

Bio 2nd Qtr 2019 — Retest  
(Apr, May, June)

(Due to invalid  
C. dubia tests,  
previously)

June 25, 2019

Biomonitoring Testing  
for  
Outfall 001  
Benton, AR

Control No. 235419-1

Prepared for:

Mr. Jonathon Buff  
Benton Utilities  
616 West Hazel  
Benton, AR 72015

Prepared by:

AMERICAN INTERPLEX CORPORATION  
8600 Kanis Road  
Little Rock, AR 72204-2322



Benton Utilities  
ATTN: Mr. Jonathon Buff  
616 West Hazel  
Benton, AR 72015

Re: Chronic 7-Day Renewal *Ceriodaphnia dubia*  
Outfall 001 - Benton, AR  
NPDES Permit No. AR0036498 AFIN# 63-00063


Dear Mr. Jonathon Buff:

This report is the analytical results and supporting information for the samples submitted to American Interplex Corporation (AIC). 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 Chief Operating Officer or qualified designee.

Testing procedures and Quality Assurance were in accordance with "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" EPA-821-R-02-013, Fourth Edition, October 2002. Test results are summarized below:

Method 1002.0 Chronic *Ceriodaphnia dubia* Survival and Reproduction Test: The No Observable Effects Concentration (NOEC) for survival occurred at 100 % effluent, which is equal to the critical dilution of 100 %. The NOEC for reproduction occurred at 100 % effluent, which is equal to the critical dilution of 100 %. **The sample, therefore, PASSED both lethal and sub-lethal effects for the *Ceriodaphnia dubia* test.**

AMERICAN INTERPLEX CORPORATION



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John Overbey  
Chief Operating Officer

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I. Control Acceptance Criteria

*Ceriodaphnia dubia* Method 1002.0

CRITERIA	RESULTS	PASS/FAIL
Control Survival > or = 80%	100	PASS
Control Reproduction > or = 15 per Surviving Female	20.0	PASS
Control CV < or = 40% per Surviving Female	28.3	PASS
Reproduction Minimum Significant Difference 13 to 47%	22.3	PASS
Critical Dilution CV < or = 40%	18.9	PASS

II. Outlined Report

A. Introduction

1. Permit Number: AR0036498 AFIN# 63-00063
2. Test Requirements: Chronic Biomonitoring, Quarterly Test Method 1002.0

B. Source of Effluent/Dilution Water:

1. Effluent Samples:

- a. Sampling Point: Outfall 001
- b. Chemical Data:

Analysis	Sample 1	Sample 2	Sample 3
Dissolved oxygen (mg/l)	8.1	7.8	7.5
pH (standard units)	7.0	6.9	7.3
Alkalinity (mg/l as CaCO <sub>3</sub> )	27	38	42
Hardness (mg/l as CaCO <sub>3</sub> )	51	49	50
Conductivity (umhos/cm)	240	240	250
Residual Chlorine (mg/l)	<0.05	<0.05	<0.05
Ammonia as N (mg/l)	0.55	0.47	0.19

2. Dilution Water Samples:

Soft

Analysis	235182-1
Dissolved oxygen (mg/l)	7.4
pH (standard units)	7.6
Alkalinity (mg/l as CaCO <sub>3</sub> )	30
Hardness (mg/l as CaCO <sub>3</sub> )	40
Conductivity (umhos/cm)	140
Residual Chlorine (mg/l)	<0.05

C. Test Methods

1. Test methods used:

Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA-821-R-02-013; test Method 1002.0, *Ceriodaphnia dubia* Survival and Reproduction.

2. Endpoint: No Observable Effects Concentration (NOEC)

3. Test Conditions:

*Ceriodaphnia dubia* Survival and Reproduction Method 1002.0

Date & Time Test Initiated: June 18, 2019 at 1530  
Date & Time Test Terminated: June 24, 2019 at 1545  
Type & Volume of Test Chamber: 30 ml disposable beaker  
Volume of Sample: 15 ml  
Number of Organisms per replicate: 1  
Number of Replicates per dilution: 10

4. Source of test organisms: Obtained from in-house cultures

5. Test Temperature: 25 +/- 1 degree Celsius

D. Test Organisms

1. Scientific Name

a. Test 1002.0 *Ceriodaphnia dubia*

III. Data Analysis

The data was analyzed using American Interplex Corporation's Laboratory Information Management Software based on Toxstat and following EPA method criteria.

