



November 30, 2021

Biomonitoring Testing
for
AR0035602

Control No. 260408-1

Prepared for:

Mr. Scotty Jones
Trumann Water and Sewer Commission
704 Hwy 463 N
Trumann, AR 72472

Prepared by:

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



Trumann Water and Sewer Commission
ATTN: Mr. Scotty Jones
704 Hwy 463 N
Trumann, AR 72472

Re: Chronic *Pimephales promelas* (Fathead minnow)
AR0035602
NPDES Permit No. AR0035602 AFIN 56-00047


Dear Mr. Scotty Jones:

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 1000.0 Chronic *Pimephales promelas* (Fathead minnow) Survival and Growth Test: The No Observable Effects Concentration (NOEC) for survival occurred at 12 % effluent, which is above the critical dilution of 9 %. The NOEC for growth occurred at 12 % effluent, which is above the critical dilution of 9 %. **The sample, therefore, PASSED both lethal and sub-lethal effects for the Fathead minnow test.**

AMERICAN INTERPLEX CORPORATION



John Overbey
Chief Operating Officer

PDF cc: Trumann Water and Sewer Commission
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Trumann Water and Sewer Commission
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I. Control Acceptance Criteria

Pimephales promelas (Fathead minnow) Method 1000.0

CRITERIA	RESULTS	PASS/FAIL
Control Survival > or = 80%	97.5	PASS
Control Growth > or = 0.25 mg per Surviving minnow	0.503	PASS
Control Growth CV < or = 40%	10.7	PASS
Growth Minimum Significant Difference 12 to 30%	19.6	PASS
Critical Dilution CV < or = 40%	16.4	PASS

II. Outlined Report

A. Introduction

1. Permit Number: AR0035602 AFIN 56-00047
2. Test Requirements:
Test Method 1000.0

B. Source of Effluent/Dilution Water:

1. Effluent Samples:
 - a. Sampling Point: AR0035602
 - b. Chemical Data:

Analysis	Sample 1	Sample 2	Sample 3
Dissolved oxygen (mg/l)	7.9	8.2	8.1
pH (standard units)	8.3	8.3	8.3
Alkalinity (mg/l as CaCO ₃)	130	130	120
Hardness (mg/l as CaCO ₃)	33	29	29
Conductivity (umhos/cm)	450	460	460
Residual Chlorine (mg/l)	0.060	<0.05	0.060
Ammonia as N (mg/l)	0.18	0.23	0.42

2. Dilution Water Samples:
Moderately Hard

Analysis	260222-1	260368-1	260369-1
Dissolved oxygen (mg/l)	6.9	7.4	7.6
pH (standard units)	7.9	7.9	8.0
Alkalinity (mg/l as CaCO ₃)	60	60	61
Hardness (mg/l as CaCO ₃)	82	83	82
Conductivity (umhos/cm)	300	300	310
Residual Chlorine (mg/l)	<0.05	<0.05	<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 1000.0, Fathead Minnow Survival and Growth.

2. Endpoint: No Observable Effects Concentration (NOEC)

3. Test Conditions:

Pimephales promelas (Fathead minnow) Survival and Growth Method 1000.0

Date & Time Test Initiated: November 16, 2021 at 1415

Date & Time Test Terminated: November 23, 2021 at 1420

Type & Volume of Test Chamber: 500 ml disposable beaker

Volume of Sample: 250 ml

Number of Organisms per replicate: 8

Number of Replicates per dilution: 5

4. Source of test organisms: In-house culture

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

D. Test Organisms

1. Scientific Name

a. Test 1000.0 *Pimephales promelas*

III. Data Analysis

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

Pimephales promelas (Fathead minnow) survival data was transformed using the Arc Sine transformation. Normality and homogeneity of variance were checked using Shapiro-Wilk's and Bartlett's test. The survival data was then analyzed using Dunnett's Test to determine the No Observable Effects Concentration (NOEC).

Fathead minnow growth data was analyzed for normality and homogeneity of variance using Shapiro-Wilk's and Bartlett's test. Dunnett's Test was used to determine the No Observable Effects Concentration (NOEC) for growth.

