100		3/5	3/5	2/5	3/5

CETIS Analytical Report

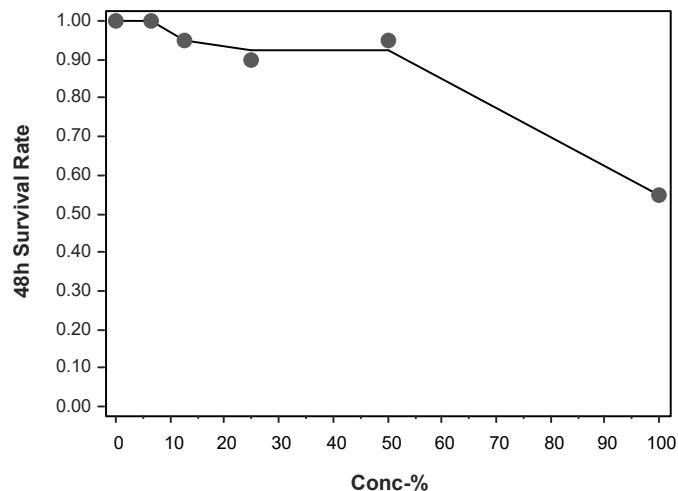
Report Date: 17 Oct-24 11:01 (p 2 of 2)
Test Code/ID: 275259_CD / 17-8194-1342

Ceriodaphnia 48-h Acute Survival Test

Eurofins Arkansas

Analysis ID:	06-8100-1553	Endpoint:	48h Survival Rate	CETIS Version:	CETISv2.1.4
Analyzed:	17 Oct-24 11:00	Analysis:	Linear Interpolation (ICPIN)	Status Level:	1
Edit Date:	17 Oct-24 11:00	MD5 Hash:	AB5DF45FD5C0653AC3195C0B854AFC41	Editor ID:	005-847-680-2

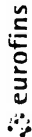
Graphics



Eurofins Arkansas

8600 Kanis Rd
Little Rock, AR 72204
Phone: 501-224-5060 Fax: 501-224-5075

Chain of Custody Record



Environmental Testing

FXFO

Client Information Client Contact: Brandi Andrews Company: Jacobs Engineering Group, Inc. Address: 1004 N. Freya Street City: Spokane State, Zip: WA, 99202 Phone: 509-536-3710 Email: brandi.andrews@jacobs.com Project Name: Spokane County Water Q2 and Q4 Site: Outfall-Mannholz		Lab PM: Overbey, John E-Mail: john.overbey@eurofins.com PWSID:		Carrier Tracking No(s): 280357644407 State of Origin: Washington COC No: 192-2799-988.1 Page: Page 1 of 1 Job #:	
Due Date Requested: 30 Days TAT Requested (days): 30 Days Compliance Project: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> PO #: 148055071 WO #: 19201000 Project #: 19201000 SSOW#:		Analysis Requested			
Sample Identification B1024100707		Sample Date 10/6/24	Sample Time 0855	Sample Type (C=Comp, G=grab) C	Matrix (W=water, S=solid, O=soil, A=air) Water
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> No Perform Method (Yes or No) <input checked="" type="checkbox"/> No		Special Instructions/Note: Cario - acute Cario - chronic			
Total Number of Containers 1		Preservation Codes: N - None Other:			
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by:					
Relinquished by: Brandi Andrews Date/Time: 10/7/24 1143 Company: Jacobs		Received by: _____ Date/Time: _____ Company: _____			
Relinquished by: _____ Date/Time: _____ Company: _____		Received by: _____ Date/Time: _____ Company: _____			
Relinquished by: _____ Date/Time: _____ Company: _____		Received by: P. BROWN Date/Time: 10.8.24/0750 Company: _____			
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.8			

