



ENVIRONMENTAL TESTING & CONSULTING, INC.

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"A Laboratory Management Partner"

02608

City of Marion Water Department
Mr. Jim Shempert
PO Box 814
Marion, AR 72364

Project ID : Weekly
Project Weekly
Information :

Report Date : 7/10/2013

Report Number : 13-183-0236

REPORT OF ANALYSIS

Received : 7/2/2013

Lab No : 96282

Sample ID : Effluent Grab

Matrix: Aqueous

Sampled: 7/2/2013 9:30

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Nitrate (NO3-N)	<0.100	mg/L	0.100	1	07/02/13 17:53	RQE	EPA-300.0
Nitrite (NO2-N)	<0.100	mg/L	0.100	1	07/02/13 17:53	RQE	EPA-300.0
Nitrate+Nitrite-N	<0.100	mg/L	0.100	1	07/02/13 17:53		EPA-300.0
Total Phosphorus	2.67	mg/L	0.250	1	07/03/13 08:32	KAT	4500-PE
Fecal Coliform	30	cfu/100mL	10	1	07/02/13 14:30	CLC	9222-D

Lab No : 96283

Sample ID : Effluent Composite

Matrix: Aqueous

Sampled: 7/2/2013 8:30

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Ammonia Nitrogen	2.36	mg/L	0.100	1	07/10/13 10:05	EWB	4500-NH3D
Carbonaceous BOD - 5 day	6	mg/L	5	1	07/02/13 12:30	KAT	5210-CBOD
Total Suspended Solids	21	mg/L	2	1	07/02/13 14:56	KMF	2540D

Qualifiers/
Definitions

*

Outside QC limit

DF

Dilution Factor

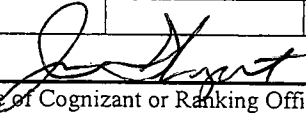
Sanitary Sewer Overflow Monthly Report

Facility Name: Marion, City of Permit Number: AR0021971 Reporting Period(Month/Year): OCTOBER 2013

No Sanitary Sewer Overflows This Monitoring Period

Summary Report Code Descriptions				
Cause(s) of SSO		SSO Impact	Action(s) Taken	Ultimate Discharge Location
CO-Construction	D-Debris	NEAH-No Evidence of Adverse Health or Environmental Impact		CR-Creek/Stream/River (please specify)
E-Equipment Failure	G-Grease	OEHC-Observed or Evidence of Human Contact	EC-Environmental Cleanup	DI-Ditch
HC-Hydro Clean	LF-Line Failure/Break	EFK-Evidence of Fish Kill	HC-Hydro Cleaned	DR-Drop Inlet
R-Rainfall	RG-Roots & Grease		HR-Hand Rodded	GR-Ground Surface
RO-Roots	V-Vandalism		EN-Referred to Engineering	PA-Paved Area
			PN-Public Notification	CB-Contained in Building

Location	Manhole #	Start Date of SSO	End Date of SSO	Estimated Volume (in gallons)	Cause of SSO	Environmental Impact	Action (s) Taken to Address SSO	Ultimate Discharge Location

Signature of Cognizant or Ranking Official 

Date 11/6/13

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



ENVIRONMENTAL TESTING & CONSULTING, INC.

2790 Whitten Road Memphis, Tennessee 38133 (901) 213-2400 Fax (901) 213-2440

July 08, 2013

Mr. Jim Shempert,
City of Marion Water Department
P.O. Box 814
Marion, AR 72364

Dear Permittee,

The results of this WET (Whole Effluent Toxicity) test are acceptable according to test review criteria. There were no significant deficiencies found in sample handling, test performance, or reporting. The test results are within the limits established by your NPDES permit and were entered into the permittee's records in the database.

Results: CV/NOEL = 88% Permit Limit: 88%

Report #: 13-162-0191 MARION AR0021971

All statistical interpretations generated by CETIS - Comprehensive Environmental Toxicity Information System (v.1.8.6.1). CETIS created by Tidepool Scientific Software

Respectfully,

Connie Cook, Lab Supervisor

Enclosure(s)

CETIS Summary Report

Report Date: 08 Jul-13 10:32 (p 1 of 2)
 Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test Environmental Testing and Consulting, Inc.

Batch ID: 00-2185-8674	Test Type: Reproduction-Survival (7d)	Analyst: Ava Davis
Start Date: 11 Jun-13 14:35	Protocol: EPA/821/R-02-013 (2002)	Diluent: Perrier Water
Ending Date: 17 Jun-13 14:10	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d	Source: In-House Culture	Age: < 24

Sample ID: 17-1217-1632	Code: 13-162-0191	Client: City of Marion Water Department
Sample Date: 11 Jun-13 07:30	Material: POTW Effluent	Project: WET Quarterly Compliance Test (2Q)
Receive Date: 11 Jun-13 12:45	Source: MARION (AR0021971)	
Sample Age: 7h (1 °C)	Station:	

Renewal	Sample Code	Sample Date	Receive Date	Renewal Date	Temp °C
1	13-162-0191	12 Jun-13 08:20	12 Jun-13 12:00	13 Jun-13 00:00	1
2	13-162-0191	14 Jun-13 09:00	14 Jun-13 13:00	15 Jun-13 00:00	1

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
12-6619-7477	6d Survival Rate	88	>88	NA	NA	1.136	Fisher Exact/Bonferroni-Holm Test
10-9126-2986	Reproduction	88	>88	NA	19.6%	1.136	Steel Many-One Rank Sum Test