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.

Pimephales promelas (Fathead minnow)

A chronic reference test was performed on October 05, 2021 at 1504 to October 12, 2021 at 1450

The results were as follows: (Control No. 259170-1.)

Survival LC-50: 3649 mg/l

Growth IC-25: 2291 mg/l

Growth PMSD: 11.7

V. Organism History

Pimephales promelas (Fathead minnow)

Date: November 16, 2021

Age: <24 hours

Source: In-house culture

Water: Moderately hard synthetic

Temperature: 25 deg.C

VII. Results Summary *Pimephales promelas*, Fathead minnow Larval Survival and Growth Test -- Method 1000.0

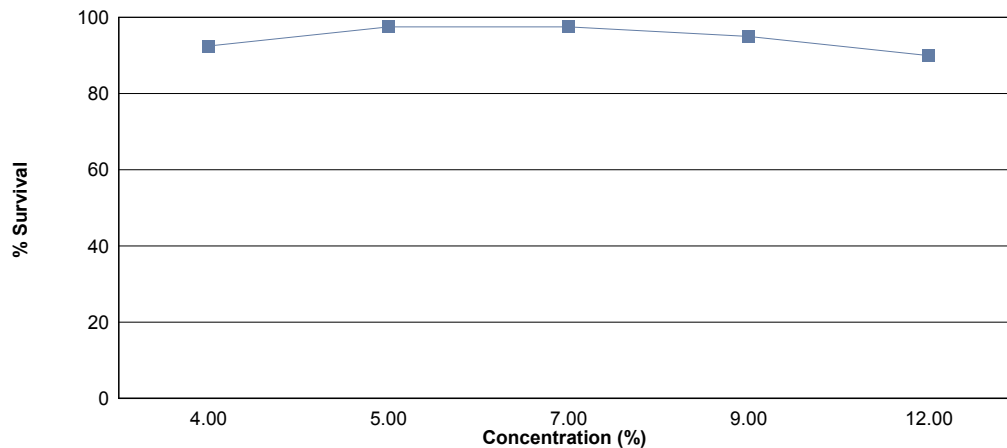
Larvae are exposed in a static renewal system for seven days to different concentrations of effluent with dilution water. Test results are based on the survival and growth (weight) of the larvae.

Effluent dilutions for this test were 4 %, 5 %, 7 %, 9 %, 12 % in accordance with the NPDES permit.

The low flow or 'critical' dilution is specified in the NPDES permit as 9 % effluent.

The test was initiated on November 16, 2021 at 1415 and continued through November 23, 2021 at 1420. Statistical analyses were performed on the observed data and the no observable effects concentrations (NOECs) were as follows:

- a.) NOEC survival = 12 % effluent
- b.) NOEC growth = 12 % effluent



Summary of the 7-day Fathead Minnow Survival and Growth		
Concentration	Percent Survival	Mean Growth (mg)
Control	97.5	0.490
4 %	92.5	0.436
5 %	97.5	0.487
7 %	97.5	0.478
9 %	95.0	0.449
12 %	90.0	0.461

Appendix A1: Test 1000.0

Pimephales promelas (Fathead Minnow) 7-Day Survival

Date and Time Test Initiated: November 16, 2021 at 1415

Date and Time Test Terminated: November 23, 2021 at 1420

Concentration	Replicate	Number of Survivors						
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Control	A	8	8	8	8	8	8	8
	B	8	8	8	8	8	8	8
	C	8	8	7	7	7	7	7
	D	8	8	8	8	8	8	8
	E	8	8	8	8	8	8	8
4 %	A	8	8	8	8	8	8	7
	B	8	8	8	8	8	8	8
	C	8	8	8	8	7	7	7
	D	8	8	8	8	8	7	7
	E	8	8	8	8	8	8	8
5 %	A	8	8	8	8	8	8	7
	B	8	8	8	8	8	8	8
	C	8	8	8	8	8	8	8
	D	8	8	8	8	8	8	8
	E	8	8	8	8	8	8	8
7 %	A	8	8	8	8	8	8	8
	B	8	8	8	8	8	8	8
	C	8	8	8	8	7	7	7
	D	8	8	8	8	8	8	8
	E	8	8	8	8	8	8	8
9 %	A	8	8	8	8	7	7	7
	B	8	8	8	8	8	8	8
	C	8	8	8	8	8	8	8
	D	8	8	8	8	8	8	7
	E	8	8	8	8	8	8	8
12 %	A	8	7	7	7	7	7	6
	B	8	8	7	7	7	7	7
	C	8	8	8	8	8	8	8
	D	8	8	8	8	8	8	8
	E	8	8	8	7	7	7	7