*Ceriodaphnia dubia* survival data was analyzed with Fisher's Exact Test. Reproduction data was analyzed using Kolmogorov's Test for Normality and Bartlett's test and analyzed with Dunnett's Test to determine the No Observable Effects Concentration (NOEC) for Reproduction.

#### IV. Standard Reference Toxicants

The sensitivity of the offspring is determined by performing a standard reference toxicant test monthly. Sodium chloride in synthetic moderately hard water is used as prescribed in EPA-821-R-02-013.

##### *Ceriodaphnia dubia*

A chronic reference test was performed on May 28, 2019 at 1400 to June 04, 2019 at 1413

The results were as follows: (Control No. 234022-2.)

Survival LC-50: 1732 mg/l

Growth IC-25: 1127 mg/l

Growth PMSD: 13.3

#### V. Organism History

##### *Ceriodaphnia dubia*

Date: June 18, 2019

Age: <24 hours

Source: In-house culture

Water: Moderately hard synthetic  
Temperature: 25 deg.C

VII. Results Summary *Ceriodaphnia dubia*, Cladoceran Survival and Reproduction Test -- Method 1002.0

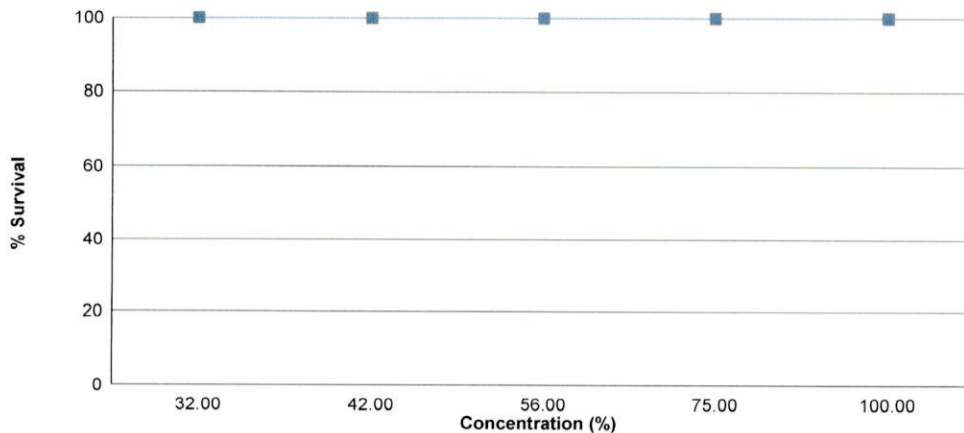
Neonates are exposed in a static renewal system to different concentrations of effluent with dilution water until 60% of surviving control organisms have three broods of offspring or a maximum of eight test days.

Effluent dilutions for this test were 32 %, 42 %, 56 %, 75 %, 100 % in accordance with the NPDES permit.

The low flow or 'critical' dilution is specified in the NPDES permit as 100 % effluent.

The test was initiated on June 18, 2019 at 1530 and continued through June 24, 2019 at 1545. Statistical analyses were performed on the observed data and the no observable effects concentrations (NOECs) were as follows:

- a.) NOEC survival = 100 % effluent
- b.) NOEC reproduction = 100 % effluent



Concentration	Percent Survival	Mean Reproduction
Control	100	20.0
32 %	100	25.5
42 %	100	29.3
56 %	100	25.6
75 %	100	27.5
100 %	100	26.2

Appendix A1: Test 1002.0

*Ceriodaphnia dubia* Survival and Reproduction

Date and Time Test Initiated: June 18, 2019 at 1530

Date and Time Test Terminated: June 24, 2019 at 1545

Concentration: Control													
Day	Replicate										No. of Young	No. of Adults	Young per Adult
	1	2	3	4	5	6	7	8	9	10			
1	0	0	0	0	0	0	0	0	0	0	0	10	0.00
2	0	0	0	0	0	0	0	0	0	0	0	10	0.00
3	0	0	0	0	4	0	2	3	4	4	17	10	1.70
4	3	3	4	5	0	2	0	0	0	0	17	10	1.70
5	0	0	10	7	10	9	9	6	6	7	64	10	6.40
6	4	10	10	12	10	11	11	10	12	12	102	10	10.2
7													
8													
TOTAL	7	13	24	24	24	22	22	19	22	23	200	10	20.0