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits	Overlap	Decision
12-6619-7477	6d Survival Rate	Control CV	0	NL - 0.4	Yes	Passes Acceptability Criteria
10-9126-2986	Reproduction	Control CV	0.1917	NL - 0.4	Yes	Passes Acceptability Criteria
12-6619-7477	6d Survival Rate	Control Resp	1	0.8 - NL	Yes	Passes Acceptability Criteria
10-9126-2986	Reproduction	Control Resp	17.6	15 - NL	Yes	Passes Acceptability Criteria
10-9126-2986	Reproduction	PMSD	0.196	0.13 - 0.47	Yes	Passes Acceptability Criteria

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Water	10	1	1	1	1	1	0	0	0.0%	0.0%
28		10	1	1	1	1	1	0	0	0.0%	0.0%
37		10	1	1	1	1	1	0	0	0.0%	0.0%
50		10	1	1	1	1	1	0	0	0.0%	0.0%
66		10	1	1	1	1	1	0	0	0.0%	0.0%
88		10	1	1	1	1	1	0	0	0.0%	0.0%

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Water	10	17.6	15.19	20.01	12	22	1.067	3.373	19.17%	0.0%
28		10	17.5	15.47	19.53	11	21	0.8975	2.838	16.22%	0.57%
37		10	16.1	13.23	18.97	9	21	1.269	4.012	24.92%	8.52%
50		10	17.5	15.39	19.61	13	23	0.9339	2.953	16.88%	0.57%
66		10	17.2	14.87	19.53	9	21	1.031	3.259	18.95%	2.27%
88		10	15.9	13.3	18.5	9	20	1.149	3.635	22.86%	9.66%

CETIS Summary Report

Report Date: 08 Jul-13 10:32 (p 2 of 2)
 Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test											Environmental Testing and Consulting, Inc.
6d Survival Rate Detail											
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Lab Water	1	1	1	1	1	1	1	1	1	1
28		1	1	1	1	1	1	1	1	1	1
37		1	1	1	1	1	1	1	1	1	1
50		1	1	1	1	1	1	1	1	1	1
66		1	1	1	1	1	1	1	1	1	1
88		1	1	1	1	1	1	1	1	1	1
Reproduction Detail											
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Lab Water	17	14	12	18	22	15	21	18	17	22
28		20	17	21	19	19	18	18	17	11	15
37		21	17	9	15	10	16	18	21	16	18
50		15	15	13	18	15	19	19	23	19	19
66		17	19	9	16	16	19	18	18	19	21
88		19	17	18	11	18	17	9	17	20	13

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 1 of 8)

Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test

Environmental Testing and Consulting, Inc.

Sample ID: 17-1217-1632

Code: 13-162-0191

Client: City of Marion Water Department

Sample Date: 11 Jun-13 07:30

Material: POTW Effluent

Project: WET Quarterly Compliance Test (2Q)

Receive Date: 11 Jun-13 12:45

Source: MARION (AR0021971)

Sample Age: 7h (1 °C)

Station:

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 3 of 8)

Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test				Environmental Testing and Consulting, Inc.			
Final Dissolved Oxygen-mg/L							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	8.3				
28			8.4				
37			8.4				
50			8.4				
66			8.3				
88			8.2				
0			Lab Water	2	8.1		
28	8.1						
37	8						
50	8.3						
66	8.2						
88	8.2						
0	Lab Water	3			8.2		
28			8.2				
37			8.1				
50			8.2				
66			8.1				
88			8				
0			Lab Water	4	8.3		
28	8.3						
37	8.3						
50	8.1						
66	8.4						
88	8.1						
0	Lab Water	5			8.1		
28			8.1				
37			8.1				
50			8.3				
66			8.1				
88			8.1				
0			Lab Water	6	8		
28	8						
37	8						
50	8						
66	8						
88	8						

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 4 of 8)
 Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test				Environmental Testing and Consulting, Inc.			
Initial Dissolved Oxygen-mg/L							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	8.9				
28			9.1				
37			9.1				
50			9.2				
66			9.1				
88			9.1				
0			Lab Water	2	9.2		
28	9						
37	9						
50	9						
66	9.1						
88	9.1						
0	Lab Water	3			9.2		
28			9.2				
37			9.2				
50			9.1				
66			9				
88			9				
0			Lab Water	4	9.4		
28	9.2						
37	9.2						
50	9.2						
66	9						
88	9						
0	Lab Water	5			9.5		
28			9.2				
37			9.2				
50			9.2				
66			9				
88			9				
0			Lab Water	6	9.3		
28	9.1						
37	9.1						
50	9.1						
66	9						
88	9						
0	Lab Water	7			9.6		
28			9.6				
37			9.7				
50			9.7				
66			9.6				
88			9.6				
Hardness (CaCO3)-mg/L							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	93				
0	Lab Water	2	93				
0	Lab Water	3	91				
0	Lab Water	4	93				
0	Lab Water	5	89				
0	Lab Water	6	91				
0	Lab Water	7	90				

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 5 of 8)
 Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test				Environmental Testing and Consulting, Inc.			
Final pH-Units							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	7.8				
28			7.9				
37			7.8				
50			7.6				
66			7.9				
88			7.8				
0			Lab Water	2	7.5		
28	7.5						
37	7.9						
50	7.9						
66	7.8						
88	7.9						
0	Lab Water	3			7.6		
28			7.9				
37			7.8				
50			7.6				
66			7.6				
88			7.9				
0			Lab Water	4	7.5		
28	7.5						
37	7.6						
50	7.6						
66	7.9						
88	7.9						
0	Lab Water	5			7.5		
28			7.7				
37			7.7				
50			7.9				
66			7.7				
88			7.6				
0			Lab Water	6	7.6		
28	7.6						
37	7.5						
50	7.9						
66	7.9						
88	7.8						