Appendix A1: Test 1000.0

Pimephales promelas (Fathead Minnow) 7-Day Growth

Test Initiated: November 16, 2021 at 1415

Test Terminated: November 23, 2021 at 1420

Concentration	Replicate	Weight of pan	Weight of pan + fish	Total weight of fish (g)	Original # of fish	Mean dry weight (mg)
Control	A	.65677	.66052	0.00375	8	0.469
	B	.65562	.66015	0.00453	8	0.566
	C	.65520	.65858	0.00338	8	0.422
	D	.64961	.65363	0.00402	8	0.502
	E	.66573	.66965	0.00392	8	0.490
4 %	A	.64819	.65206	0.00387	8	0.484
	B	.67730	.68120	0.00390	8	0.488
	C	.65126	.65424	0.00298	8	0.372
	D	.64728	.65024	0.00296	8	0.370
	E	.65859	.66230	0.00371	8	0.464
5 %	A	.65583	.65906	0.00323	8	0.404
	B	.65833	.66320	0.00487	8	0.609
	C	.65955	.66363	0.00408	8	0.510
	D	.66057	.66408	0.00351	8	0.439
	E	.65691	.66069	0.00378	8	0.472
7 %	A	.65110	.65531	0.00421	8	0.526
	B	.65098	.65479	0.00381	8	0.476
	C	.64754	.65073	0.00319	8	0.399
	D	.66551	.66920	0.00369	8	0.461
	E	.66595	.67016	0.00421	8	0.526
9 %	A	.64044	.64431	0.00387	8	0.484
	B	.66142	.66586	0.00444	8	0.555
	C	.66088	.66399	0.00311	8	0.389
	D	.66189	.66488	0.00299	8	0.374
	E	.65689	.66045	0.00356	8	0.445
12 %	A	.66824	.67219	0.00395	8	0.494
	B	.66239	.66543	0.00304	8	0.380
	C	.66245	.66601	0.00356	8	0.445
	D	.66135	.66573	0.00438	8	0.548
	E	.63986	.64337	0.00351	8	0.439

Appendix A2: Statistics

Pimephales promelas (Fathead minnow) Survival

Transformation of Data			Transform: Arc Sin(Square Root(Y))	
Group	Identification	Rep	Value	Transformed
1	Control	1	1.00000	1.39310
1	Control	2	1.00000	1.39310
1	Control	3	0.87500	1.20940
1	Control	4	1.00000	1.39310
1	Control	5	1.00000	1.39310
2	4 %	1	0.87500	1.20940
2	4 %	2	1.00000	1.39310
2	4 %	3	0.87500	1.20940
2	4 %	4	0.87500	1.20940
2	4 %	5	1.00000	1.39310
3	5 %	1	0.87500	1.20940
3	5 %	2	1.00000	1.39310
3	5 %	3	1.00000	1.39310
3	5 %	4	1.00000	1.39310
3	5 %	5	1.00000	1.39310
4	7 %	1	1.00000	1.39310
4	7 %	2	1.00000	1.39310
4	7 %	3	0.87500	1.20940
4	7 %	4	1.00000	1.39310
4	7 %	5	1.00000	1.39310
5	9 %	1	0.87500	1.20940
5	9 %	2	1.00000	1.39310
5	9 %	3	1.00000	1.39310
5	9 %	4	0.87500	1.20940
5	9 %	5	1.00000	1.39310
6	12 %	1	0.75000	1.04720
6	12 %	2	0.87500	1.20940
6	12 %	3	1.00000	1.39310
6	12 %	4	1.00000	1.39310
6	12 %	5	0.87500	1.20940