Chain of Custody Record

F X F O

Client Information		Lab PM: Overbey, John		Carrier Tracking Note: 2804 6278 3258		COC No: 192-2799-988.1	
Client Contact: Brandi Andrews		E-Mail: john.overbey@et.eurofins.com		Ship of Origin: Wash.		Page: Page 1 of 1	
Company: Jacobs Engineering Group, Inc.		PWSID:		Analysis Requested		Job #:	
Address: 1004 N. Freya Street		Due Date Requested: 30 Days		TAT Requested (days): 30 Days		Preservation Codes: N - None	
City: Spokane		Compliance Project: 148055071		PO #: 509-536-3710		Other:	
State, Zip: WA, 99202		WO #: 19201000		Project #: 19201000		Total Number of Containers	
Phone: 509-536-3710		SSOW#: Outfall - Manhole		Sample Date: 10/8/24		Special Instructions/Note:	
Email: brandi.andrews@jacobs.com		Sample Type (C=Comp, G=grab): C		Sample Time: 0902		Preservation Code: Water	
Project Name: Spokane County Water Q2 and Q4		Matrix (W=water, S=solid, O=unknown, A=air):		Field Filtered Sample (Yes or No):		Perform MSMD (Yes or No):	
Site: Outfall - Manhole		Sample Date: 10/8/24		Sample Time: 0902		1002, CD, 2002, 46CDNR	
Sample Identification: B1024100909		Sample Type (C=Comp, G=grab): C		Sample Time: 0902		Matrix (W=water, S=solid, O=unknown, A=air):	
Possible Hazard Identification: <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:	
Empty Kit Relinquished by: Brandi Andrews		Date: 10/9/24		Time: 1144		Company: Jacobs	
Relinquished by: Brandi Andrews		Date: 10/9/24		Time: 1144		Company: Jacobs	
Relinquished by: Brandi Andrews		Date: 10/9/24		Time: 1144		Company: Jacobs	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: 10-10-24/0713		Cooler Temperature(s) °C and Other Remarks: D.7		Ver: 05/06/2024	

Eurofins Arkansas

8600 Kanis Rd
Little Rock, AR 72204
Phone: 501-224-5060 Fax: 501-224-5075

Chain of Custody Record



Environmental Testing

FXFO

Client Information		Sampler: <u>Brandi Andrews</u>		Lab PM: <u>Overbey, John</u>	COC No: <u>192-2799-988.1</u>
Client Contact: <u>Brandi Andrews</u>		Phone: <u>509-536-3710</u>		E-Mail: <u>john.overbey@eurofinsus.com</u>	Page: <u>1 of 1</u>
Company: <u>Jacobs Engineering Group, Inc.</u>		PWSID: _____		Job #: _____	
Address: <u>1004 N. Freya Street</u>		Due Date Requested: <u>30 Days</u>		Analysis Requested: _____	
City: <u>Spokane</u>		TAT Requested (days): <u>30 Days</u>		Preservation Codes: <u>N - None</u>	
State, Zip: <u>WA, 99202</u>		Compliance Project: <u>X Yes</u> <u>Δ No</u>		Other: _____	
Phone: _____		PO #: <u>148055071</u>		Total Number of Containers: _____	
Email: <u>brandi.andrews@jacobs.com</u>		WO #: _____		Special Instructions/Note: _____	
Project Name: <u>Spokane County Water Q2 and Q4</u>		Project #: <u>19201000</u>		1002 CD, 2002, 48CDNR	
Site: <u>Outfall - Manhole</u>		SSOW#: _____		Field Filtered Sample (Yes or No) <u>X</u>	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=air, T=tissue, A=air)
<u>B1024101106</u>	<u>10/10-11/24</u>	<u>0633</u>	<u>2904</u>	<u>C</u>	<u>Water</u>
Possible Hazard Identification		Sample Date		Sample Time	Sample Type (C=Comp, G=grab)
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Date		Time	Matrix (W=water, S=solid, O=soil, A=air, T=tissue, A=air)
Deliverable Requested: I, II, III, IV, Other (specify)		Date		Time	Matrix (W=water, S=solid, O=soil, A=air, T=tissue, A=air)
Empty Kit Relinquished by: _____		Date		Time	Matrix (W=water, S=solid, O=soil, A=air, T=tissue, A=air)
Relinquished by: <u>Brandi Andrews</u>		Date/Time: <u>10/11/24 1137</u>		Company	
Relinquished by: _____		Date/Time: _____		Company	
Relinquished by: _____		Date/Time: _____		Company	
Custody Seals Intact: <u>Δ Yes</u> <u>Δ No</u>		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: <u>0.4</u>	