Concentration: 32 %													
Day	Replicate										No. of Young	No. of Adults	Young per Adult
	1	2	3	4	5	6	7	8	9	10			
1	0	0	0	0	0	0	0	0	0	0	0	10	0.00
2	0	0	0	0	0	0	0	0	0	0	0	10	0.00
3	6	5	0	3	5	3	0	5	5	4	36	10	3.60
4	0	0	3	1	0	0	0	0	1	0	5	10	0.500
5	12	13	10	10	8	6	9	9	9	8	94	10	9.40
6	15	12	9	12	13	15	11	13	13	7	120	10	12.0
7													
8													
TOTAL	33	30	22	26	26	24	20	27	28	19	255	10	25.5

Concentration: 42 %													
Day	Replicate										No. of Young	No. of Adults	Young per Adult
	1	2	3	4	5	6	7	8	9	10			
1	0	0	0	0	0	0	0	0	0	0	0	10	0.00
2	0	0	0	0	0	0	0	0	0	0	0	10	0.00
3	0	6	2	3	5	4	5	5	5	5	40	10	4.00
4	2	0	3	0	0	0	0	1	1	1	8	10	0.800
5	10	12	11	10	14	12	10	11	12	10	112	10	11.2
6	12	12	11	14	14	12	13	15	16	14	133	10	13.3
7													
8													
TOTAL	24	30	27	27	33	28	28	32	34	30	293	10	29.3



Appendix A1: Test 1002.0

*Ceriodaphnia dubia* Survival and Reproduction

Date and Time Test Initiated: June 18, 2019 at 1530

Date and Time Test Terminated: June 24, 2019 at 1545

Concentration: 56 %													
Day	Replicate										No. of Young	No. of Adults	Young per Adult
	1	2	3	4	5	6	7	8	9	10			
1	0	0	0	0	0	0	0	0	0	0	0	10	0.00
2	0	0	0	0	0	0	0	0	0	0	0	10	0.00
3	0	4	0	4	5	5	6	7	5	6	42	10	4.20
4	2	0	4	0	0	1	0	0	1	0	8	10	0.800
5	6	12	12	10	11	9	10	13	10	10	103	10	10.3
6	9	8	12	12	14	11	12	0	13	12	103	10	10.3
7													
8													
TOTAL	17	24	28	26	30	26	28	20	29	28	256	10	25.6

Concentration: 75 %													
Day	Replicate										No. of Young	No. of Adults	Young per Adult
	1	2	3	4	5	6	7	8	9	10			
1	0	0	0	0	0	0	0	0	0	0	0	10	0.00
2	0	0	0	0	0	0	0	0	0	0	0	10	0.00
3	0	2	0	4	6	5	0	5	4	6	32	10	3.20
4	6	1	6	0	0	0	3	0	8	0	24	10	2.40
5	3	12	12	6	9	11	11	12	1	10	87	10	8.70
6	14	12	15	16	15	10	10	13	14	13	132	10	13.2
7													
8													
TOTAL	23	27	33	26	30	26	24	30	27	29	275	10	27.5

Concentration: 100 %													
Day	Replicate										No. of Young	No. of Adults	Young per Adult
	1	2	3	4	5	6	7	8	9	10			
1	0	0	0	0	0	0	0	0	0	0	0	10	0.00
2	0	0	0	0	0	0	0	0	0	0	0	10	0.00
3	6	7	0	0	5	3	7	6	4	6	44	10	4.40
4	0	0	5	4	0	1	0	0	0	0	10	10	1.00
5	10	12	11	9	10	11	12	10	11	12	108	10	10.8
6	1	12	10	6	12	13	13	14	13	6	100	10	10.0
7													
8													
TOTAL	17	31	26	19	27	28	32	30	28	24	262	10	26.2

Appendix A2: Statistics

*Ceriodaphnia dubia* Survival

Fisher's Exact Test			
Identification	Alive	Dead	Total Animals
Control	10	0	10
32 %	10	0	10
Total	20	0	20