Appendix A2: Statistics

Pimephales promelas (Fathead minnow) Survival

Shapiro - Wilk's Test for Normality		Transform: Arc Sin(Square Root(Y))
D = 0.2474		
W = 0.9071		
Critical W = 0.9	(alpha = 0.01, N = 30)	
Critical W = 0.927	(alpha = 0.05, N = 30)	
Data PASS normality test (alpha = 0.01).		

Bartlett's Test for Homogeneity of Variance		Transform: Arc Sin(Square Root(Y))
Calculated B1 statistic = 2.107		
Critical B = 15.086	(alpha = 0.01, df = 5)	
Data PASS B1 homogeneity test at 0.01 level.		

Appendix A2: Statistics

Pimephales promelas (Fathead minnow) Survival

ANOVA Table			Transform: Arc Sin(Square Root(Y))	
SOURCE	DF	SS	MS	F
Between	5	0.05091	0.01018	0.9874
Within (Error)	24	0.2474	0.01031	
Total	29	0.2983		
Critical F = 3.9 (alpha = 0.01, df = 5,24) 2.62 (alpha = 0.05, df = 5,24)				
Since F < Critical F FAIL TO REJECT Ho: All equal (alpha = 0.05)				

Dunnett's Test - Table 1 of 2				Transform: Arc Sin(Square Root(Y))	
Ho:Control<Treatment					
Group	Identification	Transformed Mean	Mean In Original Units	T Stat	Sig 0.05
1	Control	1.3564	0.975		
2	4 %	1.2829	0.925	1.145	
3	5 %	1.3564	0.975	0	
4	7 %	1.3564	0.975	0	
5	9 %	1.3196	0.95	0.573	
6	12 %	1.2504	0.9	1.651	
Dunnett's critical value = 2.36 (1 Tailed, alpha = 0.05, df = 5,24)					

Dunnett's Test - Table 2 of 2				Transform: Arc Sin(Square Root(Y))	
Ho:Control<Treatment					
Group	Identification	Num of Reps	Min Sig Diff (In Orig. Units)	% of Control	Difference From Control
1	Control	5			
2	4 %	5	0.08281	8.67	0.05
3	5 %	5	0.08281	8.67	0
4	7 %	5	0.08281	8.67	0
5	9 %	5	0.08281	8.67	0.025
6	12 %	5	0.08281	8.67	0.075

Appendix A2: Statistics

Pimephales promelas (Fathead minnow) Growth

Shapiro - Wilk's Test for Normality	No Transformation
<p>D = 0.09886 W = 0.9494 Critical W = 0.9 (alpha = 0.01, N = 30) Critical W = 0.927 (alpha = 0.05, N = 30)</p> <p>Data PASS normality test (alpha = 0.01).</p>	

Bartlett's Test for Homogeneity of Variance	No Transformation
<p>Calculated B1 statistic = 1.053 Critical B = 15.086 (alpha = 0.01, df = 5)</p> <p>Data PASS B1 homogeneity test at 0.01 level.</p>	

Appendix A2: Statistics

Pimephales promelas (Fathead minnow) Growth

ANOVA Table				No Transformation	
SOURCE	DF	SS	MS	F	
Between	5	0.01177	0.002353	0.5713	
Within (Error)	24	0.09886	0.004119		
Total	29	0.1106			
Critical F = 3.9 (alpha = 0.01, df = 5,24) 2.62 (alpha = 0.05, df = 5,24)					
Since F < Critical F FAIL TO REJECT Ho: All equal (alpha = 0.05)					

