

BOND CONSULTING ENGINEERS EAST, INC.
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C.H. BOND, JR., P.E.
JEROME B. ALFORD, P.E.
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January 25, 2016

ADEQ
5301 Northshore Drive
North Little Rock, AR 72118-5317

Attn: Alan Anderson
Water Division Enforcement Branch

RE: NPDES Permit No.AR0021971
Outfall #002

Dear Alan,

Please refer to our correspondence of November 23, 2015 where we predicted the higher flows would potentially cause violations in the mass loading part of our permit.

Attached please find DMR's for December 2015 where again the concentrations of BOD and TSS are within permit allowable but we are slightly over on BOD mass loading.

We are within a few days of final inspection with the funding agency. We will be officially notifying ADEQ that construction is complete. If this is the trigger point to eliminating discharge from Outfall #001 then we respectfully request some input in regard to max flow in the revised permit to avoid these chronic violations. As we have discussed there seems to be an inconsistency when our flow to the Mississippi River was not limited and at the same time the permit placed a limit on mass loading. It has been discussed that this change be addressed at the same time the permit is being revised to eliminate the original discharge (Outfall #001). Could you please route this correspondence to the appropriate person in the permit section so they will be aware of our forthcoming request.

Sincerely,

Jerome Alford, P.E.


Mayor Frank Fogleman



12/30/2015

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

Ref: Analytical Testing
ETC Report Number: 15-342-0192
Client Project Description: Bioassay

Dear Mr. Jim Shempert:

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.

Note: Receiving water was tested alongside client's effluent. Receiving water showed significant toxicity and is unacceptable for use as dilution water. Laboratory control water will be used as dilution water for all future testing.

Results: NOEL/CV > 1.33%
Permit Limit: 1.0%

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

CETIS Test Evaluation Report

Report Date: 30 Dec-15 12:51 (1 of 1)

Test Code: DP 15-342-0192 | 14-9110-4134

Facility: Marion Water Department	Test Name: Daphnia pulex 48-h Acute Survival Test
Sample Site:	Organism: Daphnia pulex (Water Flea)
Sample Code: 15-342-0192	Protocol: EPA/821/R-02-012 (2002)
Sample Date: 07 Dec-15 07:00	Start Date: 08 Dec-15 16:45
Sample Age: 34h (1.7 °C)	End Date: 10 Dec-15 13:30
Project: WET Biannual Compliance Test (2nd)	Duration: 45h Organism Age: < 24
Permittee: City of Marion Water Department	Laboratory: Waypoint Analytical , Inc.
Address: PO Box 814 Marion, AR 72364	Address: 2790 Whitten Road Memphis, TN 38133
Contact: Mr. Jim Shempert	Contact: Ms. Connie Cook, Lab Supervisor
Phone: 870-739-5413, 870-739-5415(fax)	Phone: 901-213-2454, 901-213-2440(fax)
Email: jshempert.waterdept@yahoo.com	Email: ccook@etcmemphis

Comments:

Acute Toxicity Evaluation

Endpoint	Criteria	Conc-%	IWC	Decision	Method
48h Survival Rate	NOEL/LOEL	1.3/>1.3	1	Passes IWC	Steel Many-One Rank Sum Test

Test Acceptability Criteria

Endpoint	Attribute	Test Stat	TAC Limits			Decision
			Lower	Upper	Overlap	
48h Survival Rate	Control Resp	1	0.9	>>	Yes	Passes Acceptability Criteria

48h Survival Rate Data Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	L	5	1	1	1	1	1	0	0	0.00%	0.0%
0.45		5	1	1	1	1	1	0	0	0.00%	0.0%
0.56		5	1	1	1	1	1	0	0	0.00%	0.0%
0.75		5	1	1	1	1	1	0	0	0.00%	0.0%
1		5	1	1	1	1	1	0	0	0.00%	0.0%
1.3		5	1	1	1	1	1	0	0	0.00%	0.0%

CETIS Summary Report

Report Date: 30 Dec-15 12:51 (p 1 of 1)
 Test Code: DP 15-342-0192 | 14-9110-4134

Daphnia pulex 48-h Acute Survival Test				Waypoint Analytical, Inc.			
Batch ID:	16-2376-0497	Test Type:	Survival (48h)	Analyst:	Ava Davis		
Start Date:	08 Dec-15 16:45	Protocol:	EPA/821/R-02-012 (2002)	Diluent:	Perrier Water		
Ending Date:	10 Dec-15 13:30	Species:	Daphnia pulex	Brine:	Not Applicable		
Duration:	45h	Source:	In-House Culture	Age:	< 24		
Sample ID:	02-3148-1642	Code:	15-342-0192	Client:	City of Marion Water Department		
Sample Date:	07 Dec-15 07:00	Material:	POTW Effluent	Project:	WET Biannual Compliance Test (2nd)		
Receipt Date:	08 Dec-15 12:51	Source:	Marion Water Department (AR0021971)				
Sample Age:	34h (1.7 °C)	Station:					

Multiple Comparison Summary							
Analysis ID	Endpoint	Comparison Method	NOEL	LOEL	TOEL	TU	PMSD ✓
21-2555-7494	48h Survival Rate	Steel Many-One Rank Sum Test	1.3	> 1.3	n/a	76.92	n/a