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 6 of 8)
 Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test							Environmental Testing and Consulting, Inc.		
Initial pH-Units									
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	Lab Water	1	8.2						
28			7.9						
37			7.9						
50			7.8						
66			7.8						
88			7.8						
0			Lab Water	2	7.4				
28	7.4								
37	7.4								
50	7.5								
66	7.5								
88	7.6								
0	Lab Water	3			8.1				
28			8						
37			7.9						
50			7.9						
66			7.9						
88			7.9						
0			Lab Water	4	7.3				
28	7.3								
37	7.4								
50	7.4								
66	7.5								
88	7.5								
0	Lab Water	5			7.4				
28			7.2						
37			7.4						
50			7.4						
66			7.5						
88			7.6						
0			Lab Water	6	8.5				
28	8.4								
37	8.4								
50	8.3								
66	8.3								
88	8.1								
0	Lab Water	7			9.3				
28			9.3						
37			9.3						
50			9.3						
66			9.3						
88			9.3						

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 7 of 8)

Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test				Environmental Testing and Consulting, Inc.			
Final Temperature-°C							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0			Lab Water	2	23		
28	23						
37	23						
50	23						
66	23						
88	23						
0	Lab Water	3			23		
28			23				
37			23				
50			23				
66			23				
88			23				
0			Lab Water	4	23		
28	23						
37	23						
50	23						
66	23						
88	23						
0	Lab Water	5			23		
28			23				
37			23				
50			23				
66			23				
88			23				
0			Lab Water	6	23		
28	23						
37	23						
50	23						
66	23						
88	23						

CETIS Measurement Report

Report Date: 08 Jul-13 10:32 (p 8 of 8)
 Test Code: CD 13-162-0191 | 05-2264-7484

Ceriodaphnia 7-d Survival and Reproduction Test				Environmental Testing and Consulting, Inc.			
Initial Temperature-°C							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0			Lab Water	2	23		
28	23						
37	23						
50	23						
66	23						
88	23						
0	Lab Water	3			23		
28			23				
37			23				
50			23				
66			23				
88			23				
0			Lab Water	4	23		
28	23						
37	23						
50	23						
66	23						
88	23						
0	Lab Water	5			23		
28			23				
37			23				
50			23				
66			23				
88			23				
0			Lab Water	6	23		
28	23						
37	23						
50	23						
66	23						
88	23						
0	Lab Water	7			23		
28			23				
37			23				
50			23				
66			23				
88			23				

CETIS Test Evaluation Report

Report Date: 08 Jul-13 10:33 (1 of 2)

Test Code: FH 13-162-0191 | 20-4165-5110

Facility: MARION Sample Site: Sample Code: 13-162-0191 Sample Date: 11 Jun-13 07:30 Sample Age: 7h (1 °C) Project: WET Quarterly Compliance Test (2Q)	Test Name: Fathead Minnow 7-d Larval Survival and Growth Test Organism: Pimephales promelas (Fathead Minnow) Protocol: EPA/821/R-02-013 (2002) Start Date: 11 Jun-13 14:15 End Date: 18 Jun-13 16:00 Duration: 7d 2h Organism Age: < 24
Permittee: City of Marion Water Department Address: P.O. Box 814 Marion, AR 72364 Contact: Mr. Jim Shempert Phone: 870-739-5413 Email:	Laboratory: Environmental Testing and Consulting, Inc. Address: 2790 Whitten Road Memphis, TN 38133 Contact: Connie Cook, Lab Supervisor Phone: 901-213-2454 Email: ccook@etcmemphis.com

Chronic Toxicity Evaluation					
Endpoint	Parameter	C-%	IWC	Pass/Fail	Method
7d Survival Rate	NOEL/LOEL	88/>88	87.99	Pass	Dunnett Multiple Comparison Test
Mean Dry Weight-mg	NOEL/LOEL	88/>88	87.99	Pass	Dunnett Multiple Comparison Test

Test Acceptability Criteria				
Endpoint	Attribute	Test Stat	Limits	Pass/Fail
7d Survival Rate	Control CV	0.175	N/A - 0.4	Pass
7d Survival Rate	Control Resp	0.875	0.8 - N/A	Pass
Mean Dry Weight-mg	Control CV	0.1391	N/A - 0.4	Pass
Mean Dry Weight-mg	Control Resp	0.2725	0.25 - N/A	Pass

CETIS Test Evaluation Report

Report Date: 08 Jul-13 10:33 (2 of 2)

Test Code: FH 13-162-0191 | 20-4165-5110

7d Survival Rate Summary											
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Water	5	0.875	0.8178	0.9322	0.625	1	0.06847	0.1531	17.5%	0.0%
28		5	0.925	0.8994	0.9506	0.875	1	0.03062	0.06847	7.4%	-5.71%
37		5	0.925	0.8994	0.9506	0.875	1	0.03062	0.06847	7.4%	-5.71%
50		5	0.925	0.8994	0.9506	0.875	1	0.03062	0.06847	7.4%	-5.71%
66		5	0.95	0.9244	0.9756	0.875	1	0.03062	0.06847	7.21%	-8.57%
88		5	0.875	0.842	0.908	0.75	1	0.03953	0.08839	10.1%	0.0%