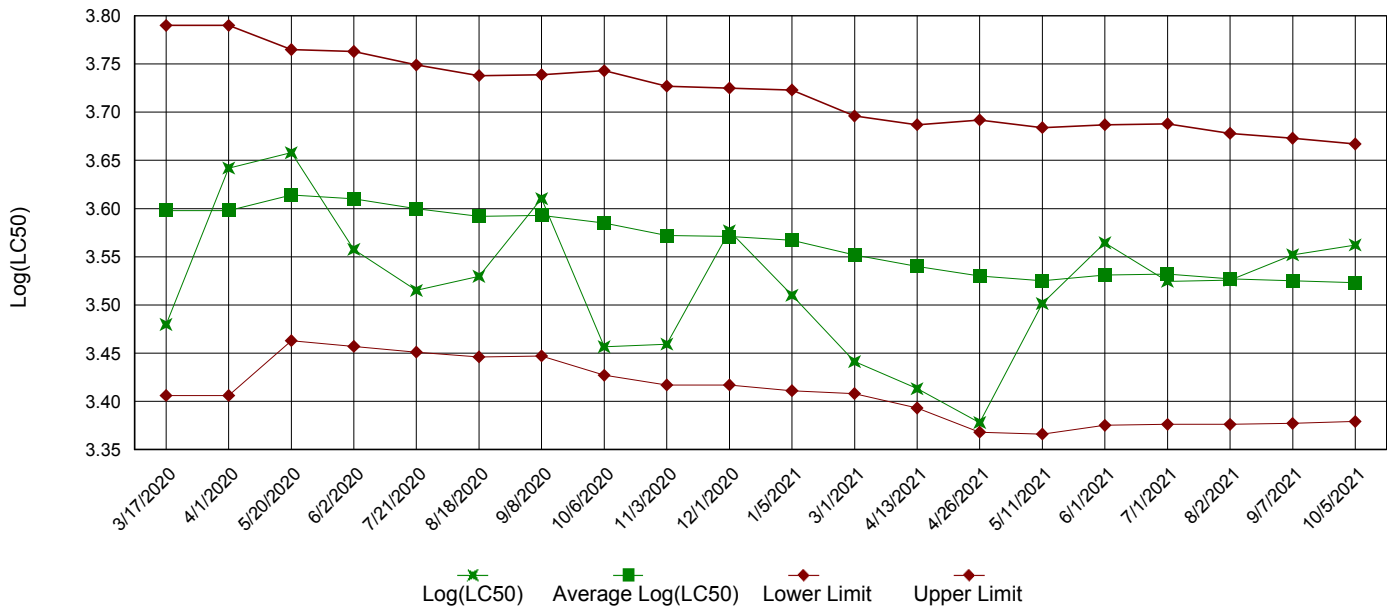
Dunnett's Test - Table 1 of 2					No Transformation	
Ho:Control<Treatment						
Group	Identification	Transformed Mean	Mean In Original Units	T Stat	Sig 0.05	
1	Control	0.4898	0.4898			
2	4 %	0.4356	0.4356	1.335		
3	5 %	0.4868	0.4868	0.07391		
4	7 %	0.4776	0.4776	0.3006		
5	9 %	0.4494	0.4494	0.9953		
6	12 %	0.4612	0.4612	0.7046		
Dunnett's critical value = 2.36 (1 Tailed, alpha = 0.05, df = 5,24)						

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	5				
2	4 %	5	0.09579	19.6	0.0542	
3	5 %	5	0.09579	19.6	0.003	
4	7 %	5	0.09579	19.6	0.0122	
5	9 %	5	0.09579	19.6	0.0404	
6	12 %	5	0.09579	19.6	0.0286	