Critical Fisher's value (10,10,10) (alpha=0.05) is 6. b value is 10. Since b is greater than 6 there is NO SIGNIFICANT DIFFERENCE between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test			
Identification	Alive	Dead	Total Animals
Control	10	0	10
42 %	10	0	10
Total	20	0	20

Critical Fisher's value (10,10,10) (alpha=0.05) is 6. b value is 10. Since b is greater than 6 there is NO SIGNIFICANT DIFFERENCE between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test			
Identification	Alive	Dead	Total Animals
Control	10	0	10
56 %	10	0	10
Total	20	0	20

Critical Fisher's value (10,10,10) (alpha=0.05) is 6. b value is 10. Since b is greater than 6 there is NO SIGNIFICANT DIFFERENCE between CONTROL and TREATMENT at the 0.05 level.

Fisher's Exact Test			
Identification	Alive	Dead	Total Animals
Control	10	0	10
75 %	10	0	10
Total	20	0	20

Critical Fisher's value (10,10,10) (alpha=0.05) is 6. b value is 10. Since b is greater than 6 there is NO SIGNIFICANT DIFFERENCE between CONTROL and TREATMENT at the 0.05 level.

Appendix A2: Statistics

*Ceriodaphnia dubia* Survival

Fisher's Exact Test			
Identification	Alive	Dead	Total Animals
Control	10	0	10
100 %	10	0	10
Total	20	0	20

Critical Fisher's value (10,10,10) ( $\alpha=0.05$ ) is 6. b value is 10. Since b is greater than 6 there is NO SIGNIFICANT DIFFERENCE between CONTROL and TREATMENT at the 0.05 level.

Summary of Fisher's Exact Test				
Group	Identification	Exposed	Dead	Sig 0.05
0	Control	10	0	
1	32 %	10	0	
2	42 %	10	0	
3	56 %	10	0	
4	75 %	10	0	
5	100 %	10	0	

Appendix A2: Statistics

*Ceriodaphnia dubia* Reproduction

Kolmogorov Test for Normality	No Transformation
<p>D = 0.1231 D* = 0.9658 Critical D* = 1.035 (alpha = 0.01, N = 60)</p> <p>Data PASS normality test (alpha = 0.01).</p>	

Bartlett's Test for Homogeneity of Variance	No Transformation
<p>Calculated B1 statistic = 5.182 Critical B = 15.086 (alpha = 0.01, df = 5)</p> <p>Data PASS B1 homogeneity test at 0.01 level.</p>	

Appendix A2: Statistics

*Ceriodaphnia dubia* Reproduction

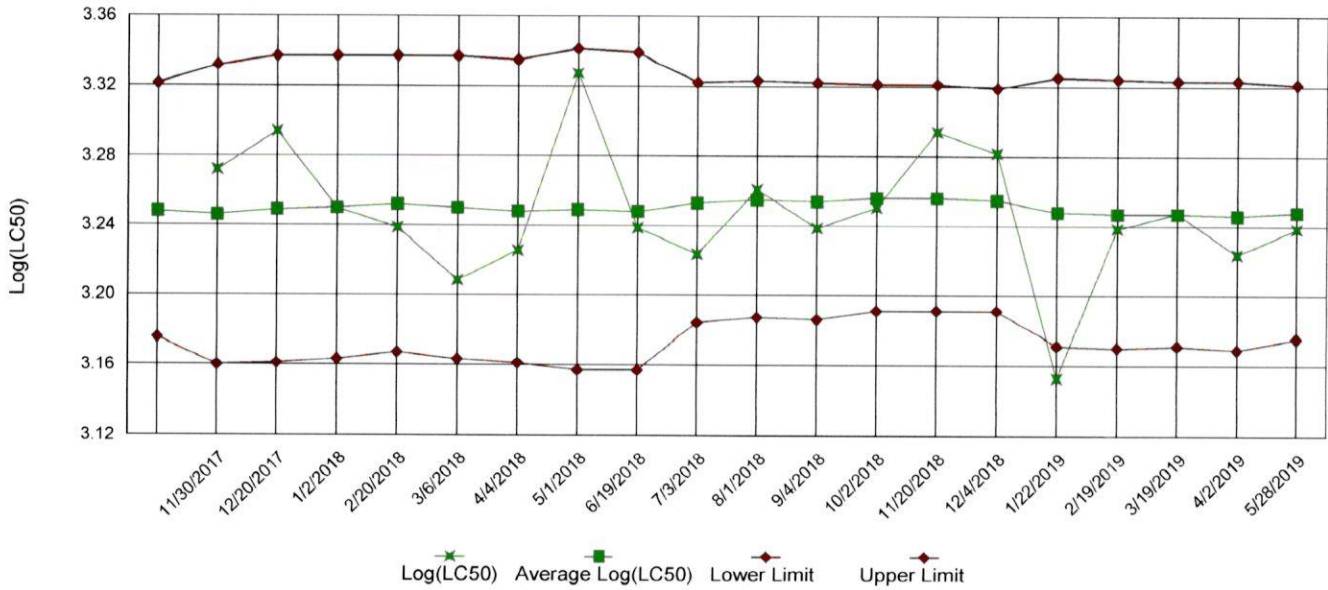
ANOVA Table				No Transformation	
SOURCE	DF	SS	MS	F	
Between	5	489.9	97.98	5.265	
Within (Error)	54	1005	18.61		
Total	59	1495			
Critical F = 3.38 (alpha = 0.01, df = 5,54)					
2.38 (alpha = 0.05, df = 5,54)					
Since F > Critical F REJECT Ho: All equal (alpha = 0.05)					