Mean Dry Weight-mg Summary											
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Water	5	0.2725	0.2583	0.2867	0.2125	0.3125	0.01696	0.03791	13.91%	0.0%
28		5	0.3075	0.2833	0.3317	0.225	0.4	0.02894	0.06471	21.04%	-12.84%
37		5	0.3125	0.2906	0.3344	0.225	0.375	0.02622	0.05863	18.76%	-14.68%
50		5	0.28	0.2598	0.3002	0.225	0.35	0.02424	0.0542	19.36%	-2.75%
66		5	0.26	0.2424	0.2776	0.2125	0.3375	0.02107	0.0471	18.12%	4.59%
88		5	0.265	0.2425	0.2875	0.2	0.35	0.02693	0.06021	22.72%	2.75%

CETIS Summary Report

Report Date: 08 Jul-13 10:33 (p 1 of 2)
 Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test Environmental Testing and Consulting, Inc.

Batch ID: 17-3291-1012	Test Type: Growth-Survival (7d)	Analyst: Ava Davis
Start Date: 11 Jun-13 14:15	Protocol: EPA/821/R-02-013 (2002)	Diluent: Perrier Water
Ending Date: 18 Jun-13 16:00	Species: Pimephales promelas	Brine: Not Applicable
Duration: 7d 2h	Source: Aquatox, AR	Age: < 24

Sample ID: 17-1217-1632	Code: 13-162-0191	Client: City of Marion Water Department
Sample Date: 11 Jun-13 07:30	Material: POTW Effluent	Project: WET Quarterly Compliance Test (2Q)
Receive Date: 11 Jun-13 12:45	Source: MARION (AR0021971)	
Sample Age: 7h (1 °C)	Station:	

Renewal	Sample Code	Sample Date	Receive Date	Renewal Date	Temp °C
1	13-162-0191	12 Jun-13 08:00	12 Jun-13 12:00	13 Jun-13 00:00	1
2	13-162-0191	14 Jun-13 09:00	14 Jun-13 13:00	15 Jun-13 00:00	1

Analysis ID	Endpoint	NOEL	LOEL	TOEL	PMSD	TU	Method
08-0959-3165	7d Survival Rate	88	>88	NA	15.4%	1.136	Dunnett Multiple Comparison Test
21-2988-9860	Mean Dry Weight-mg	88	>88	NA	29.9%	1.136	Dunnett Multiple Comparison Test

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits	Overlap	Decision
08-0959-3165	7d Survival Rate	Control CV	0.175	NL - 0.4	Yes	Passes Acceptability Criteria
21-2988-9860	Mean Dry Weight-mg	Control CV	0.1391	NL - 0.4	Yes	Passes Acceptability Criteria
08-0959-3165	7d Survival Rate	Control Resp	0.875	0.8 - NL	Yes	Passes Acceptability Criteria
21-2988-9860	Mean Dry Weight-mg	Control Resp	0.2725	0.25 - NL	Yes	Passes Acceptability Criteria

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Water	5	0.875	0.6849	1	0.625	1	0.06847	0.1531	17.5%	0.0%
28		5	0.925	0.84	1	0.875	1	0.03062	0.06847	7.4%	-5.71%
37		5	0.925	0.84	1	0.875	1	0.03062	0.06847	7.4%	-5.71%
50		5	0.925	0.84	1	0.875	1	0.03062	0.06847	7.4%	-5.71%
66		5	0.95	0.865	1	0.875	1	0.03062	0.06847	7.21%	-8.57%
88		5	0.875	0.7653	0.9847	0.75	1	0.03953	0.08839	10.1%	0.0%

C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Lab Water	5	0.2725	0.2254	0.3196	0.2125	0.3125	0.01696	0.03791	13.91%	0.0%
28		5	0.3075	0.2272	0.3878	0.225	0.4	0.02894	0.06471	21.04%	-12.84%
37		5	0.3125	0.2397	0.3853	0.225	0.375	0.02622	0.05863	18.76%	-14.68%
50		5	0.28	0.2127	0.3473	0.225	0.35	0.02424	0.0542	19.36%	-2.75%
66		5	0.26	0.2015	0.3185	0.2125	0.3375	0.02107	0.0471	18.12%	4.59%
88		5	0.265	0.1902	0.3398	0.2	0.35	0.02693	0.06021	22.72%	2.75%

CETIS Summary Report

Report Date: 08 Jul-13 10:33 (p 2 of 2)

Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test						Environmental Testing and Consulting, Inc.
7d Survival Rate Detail						
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Lab Water	0.875	0.625	1	0.875	1
28		0.875	0.875	1	1	0.875
37		1	0.875	0.875	1	0.875
50		0.875	1	0.875	1	0.875
66		0.875	0.875	1	1	1
88		0.875	0.875	0.875	0.75	1
Mean Dry Weight-mg Detail						
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	Lab Water	0.2625	0.2125	0.2875	0.2875	0.3125
28		0.225	0.325	0.4	0.3125	0.275
37		0.2875	0.225	0.375	0.35	0.325
50		0.25	0.25	0.225	0.325	0.35
66		0.2375	0.2125	0.2625	0.3375	0.25
88		0.35	0.25	0.2	0.225	0.3

CETIS Measurement Report



Report Date: 08 Jul-13 10:33 (p 1 of 8)

Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test

Environmental Testing and Consulting, Inc.