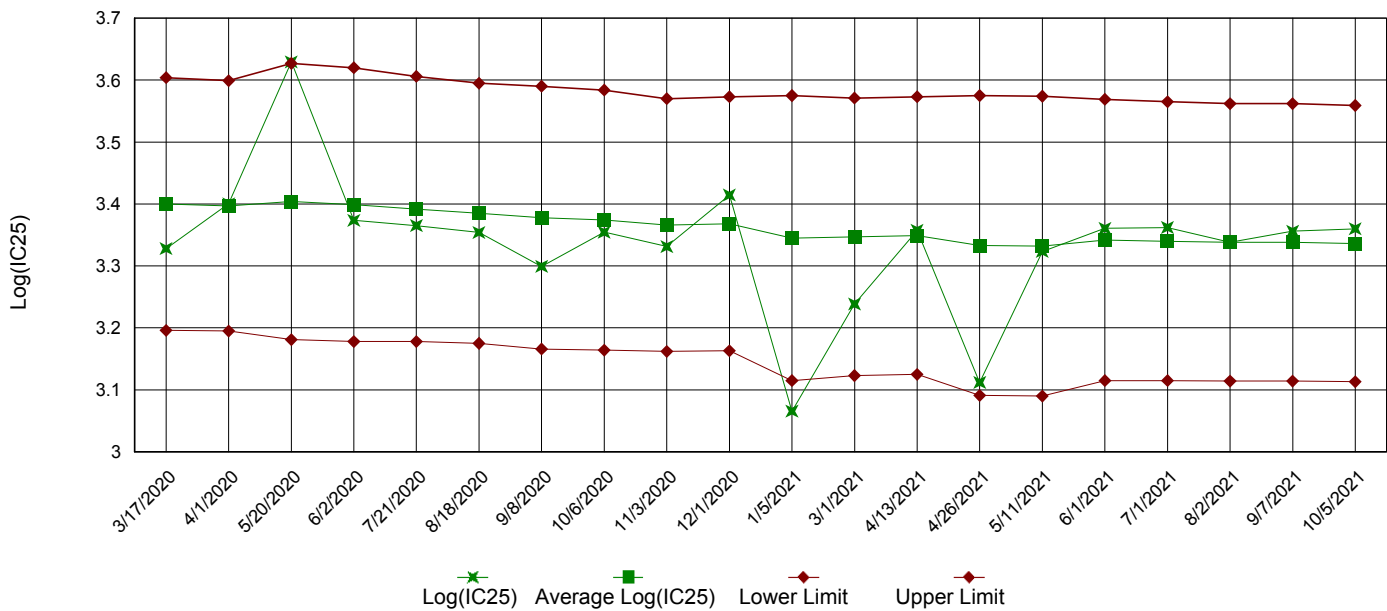
Appendix A3: Test 1000.0

Chronic Reference Toxicant, *Pimephales promelas* (Fathead Minnow)

LC50 Survival Data



IC25 Growth Data



Appendix B: Test 1000.0
SUMMARY REPORTING FORMS
CHRONIC BIOMONITORING
Pimephales promelas (Fathead Minnow)
SURVIVAL AND GROWTH

Permittee: Trumann Water and Sewer Commission

NPDES No.: AR0035602 AFIN 56-00047

Date and Time Test Initiated: November 16, 2021 at 1415

Date and Time Test Terminated: November 23, 2021 at 1420

Dilution water used: Moderately Hard

DATA TABLE FOR SURVIVAL

Effluent Conc. %	Percent Survival in replicate chambers					Mean percent survival			CV%
	A	B	C	D	E	24 hr	48 hr	7 days	
Control	100	100	87.5	100	100	100	100	97.5	5.73
4 %	87.5	100	87.5	87.5	100	100	100	92.5	7.40
5 %	87.5	100	100	100	100	100	100	97.5	5.73
7 %	100	100	87.5	100	100	100	100	97.5	5.73
9 %	87.5	100	100	87.5	100	100	100	95.0	7.21
12 %	75.0	87.5	100	100	87.5	100	97.5	90.0	11.6

DATA TABLE FOR GROWTH

Effluent Conc. %	Average dry weight, mg replicate chambers					Mean dry weight, mg	CV%
	A	B	C	D	E		
Control	0.469	0.566	0.422	0.502	0.490	0.490	10.7
4 %	0.484	0.488	0.372	0.370	0.464	0.436	13.7
5 %	0.404	0.609	0.510	0.439	0.472	0.487	16.2
7 %	0.526	0.476	0.399	0.461	0.526	0.478	11.1
9 %	0.484	0.555	0.389	0.374	0.445	0.449	16.4
12 %	0.494	0.380	0.445	0.548	0.439	0.461	13.7