Dunnett's Test - Table 1 of 2					No Transformation	
Ho: Control < Treatment						
Group	Identification	Transformed Mean	Mean In Original Units	T Stat	Sig 0.05	
1	Control	20	20			
2	32 %	25.5	25.5	-2.851		
3	42 %	29.3	29.3	-4.821		
4	56 %	25.6	25.6	-2.903		
5	75 %	27.5	27.5	-3.888		
6	100 %	26.2	26.2	-3.214		
Dunnett's critical value = 2.31 (1 Tailed, alpha = 0.05, df [used] = 5,40) (Actual df = 5,54)						

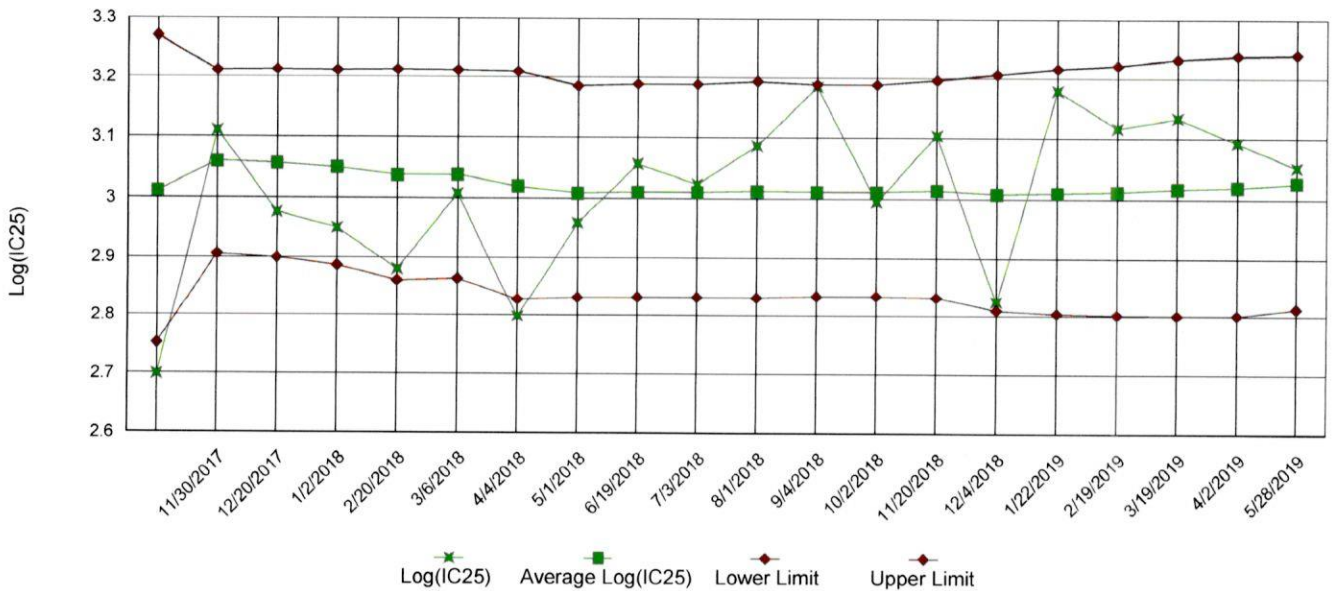
Dunnett's Test - Table 2 of 2					No Transformation	
Ho: Control < Treatment						
Group	Identification	Num of Reps	Min Sig Diff (In Orig. Units)	% of Control	Difference From Control	
1	Control	10				
2	32 %	10	4.457	22.3	-5.5	
3	42 %	10	4.457	22.3	-9.3	
4	56 %	10	4.457	22.3	-5.6	
5	75 %	10	4.457	22.3	-7.5	
6	100 %	10	4.457	22.3	-6.2	