Sample ID: 17-1217-1632	Code: 13-162-0191	Client: City of Marion Water Department
Sample Date: 11 Jun-13 07:30	Material: POTW Effluent	Project: WET Quarterly Compliance Test (2Q)
Receive Date: 11 Jun-13 12:45	Source: MARION (AR0021971)	
Sample Age: 7h (1 °C)	Station:	

CETIS Measurement Report

Report Date: 08 Jul-13 10:33 (p 2 of 8)

Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test							Environmental Testing and Consulting, Inc.		
Alkalinity (CaCO3)-mg/L									
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	Lab Water	1	63						
0	Lab Water	2	63						
0	Lab Water	3	61						
0	Lab Water	4	59						
0	Lab Water	5	62						
0	Lab Water	6	63						
0	Lab Water	7	61						
Total Residual Chlorine-mg/L									
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	Lab Water	1	0						
88			0						
0	Lab Water	2	0						
88			0						
0	Lab Water	3	0						
88			0						
0	Lab Water	4	0						
88			0						
0	Lab Water	5	0						
88			0						
0	Lab Water	6	0						
88			0						
0	Lab Water	7	0						
88			0						
Conductivity-µS/cm									
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes	
0	Lab Water	1	178						
88			321						
0	Lab Water	2	177						
88			333						
0	Lab Water	3	181						
88			344						
0	Lab Water	4	178						
88			340						
0	Lab Water	5	174						
88			359						
0	Lab Water	6	178						
88			372						
0	Lab Water	7	174						
88			352						

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CETIS Measurement Report

Report Date: 08 Jul-13 10:33 (p 3 of 8)

Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test				Environmental Testing and Consulting, Inc.			
Final Dissolved Oxygen-mg/L							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	9.2				
28			9.2				
37			9.2				
50			9.1				
66			9.1				
88			9.1				
0			Lab Water	2	9.3		
28	9.3						
37	9.3						
50	9.2						
66	9.2						
88	9.2						
0	Lab Water	3			9.7		
28			9.7				
37			9.7				
50			9.8				
66			9.7				
88			9.5				
0			Lab Water	4	9.2		
28	9.3						
37	9.3						
50	9.2						
66	9.1						
88	9.1						
0	Lab Water	5			9.4		
28			9.5				
37			9.5				
50			9.4				
66			9.4				
88			9.3				
0			Lab Water	6	9.6		
28	9.6						
37	9.6						
50	9.8						
66	9.7						
88	9.6						
0	Lab Water	7			7		
28			7				
37			7				
50			7				
66			7				
88			7				

CETIS Measurement Report

Report Date: 08 Jul-13 10:33 (p 4 of 8)

Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test	Environmental Testing and Consulting, Inc.
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Initial Dissolved Oxygen-mg/L							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	8.9				
28			9.1				
37			9.1				
50			9.2				
66			9.1				
88			9.1				
0	Lab Water	2	9.2				
28			9				
37			9				
50			9				
66			9.1				
88			9.1				
0	Lab Water	3	9.2				
28			9.2				
37			9.2				
50			9.1				
66			9				
88			9				
0	Lab Water	4	9.4				
28			9.2				
37			9.2				
50			9.2				
66			9				
88			9				
0	Lab Water	5	9.5				
28			9.2				
37			9.2				
50			9.2				
66			9				
88			9				
0	Lab Water	6	9.3				
28			9.1				
37			9.1				
50			9.1				
66			9				
88			9				
0	Lab Water	7	9.6				
28			9.6				
37			9.7				
50			9.7				
66			9.6				
88			9.6				

Hardness (CaCO3)-mg/L							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	93				
0	Lab Water	2	93				
0	Lab Water	3	91				
0	Lab Water	4	93				
0	Lab Water	5	89				
0	Lab Water	6	91				
0	Lab Water	7	90				

CETIS Measurement Report

Report Date: 08 Jul-13 10:33 (p 5 of 8)
 Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test

Environmental Testing and Consulting, Inc.

Final pH-Units

C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	Lab Water	1	7.7					
28			7.7					
37			7.7					
50			7.7					
66			7.8					
88			7.8					
0			Lab Water	2	7.8			
28	7.8							
37	7.8							
50	7.8							
66	7.7							
88	7.7							
0	Lab Water	3			7.6			
28			7.6					
37			7.6					
50			7.6					
66			7.8					
88			7.8					
0			Lab Water	4	7.8			
28	7.8							
37	7.8							
50	7.8							
66	7.9							
88	7.9							
0	Lab Water	5			8.7			
28			8.4					
37			8.4					
50			8.4					
66			8.4					
88			8.4					
0			Lab Water	6	8.3			
28	9.3							
37	9.3							
50	9.3							
66	9.3							
88	9.3							
0	Lab Water	7			8.6			
28			8.4					
37			8.3					
50			8.3					
66			8.2					
88			8.2					

CETIS Measurement Report

Report Date: 08 Jul-13 10:33 (p 6 of 8)
 Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test				Environmental Testing and Consulting, Inc.			
Initial pH-Units							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	8.2				
28			7.9				
37			7.9				
50			7.8				
66			7.8				
88			7.8				
0			Lab Water	2	7.4		
28	7.4						
37	7.4						
50	7.5						
66	7.5						
88	7.6						
0	Lab Water	3			8.1		
28			8				
37			7.9				
50			7.9				
66			7.9				
88			7.9				
0			Lab Water	4	7.3		
28	7.3						
37	7.4						
50	7.4						
66	7.5						
88	7.5						
0	Lab Water	5			7.4		
28			7.2				
37			7.4				
50			7.4				
66			7.5				
88			7.6				
0			Lab Water	6	8.5		
28	8.4						
37	8.4						
50	8.3						
66	8.3						
88	8.1						
0	Lab Water	7			9.3		
28			9.3				
37			9.3				
50			9.3				
66			9.3				
88			9.3				