CV = Coefficient of variation = standard deviation * 100 / mean

Appendix B: Test 1000.0
SUMMARY REPORTING FORMS
CHRONIC BIOMONITORING
Pimephales promelas (Fathead Minnow)
SURVIVAL AND GROWTH

1. Dunnett's 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	<u> </u> YES	<u> X </u> NO
b.) 1/2 LOW FLOW DILUTION	<u> </u> YES	<u> </u> NO

2. Dunnett's Test:

Is the mean dry weight (growth) significantly different ($p=0.05$) than the control's dry weight (growth) for the % effluent corresponding to (significant non-lethal effects):

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

3. If you answered NO to 1.a) enter [0] otherwise enter [1]: 0 (TLP6C)
4. If you answered NO to 2.a) enter [0] otherwise enter [1]: 0 (TGP6C)
5. NOEC *Pimephales* Lethality: 12 % (TOP6C)
6. LOEC *Pimephales* Lethality: 12 % (TXP6C)
7. NOEC *Pimephales* Sublethality: 12 % (TPP6C)
8. LOEC *Pimephales* Sublethality: 12 % (TYP6C)
9. Coefficient of variation for *Pimephales* growth: 16.4 (TQP6C)
10. Sublethality for this test: 12 % (51714 or 51714S)

Appendix B: Test 1000.0
CHRONIC TOXICITY SUMMARY FORM
Pimephales promelas (Fathead minnow)
CHEMICAL PARAMETERS CHART

PERMITTEE: Trumann Water and Sewer Commi
NPDES NO.: AR0035602 AFIN 56-00047
CONTACT: Mr. Scotty Jones
ANALYST: 280, 343, 357, 358

Test Initiated: DATE: November 16, 2021 TIME: 1415
Test Terminated: DATE: November 23, 2021 TIME: 1420

DILUTION	DAY						
	1	2	3	4	5	6	7
Control							
D.O. Initial	6.9	7.1	7.4	7.6	7.6	7.4	7.4
Final	6.1	6.4	6.5	5.9	6.0	6.8	6.6
pH Initial	7.9	7.9	7.9	7.8	8.0	7.9	7.8
Final	7.5	7.6	7.6	7.5	7.5	7.6	7.6

DILUTION	DAY						
	1	2	3	4	5	6	7
4 %							
D.O. Initial	7.0	7.3	7.6	7.4	7.8	7.3	7.7
Final	6.2	5.8	5.8	5.6	5.8	6.8	6.6
pH Initial	7.9	7.9	7.9	7.9	8.0	7.9	7.8
Final	7.6	7.5	7.4	7.4	7.5	7.6	7.5

DILUTION	DAY						
	1	2	3	4	5	6	7
5 %							
D.O. Initial	7.2	7.4	7.5	7.5	7.7	7.4	7.9
Final	6.0	6.9	5.6	5.6	5.6	6.7	6.5
pH Initial	7.9	7.9	7.9	7.9	8.0	7.9	7.8
Final	7.5	7.6	7.4	7.4	7.5	7.5	7.5

DILUTION	DAY						
	1	2	3	4	5	6	7
7 %							
D.O. Initial	7.0	7.3	7.6	7.7	7.5	7.4	7.7
Final	5.8	7.4	5.6	5.4	5.8	6.6	6.4
pH Initial	8.0	7.9	8.0	7.9	8.0	7.9	7.9
Final	7.5	7.7	7.4	7.5	7.5	7.6	7.5

DILUTION	DAY						
	1	2	3	4	5	6	7
9 %							
D.O. Initial	7.0	7.1	7.5	7.8	7.5	7.5	7.7
Final	6.0	6.2	5.7	5.6	5.7	6.5	6.3
pH Initial	8.0	8.0	8.0	8.0	8.0	7.9	7.9
Final	7.5	7.5	7.5	7.5	7.5	7.5	7.5