Appendix A3: Test 1002.0  
Chronic Reference Toxicant, *Ceriodaphnia dubia*

LC50 Survival Data



IC25 Reproduction Data



Appendix B: Test 1002.0  
SUMMARY REPORTING FORMS  
CHRONIC BIOMONITORING  
*Ceriodaphnia dubia*  
SURVIVAL AND REPRODUCTION

Permittee: Benton Utilities

NPDES No.: AR0036498 AFIN# 63-00063

Date and Time Test Initiated: June 18, 2019 at 1530

Date and Time Test Terminated: June 24, 2019 at 1545

Dilution water used: Soft

PERCENT SURVIVAL

Time of Reading	Control	Percent Effluent				
		32 %	42 %	56 %	75 %	100 %
24 hour	100	100	100	100	100	100
48 hour	100	100	100	100	100	100
6 day	100	100	100	100	100	100

NUMBER OF YOUNG PRODUCED PER FEMALE @ 6 DAYS

Replicates	Control	Percent Effluent				
		32 %	42 %	56 %	75 %	100 %
A	7	33	24	17	23	17
B	13	30	30	24	27	31
C	24	22	27	28	33	26
D	24	26	27	26	26	19
E	24	26	33	30	30	27
F	22	24	28	26	26	28
G	22	20	28	28	24	32
H	19	27	32	20	30	30
I	22	28	34	29	27	28
J	23	19	30	28	29	24
Mean per Adult	20.0	25.5	29.3	25.6	27.5	26.2
Mean per Surviving Adult	20.0	25.5	29.3	25.6	27.5	26.2
CV %	28.3	17.2	10.6	16.3	11.0	18.9

CV = Coefficient of variation = standard deviation \* 100 / mean  
(calculated based on young produced by surviving females)

Appendix B: Test 1002.0  
SUMMARY REPORTING FORMS  
CHRONIC BIOMONITORING  
*Ceriodaphnia dubia*  
SURVIVAL AND REPRODUCTION

1. Fisher's Exact Test:

Is the mean survival significantly different ( $p=0.05$ ) than the control survival for the % effluent corresponding to (lethality):

a.) LOW FLOW OR CRITICAL DILUTION	(100 %)	<u>      </u> YES	<u>  X  </u> NO
b.) 1/2 LOW FLOW DILUTION	(NA)	<u>      </u> YES	<u>      </u> NO

2. Dunnett's Test:

Is the mean number of young produced per female significantly different ( $p=0.05$ ) than the control's number of young per female for the % effluent corresponding to (significant non-lethal effects):

a.) LOW FLOW OR CRITICAL DILUTION	(100 %)	<u>      </u> YES	<u>  X  </u> NO
b.) 1/2 LOW FLOW DILUTION	(NA)	<u>      </u> YES	<u>      </u> NO

3. If you answered NO to 1.a) enter [0] otherwise enter [1]:   0   (TLP3B)
4. If you answered NO to 2.a) enter [0] otherwise enter [1]:   0   (TGP3B)
5. NOEC *Ceriodaphnia* Lethality:  100 %  (TOP3B)
6. LOEC *Ceriodaphnia* Lethality:  100 %  (TXP3B)
7. NOEC *Ceriodaphnia* Sublethality:  100 %  (TPP3B)
8. LOEC *Ceriodaphnia* Sublethality:  100 %  (TYP3B)
9. Coefficient of variation for *Ceriodaphnia* Reproduction:  28.3  (TQP3B)



Appendix B: Test 1002.0  
CHRONIC TOXICITY SUMMARY FORM  
*Ceriodaphnia dubia*  
CHEMICAL PARAMETERS CHART