CETIS Measurement Report

Report Date: 08 Jul-13 10:33 (p 8 of 8)

Test Code: FH 13-162-0191 | 20-4165-5110

Fathead Minnow 7-d Larval Survival and Growth Test				Environmental Testing and Consulting, Inc.			
Initial Temperature-°C							
C-%	Control Type	Reading Time	Measure	QA	Diff-%	Inst ID	Analyst Notes
0	Lab Water	1	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0	Lab Water	2	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0	Lab Water	3	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0	Lab Water	4	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0	Lab Water	5	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0	Lab Water	6	23				
28			23				
37			23				
50			23				
66			23				
88			23				
0	Lab Water	7	23				
28			23				
37			23				
50			23				
66			23				
88			23				

NAME: Marion Wastewater
 ADDRESS:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

PERMIT NUMBER

DISCHARGE NUMBER

FACILITY:
 LOCATION:
 ATTN:

MONITORING PERIOD

YEAR	MONTH	DAY	TO	YEAR	MONTH	DAY

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
P/F STATRE 7DAY CHR CERIODAPHNIA TGP3B 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	0	*****	(9A)		
	PERMIT REQUIREMENT							PASS=0 FAIL=1		
P/F STATRE 7DAY CHR PIMEPHALES PROMELAS TGP6C 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	0	*****	(9A)		
	PERMIT REQUIREMENT							PASS=0 FAIL=1		
LF P/F LETH STATRE 7-DAY CHR CERIODAPHNIA TLP3B 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	0	*****	(9A)		
	PERMIT REQUIREMENT							PASS=0 FAIL=1		
LF P/F LETH STATRE 7-DAY CHR PIMEPHALES TLP6C 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	0	*****	(9A)		
	PERMIT REQUIREMENT							PASS=0 FAIL=1		
NOEL LETHAL STATRE 7-DAY CHR CERIODAPHNIA TOP3B 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	88	*****	(23)		
	PERMIT REQUIREMENT							PER-CENT		
NOEL LETHAL STATRE 7-DAY CHR PIMEPHALES TOP6C 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	88	*****	(23)		
	PERMIT REQUIREMENT							PER-CENT		

NAME: Marion Wastewater
 ADDRESS:

0
0

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

PERMIT NUMBER
0

DISCHARGE NUMBER
0

FACILITY:
 LOCATION:
 ATTN:

MONITORING PERIOD

YEAR	MONTH	DAY	TO	YEAR	MONTH	DAY
0	0	0		0	0	0

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
NOEL SUB-LTH STATRE 7DAY CHR CERIODAPHNIA TPP3B 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	88	*****	(23)			
	PERMIT REQUIREMENT							PER-CENT			

NOEL SUB-LTH STATRE 7DAY CHR PIMEPHALES TPP6C 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	88	*****	(23)			
	PERMIT REQUIREMENT							PER-CENT			

COEF OF VAR STATRE 7DAY CHR CERIODAPHNIA TQP3B 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	22.9	*****	(23)			
	PERMIT REQUIREMENT							PER-CENT			

COEF OF VAR STATRE 7DAY CHR PIMEPHALES TQP6C 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	*****	22.72	*****	(23)			
	PERMIT REQUIREMENT							PER-CENT			

WHOLE EFFLUENT TOXICITY 22414 S 0 0	SAMPLE MEASUREMENT	*****	*****	*****	88	*****	*****	(23)			
	PERMIT REQUIREMENT							PER-CENT			

WHOLE EFFLUENT TOXICITY 22414 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	*****	88	*****	*****	(23)			
	PERMIT REQUIREMENT							PER-CENT			



ENVIRONMENTAL TESTING & CONSULTING, INC.

www.etcmemphis.com

2790 Whitten Road

Memphis, Tennessee 38133

(901) 213-2400

Fax (901) 213-2440

"A Laboratory Management Partner"

02608

City of Marion Water Department
Mr. Jim Shempert
PO Box 814
Marion, AR 72364

Project Bioassay
Information :

Report Date : 7/8/2013

Report Number : 13-162-0191

REPORT OF ANALYSIS

Received : 6/11/2013

Lab No : 92395
Sample ID : Outfall 001

Matrix: Aqueous
Sampled: 6/11/2013 7:30

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Alkalinity (as CaCO3)	129	mg/L	1	1	06/24/13 10:25	EWB	2320B
Total Calcium	21.5	mg/L	0.100	1	06/21/13 01:28	BKN	EPA-200.7
Hardness as CaCO3(SM-2340B)	78.6	mg/L	0.100	1	06/21/13 01:28		EPA-200.7
Total Magnesium	6.04	mg/L	0.100	1	06/21/13 01:28	BKN	EPA-200.7

Lab No : 92641
Sample ID : Outfall 001

Matrix: Aqueous
Sampled: 6/12/2013 8:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Alkalinity (as CaCO3)	128	mg/L	1	1	06/24/13 10:25	EWB	2320B
Total Calcium	22.1	mg/L	0.100	1	06/21/13 01:35	BKN	EPA-200.7
Hardness as CaCO3(SM-2340B)	81.0	mg/L	0.100	1	06/21/13 01:35		EPA-200.7
Total Magnesium	6.26	mg/L	0.100	1	06/21/13 01:35	BKN	EPA-200.7