DILUTION	DAY						
	1	2	3	4	5	6	7
12 %							
D.O. Initial	7.0	7.2	7.6	7.7	7.5	7.4	7.9
Final	5.8	6.2	5.6	5.7	5.5	6.6	6.5
pH Initial	8.0	8.0	8.0	8.0	8.0	8.1	8.0
Final	7.5	7.5	7.4	7.5	7.6	7.5	7.5

Alkalinity	Hardness	Conductivity	Chlorine	Sample ID
130	33	450	0.060	AR0035602 15-NOV-21
130	29	460	<0.05	AR0035602 17-NOV-21
120	29	460	0.060	AR0035602 19-NOV-21

Alkalinity	Hardness	Conductivity	Chlorine	Sample ID
60	82	300	<0.05	260222-1
60	83	300	<0.05	260368-1
61	82	310	<0.05	260369-1



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: <u>Trumann Water Works</u>		PO No.		Analyses Requested		AIC Control No: <u>260468</u>	
Project Reference: <u>AR0035602</u>		Sample Matrix		B I O T T L E S		AIC Proposal No:	
Project Manager: <u>Scotty Jones</u>		W A T E R L				Carrier: <u>Feds</u>	
Sampled By: <u>LORRE HOLT</u>		G R A B		1		Received Temperature °C <u>0.1</u>	
AIC No. <u>AR0035602</u>		C O M P				Remarks	
Date/Time Collected: <u>11/15/01 8:00 AM</u>		V				Field pH calibration on <u>②</u>	
Container Type: <u>P</u>		Preservative: <u>NO</u>				Buffer:	
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	
Turnaround Time Requested: (Please circle) NORMAL or EXPEDITED IN _____ DAYS		Relinquished By: <u>LORRE HOLT</u>		Date/Time: <u>11/15/01 10:30</u>		Received By:	
Expedited results requested by: <u>LORRE HOLT</u>		Relinquished By: _____		Date/Time: _____		Received in Lab By: <u>[Signature]</u>	
Who should AIC contact with questions: <u>LORRE HOLT</u>						Date/Time: <u>11-16-01</u>	
Phone: <u>810-483-3832</u> Fax: <u>810-483-10525</u>						<u>0954</u>	
Report Attention to: <u>LORRE HOLT</u>							
Report Address to: <u>704 Hwy 463 N</u>							
<u>TRUMANN, AR 72472</u>							
						Comments: <u>1st RETEST . 2861 3910 5410</u>	

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: <u>TRUMANN WATER WORKS</u>		AIC Control No: <u>200408</u>	
Project Reference: <u>AR0035202</u>		AIC Proposal No:	
Project Manager: <u>SCOTTY JONES</u>		Carrier:	
Sampled By: <u>LORRE HOLT</u>		Received Temperature °C: <u>0.6</u>	
AIC No. <u>3 AR0035202</u>		Remarks:	
Date/Time Collected: <u>11/19/01 8:00 AM - 8:00 PM</u>			
Sample Matrix: <u>WATER</u>			
G R A B: <u>V</u>			
C O M P: <u>V</u>			
S O I L:			
B O T T L E S: <u>1</u>			
PO No.:		Analyses Requested: <u>BIDMONT - CHRONIC - FH</u>	
Container Type: <u>P</u>		Field pH calibration on: @	
Preservative: <u>N/A</u>		Buffer:	
G = Glass NO = none		T = Sodium Thiosulfate Z = Zinc acetate	
P = Plastic S = Sulfuric acid pH2		H = HCl to pH2 B = NaOH to pH12	
N = Nitric acid pH2		Date/Time: <u>11/19/01 10:00 AM</u>	
Turnaround Time Requested: (Please circle) <u>NORMAL</u> or EXPEDITED IN _____ DAYS		Received Date/Time: <u>20 NOV 21 0842</u>	
Expedited results requested by:		By: <u>LORRE HOLT</u>	
Who should AIC contact with questions: <u>LORRE HOLT</u>		Received in Lab By: <u>S6343</u>	
Phone: <u>870-483-2832</u> Fax: <u>870-483-10525</u>			
Report Attention to: <u>LORRE HOLT</u>			
Report Address to: <u>TRUMANN, AR 72472</u>			
Comments:			