PERMITTEE: Benton Utilities  
NPDES NO.: AR0036498 AFIN# 63-00063  
CONTACT: Mr. Jonathon Buff  
ANALYST: 280, 310, 343

Test Initiated: DATE: June 18, 2019 TIME: 1530  
Test Terminated: DATE: June 24, 2019 TIME: 1545

DILUTION Control	DAY						
	1	2	3	4	5	6	7
D.O. Initial	7.4	7.8	7.3	7.8	7.2	7.3	8.0
Final	7.6	7.1	8.0	7.9	7.6	8.1	--
pH Initial	7.6	7.6	7.2	7.6	7.8	7.7	7.2
Final	7.7	7.8	7.8	7.9	8.0	7.3	--

DILUTION 32 %	DAY						
	1	2	3	4	5	6	7
D.O. Initial	7.2	7.8	7.3	7.7	7.4	7.1	7.9
Final	7.4	7.0	7.7	7.7	8.1	8.0	--
pH Initial	7.4	7.5	7.1	7.5	7.6	7.5	7.2
Final	7.7	7.8	7.8	7.9	8.0	7.4	--

DILUTION 42 %	DAY						
	1	2	3	4	5	6	7
D.O. Initial	7.5	7.4	7.4	7.3	7.2	7.8	8.0
Final	7.4	7.4	8.0	7.9	8.3	8.1	--
pH Initial	7.3	7.5	7.1	7.4	7.5	7.4	7.2
Final	7.7	7.8	7.8	7.9	8.0	7.5	--

DILUTION 56 %	DAY						
	1	2	3	4	5	6	7
D.O. Initial	7.7	7.4	7.6	7.3	7.3	7.4	8.1
Final	7.8	7.3	8.1	7.8	8.2	8.2	--
pH Initial	7.2	7.4	7.0	7.4	7.4	7.4	7.2
Final	7.7	7.8	7.8	8.0	8.0	7.5	--

DILUTION 75 %	DAY						
	1	2	3	4	5	6	7
D.O. Initial	7.9	7.5	7.2	7.4	7.2	7.2	8.2
Final	7.4	7.2	7.9	8.0	7.7	7.9	--
pH Initial	7.1	7.4	7.0	7.4	7.4	7.4	7.2
Final	7.8	7.8	7.8	8.0	8.1	7.6	--

DILUTION 100 %	DAY						
	1	2	3	4	5	6	7
D.O. Initial	8.1	7.3	7.8	7.4	7.5	7.3	7.8
Final	7.6	7.2	8.3	7.8	8.3	8.0	--
pH Initial	7.0	7.3	6.9	7.3	7.3	7.4	7.3
Final	7.8	7.8	7.8	8.0	8.1	7.6	--

Alkalinity	Hardness	Conductivity	Chlorine	Sample ID
27	51	240	<0.05	Outfall 001 18-JUN-19
38	49	240	<0.05	Outfall 001 19-JUN-19
42	50	250	<0.05	Outfall 001 21-JUN-19

Alkalinity	Hardness	Conductivity	Chlorine	Sample ID
30	40	140	<0.05	235182-1



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: <u>Benton Utilities</u>		PO No. <u>100071</u>		ANALYSES REQUESTED		AIC PROPOSAL NO: <u>133119</u>	
Project Reference: <u>AL003649X</u>		MATRIX		NO OF BOTTLES		AIC PROPOSAL NO: <u>133119</u>	
Project Manager: <u>J. Buff</u>		WATER		3		Carrier:	
Sampled By: <u>GB</u>		SOIL				Received Temperature C <u>0-5</u>	
AIC No. <u>1</u>		GRA B				Remarks	
Sample Identification <u>OUTFall001</u>		COMP					
Date/Time Collected <u>6/18/19 0725</u>		V					
Container Type		V = VOA vials					
Preservative		N = Nitric acid pH2					
G = Glass		V = Sulfuric acid pH2					
NO = none		H = HCl to pH2					
S = Sulfuric acid pH2		B = NaOH to pH12					
Turnaround Time Requested: (Please circle)		T = Sodium Thiosulfate					
NORMAL or EXPEDITED IN ___ DAYS		Z = Zinc acetate					
Expedited results requested by: _____		A = (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , NH <sub>4</sub> OH					
Who should AIC contact with questions: _____		Relinquished By: <u>GB</u>		Date/Time <u>6/18/19 0813</u>			
Phone: _____ Fax: _____		Relinquished By: <u>GB</u>		Date/Time <u>6/18/19 0858</u>			
Report Attention to: _____		Comments: <u>DANNY BROWN</u>					
Report Address to: _____							
Email Address: <u>JwBuff@Bentonar.org</u>							
9/20/14							