Lab No : 93250
Sample ID : Outfall 001

Matrix: Aqueous
Sampled: 6/14/2013 9:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Alkalinity (as CaCO3)	135	mg/L	1	1	06/24/13 10:25	EWB	2320B
Total Calcium	22.2	mg/L	0.100	1	06/21/13 01:56	BKN	EPA-200.7
Hardness as CaCO3(SM-2340B)	81.1	mg/L	0.100	1	06/21/13 01:56		EPA-200.7
Total Magnesium	6.23	mg/L	0.100	1	06/21/13 01:56	BKN	EPA-200.7

Qualifiers/ Definitions

* Outside QC limit
MQL Method Quantitation Limit

DF Dilution Factor

Additional Toxicity Test Information

1. Methods/Instrumentation used in chemical analysis:
 - Dissolved oxygen: 4500-O G YSI MODEL - 58
 - pH: 4500-H + B JENCO METER 6072
 - Temperature: 2550 B JENCO METER 6072
 - Conductivity: 2510 B CORNING METER 441
 - Alkalinity: 2320 B
 - Hardness: 200.7
 - Total Residual Chlorine: 4500-Cl G - REPORTED VALUE OF "0" INDICATES RESULT BELOW DETECTION LIMIT OF 0.02 mg/L
 - EPA Acute/Chronic Manual Edition and Date: EPA-821-R-02-012
 - OCT 2002 (Fifth edition)

2. Laboratory
 - Temperature: Average - 25 C Range - 23 - 26
 - Light Cycle: 16 hours light/ 8 hours dark
 - Light intensity: 100 foot-candles, average
 - Control Water: Dilute mineral water made with 20 % Perrier in Nanopure
 - Dilution Water: Laboratory control water
 - Pretreatment: none

3. Method 1002.0
 - Test chambers: 30 mL disposable plastic beakers
 - Volume per chamber: 15 mL
 - Number of organisms per chamber: 1
 - Number of replicates: 10
 - Food: Laboratory culture of Selenastrum algae and YCT solution

4. Method 1000.0
 - Test chambers: 20 oz. Disposable plastic cups
 - Volume per chamber: 200 mL
 - Average number of organisms per chamber: 8
 - Number of replicates per concentration: 5
 - Food: Artemia brine shrimp hatched in laboratory
 - Acclimation of organisms: Organisms are allowed to reach test temperature. Dilution water is added at half-hour intervals until organisms are contained in a culture media that consists of 80% dilution water.

5. Indicate below any other relevant information that may aid in the evaluation of this report. Include any deviations from EPA methodology that were necessary for these tests as well as any sample manipulations which were performed, such as aeration, dechlorination with sodium thiosulfate, etc. and the justification for such manipulations or deviations. Attach additional pages as needed.
 - None



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ENVIRONMENTAL TESTING & CONSULTING, INC.

2790 Whitten Road Memphis, Tennessee 38133 (901) 213-2400 Fax (901) 213-2440



City of Marion Water Department
Bioassay

13-162-0191
02608
06-11-2013
13:41:41



Company Name City of Marion Water Department				Customer Number 02608		Telephone (870) 739-5413		RUSH	ICE
Site Name 2nd qtr bio 2013			Project Comment qtrly bioassay					FID Number	
Project Marion - Bioassay			Project Number		PO Number				
Project Manager / Contact Mr. Jim Shempert				E-mail waterdept@marionarkansas.org					
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses		
C1 - Outfall 001	Plastic - Pint	6/11/13 7:30AM	1	HNO3 - Nitric Acid	C	Aqueous	hardness		
C1 - Outfall 001	Plastic - Pint	6/11/13 7:30AM	1	NONE	C	Aqueous	Alkalinity		
C1 - Outfall 001	Plastic - Gallon	6/11/13 7:30AM	2	NONE	C	Aqueous	chronic CD/FH		
C2-Outfall 001	Plastic - Pint		1	HNO3 - Nitric Acid	C	Aqueous	hardness		
C2-Outfall 001	Plastic - Pint		1	NONE	C	Aqueous	alkalinity		
C2-Outfall 001	Plastic - Gallon		2	NONE	C	Aqueous	chronic CD/FH		
C3-Outfall 001	Plastic - Pint		1	HNO3 - Nitric Acid	C	Aqueous	hardness		

Sampled By <i>JP</i>	Method of Shipment	Blank / Cooler Temperature 10°C	Remarks
Relinquished By (sign) <i>Dean Presley</i>	Date / Time 6-11-13 1148	Received By (sign) <i>LJ. Ruch</i>	Date / Time 6-11-13 1148
Relinquished By (sign)	Date / Time	Received By (sign)	Date / Time
Relinquished By (sign) <i>LJ. Ruch</i>	Date / Time 6-11-13 1245	Received by Lab (sign) <i>LJ. Ruch</i>	Date / Time 6-11-13 1245



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City of Marion Water Department
Bioassay / 6/11/13/6/12/13

13-162-0191
02608
06-11-2013
13:41:41

2

Company Name City of Marion Water Department				Customer Number 02608		Telephone (870) 739-5413		RUSH	ICE
Site Name 2nd qtr bio 2013			Project Comment qtrly bioassay					FID Number	
Project Marion - Bioassay			Project Number		PO Number				
Project Manager / Contact Mr. Jim Shempert				E-mail waterdept@marionarkansas.org					
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses		
C1 - Outfall 001	Plastic - Pint		1	HNO3 - Nitric Acid	C	Aqueous	hardness		
C1 - Outfall 001	Plastic - Pint		1	NONE	C	Aqueous	Alkalinity		
C1 - Outfall 001	Plastic - Gallon		2	NONE	C	Aqueous	chronic CD/FH		
C2-Outfall 001	Plastic - Pint	6/12/13 8:00 AM	1	HNO3 - Nitric Acid	C	Aqueous	hardness		
C2-Outfall 001	Plastic - Pint	6/12/13 8:00 AM	1	NONE	C	Aqueous	alkalinity		
C2-Outfall 001	Plastic - Gallon	6/12/13 8:00 AM	2	NONE	C	Aqueous	chronic CD/FH		
C3-Outfall 001	Plastic - Pint		1	HNO3 - Nitric Acid	C	Aqueous	hardness		