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 2 OF 3

Client: <u>Benton Utilities</u>		AIC CONTROL NO: <u>235419</u>	
Project Reference: <u>AL003649x</u>		AIC PROPOSAL NO:	
Project Manager: <u>J. Boff</u>		Carrier:	
Sampled By: <u>GB</u>		Received Temperature C: <u>0</u>	
AIC No. <u>2</u>		Remarks:	
Sample Identification	Date/Time Collected		
<u>OUTFALL 001</u>	<u>6/19/19 0745</u>		
NO OF BOTTLES		ANALYSES REQUESTED	
3		<input checked="" type="checkbox"/> Nitrate <input checked="" type="checkbox"/> Nitrite <input checked="" type="checkbox"/> Ammonia	
MATRIX			
WATER			
SOIL			
COMPOST			
GRA B			
COMP			
NO = none			
G = Glass			
P = Plastic			
S = Sulfuric acid pH2			
V = VOA vials			
N = Nitric acid pH2			
H = HCl to pH2			
B = NaOH to pH12			
T = Sodium Thiosulfate			
Z = Zinc acetate			
A = (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , NH <sub>4</sub> OH			
Container Type	Relinquished	Received	
Preservative	By: <u>GB</u>	By: <u>GB</u>	Date/Time: <u>6/19/19 0951</u>
	Date/Time	Date/Time	Date/Time
	<u>6/19/19 1035</u>	<u>6/19/19 1035</u>	<u>6/19/19 0951</u>
	By: <u>GB</u>	By: <u>AC341</u>	By: <u>GB</u>
	Comments:		

Turnaround Time Requested: (Please circle)  
 NORMAL or EXPEDITED IN \_\_\_ DAYS  
 Expedited results requested by:  
 Who should AIC contact with questions:  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Report Attention to:  
 Report Address to:  
 Email Address: JBBoff@Bentonar.org  
GBecker@Bentonar.org  
AngelaF@Bentonar.org



### CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 1 OF 1

Client: <u>Benton Utilities</u> Project Reference: <u>AL003649X</u> Project Manager: <u>J. Buff</u> Sampled By: <u>GB</u>	PO No. <u>100071</u> MATRIX: <u>WATER</u> ANALYSES REQUESTED	NO OF BOTTLES: <u>3</u> V = VOA vials N = Nitric acid pH2	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th rowspan="2">AIC No.</th> <th rowspan="2">Sample Identification</th> <th rowspan="2">Date/Time Collected</th> <th colspan="2">GRA B</th> <th rowspan="2">C O M P</th> <th rowspan="2">M A T R I X</th> <th rowspan="2">NO OF BOTTLES</th> <th rowspan="2">ANALYSES REQUESTED</th> <th rowspan="2">Remarks</th> </tr> <tr> <th>G</th> <th>R</th> </tr> <tr> <td>3</td> <td>OSTFALL001</td> <td>6/21/19 0745</td> <td>✓</td> <td></td> <td>✓</td> <td>WATER</td> <td>3</td> <td>Water monitoring Chlorine</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>	AIC No.	Sample Identification	Date/Time Collected	GRA B		C O M P	M A T R I X	NO OF BOTTLES	ANALYSES REQUESTED	Remarks	G	R	3	OSTFALL001	6/21/19 0745	✓		✓	WATER	3	Water monitoring Chlorine																																																																																											AIC CONTROL NO: <u>235419</u> AIC PROPOSAL NO.: Carrier: Received Temperature C: <u>15</u> Received Temperature C: Remarks:
AIC No.	Sample Identification	Date/Time Collected	GRA B				C O M P	M A T R I X						NO OF BOTTLES	ANALYSES REQUESTED	Remarks																																																																																																			
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Email Address: JwBuff@Bentonar.org  
 9/2014  
G Becker@Bentonar.org  
Angela F@Bentonar.org