Sampled By <i>[Signature]</i>	Method of Shipment	Blank / Cooler Temperature 1°C	Remarks
Relinquished By (sign) <i>[Signature]</i>	Date / Time 6-12-13 1118	Received By (sign) <i>[Signature]</i>	Date / Time 6-12-13 1118
Relinquished By (sign) <i>[Signature]</i>	Date / Time	Received By (sign)	Date / Time
Relinquished By (sign) <i>[Signature]</i>	Date / Time 6-12-13 1200	Received by Lab (sign) <i>[Signature]</i>	Date / Time 6-12-13 1200



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City of Marion Water Department
Bioassay / 6/11/13/6/12/13/6/14/13

13-162-0191
02608
06-11-2013
13:41:41

3

Company Name City of Marion Water Department				Customer Number 02608		Telephone (870) 739-5413		RUSH	ICE
Site Name 2nd qtr bio 2013			Project Comment qtrly bioassay					FID Number	
Project Marion - Bioassay			Project Number		PO Number				
Project Manager / Contact Mr. Jim Shempert				E-mail waterdept@marionarkansas.org					
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses		
C1 - Outfall 001	Plastic - Pint		1	HNO3 - Nitric Acid	C	Aqueous	hardness		
C1 - Outfall 001	Plastic - Pint		1	NONE	C	Aqueous	Alkalinity		
C1 - Outfall 001	Plastic - Gallon		2	NONE	C	Aqueous	chronic CD/FH		
C2-Outfall 001	Plastic - Pint		1	HNO3 - Nitric Acid	C	Aqueous	hardness		
C2-Outfall 001	Plastic - Pint		1	NONE	C	Aqueous	alkalinity		
C2-Outfall 001	Plastic - Gallon		2	NONE	C	Aqueous	chronic CD/FH		
C3-Outfall 001	Plastic - Pint	6/14/13 9:00AM	1	HNO3 - Nitric Acid	C	Aqueous	hardness		

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Sampled By AP		Method of Shipment		Blank / Cooler Temperature		Remarks	
Relinquished By (sign) Neon Oresy		Date / Time 6-14-13 1210		Received By (sign) [Signature]		Date / Time 6-14-13 1210	
Relinquished By (sign)		Date / Time		Received By (sign)		Date / Time	
Relinquished By (sign) [Signature]		Date / Time 6-14-13 1300		Received by Lab (sign) [Signature]		Date / Time 6-14-13 1300	



ENVIRONMENTAL TESTING & CONSULTING, INC.

2790 Whitten Road Memphis, Tennessee 38133 (901) 213-2400 Fax (901) 213-2440



City of Marion Water Department
Bioassav / 6/11/13/6/12/13/6/14/13

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06-11-2013
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(B)

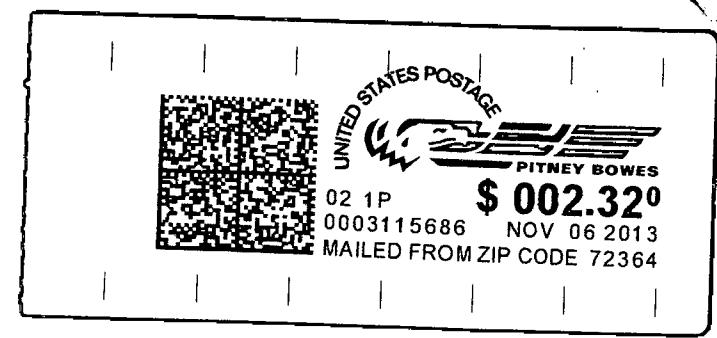
0000025779

Company Name City of Marion Water Department				Customer Number 02608		Telephone (870) 739-5413		RUSH	ICE
Site Name 2nd qtr bio 2013			Project Comment qtrly bioassay					FID Number	
Project Marion - Bioassay			Project Number		PO Number				
Project Manager / Contact Mr. Jim Shempert				E-mail waterdept@marionarkansas.org					
Sample ID	Container Type	Collected Date / Time	# Cont	Preservative	Grab / Comp	Matrix	Analyses		
C3-Outfall 001	Plastic - Pint	6/14/13 9:00AM	1	NONE	C	Aqueous	alkalinity		
C3-Outfall 001	Plastic - Gallon	6/14/13 9:00AM	3	NONE	C	Aqueous	Chronic CD/FH		

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Sampled By 		Method of Shipment		Blank / Cooler Temperature		Remarks	
Relinquished By (sign) 		Date / Time 6-14-13 12:10		Received By (sign) 		Date / Time 6-14-13 12:10	
Relinquished By (sign)		Date / Time		Received By (sign)		Date / Time	
Relinquished By (sign) 		Date / Time 6-14-13 13:00		Received by Lab (sign) 		Date / Time 6-14-13 13:00	

31 MILITARY RD
MARION, AR.
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NORTH LITTLE ROCK, AR.
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72118-5317