Test Acceptability			TAC Limits				
Analysis ID	Endpoint	Attribute	Test Stat	Lower	Upper	Overlap	Decision
21-2555-7494	48h Survival Rate	Control Resp	1	0.9	>>	Yes	Passes Acceptability Criteria

48h Survival Rate Summary											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	L	5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.45		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.56		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.75		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
1		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
1.3		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

48h Survival Rate Detail						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	L	1.0000	1.0000	1.0000	1.0000	1.0000
0.45		1.0000	1.0000	1.0000	1.0000	1.0000
0.56		1.0000	1.0000	1.0000	1.0000	1.0000
0.75		1.0000	1.0000	1.0000	1.0000	1.0000
1		1.0000	1.0000	1.0000	1.0000	1.0000
1.3		1.0000	1.0000	1.0000	1.0000	1.0000

48h Survival Rate Binomials						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	L	8/8	8/8	8/8	8/8	8/8
0.45		8/8	8/8	8/8	8/8	8/8
0.56		8/8	8/8	8/8	8/8	8/8
0.75		8/8	8/8	8/8	8/8	8/8
1		8/8	8/8	8/8	8/8	8/8
1.3		8/8	8/8	8/8	8/8	8/8

CETIS Measurement Report

Report Date: 30 Dec-15 12:51 (p 1 of 3)
Test Code: DP 15-342-0192 | 14-9110-4134

Daphnia pulex 48-h Acute Survival Test

Waypoint Analytical, Inc.

Batch ID: 16-2376-0497	Test Type: Survival (48h)	Analyst: Ava Davis
Start Date: 08 Dec-15 16:45	Protocol: EPA/821/R-02-012 (2002)	Diluent: Perrier Water
Ending Date: 10 Dec-15 13:30	Species: Daphnia pulex	Brine: Not Applicable
Duration: 45h	Source: In-House Culture	Age: < 24
Sample ID: 02-3148-1642	Code: 15-342-0192	Client: City of Marion Water Department
Sample Date: 07 Dec-15 07:00	Material: POTW Effluent	Project: WET Biannual Compliance Test (2nd)
Receipt Date: 08 Dec-15 12:51	Source: Marion Water Department (AR0021971)	
Sample Age: 34h (1.7 °C)	Station:	

CETIS Measurement Report

Report Date: 30 Dec-15 12:51 (p 2 of 3)
 Test Code: DP 15-342-0192 | 14-91110-4134

Daphnia pulex 48-h Acute Survival Test Waypoint Analytical, Inc.

Alkalinity (CaCO3)-mg/L			
Conc-%	Code	1	2
0	L	62	62
0.45			
0.56			
0.75			
1			
1.3			

Total Residual Chlorine-mg/L			
Conc-%	Code	1	2
0	L	0	0
0.45			
0.56			
0.75			
1			
1.3		0	0

Conductivity-µS/cm			
Conc-%	Code	1	2
0	L	178	173
0.45			
0.56			
0.75			
1			
1.3		450	427

Final Dissolved Oxygen-mg/L			
Conc-%	Code	1	2
0	L	8	8.2
0.45		8	8.2
0.56		8	8.2
0.75		8	8.2
1		7.9	8.3
1.3		8	8.2

Initial Dissolved Oxygen-mg/L			
Conc-%	Code	1	2
0	L	8	8.4
0.45		8.3	8.4
0.56		8.3	8.2
0.75		8.2	8.3
1		8.3	8.6
1.3		8.3	8.6

Hardness (CaCO3)-mg/L			
Conc-%	Code	1	2
0	L	91	91
0.45			
0.56			
0.75			
1			
1.3			

CETIS Measurement Report

Report Date: 30 Dec-15 12:51 (p 3 of 3)
Test Code: DP 15-342-0192 | 14-9110-4134

Daphnia pulex 48-h Acute Survival Test

Waypoint Analytical, Inc.

Final pH-Units

Conc-%	Code	1	2
0	L	7.3	7.6
0.45		7.6	7.3
0.56		7.4	7.4
0.75		7.5	7.4
1		7.5	7.3
1.3		7.3	7.3

Initial pH-Units

Conc-%	Code	1	2
0	L	7.9	7.8
0.45		8	7.9
0.56		8	7.9
0.75		8	8
1		8	8
1.3		8	8

Final Temperature-°C

Conc-%	Code	1	2
0	L	23	23
0.45		23	23
0.56		23	23
0.75		23	23
1		23	23
1.3		23	23

Initial Temperature-°C

Conc-%	Code	1	2
0	L	23	23
0.45		23	23
0.56		23	23
0.75		23	23
1		23	23
1.3		23	23

CETIS Test Evaluation Report

Report Date: 30 Dec-15 13:04 (1 of 1)

Test Code: FH 15-342-0192 | 18-5585-5853

Facility: Marion Water Department Sample Site: Sample Code: 15-342-0192 Sample Date: 07 Dec-15 07:00 Sample Age: 34h (1.7 °C) Project: WET Biannual Compliance Test (2nd)	Test Name: Fathead Minnow 48-h Acute Survival Test Organism: Pimephales promelas (Fathead Minnow) Protocol: EPA/821/R-02-012 (2002) Start Date: 08 Dec-15 16:30 End Date: 10 Dec-15 14:00 Duration: 46h Organism Age: < 24
Permittee: City of Marion Water Department Address: PO Box 814 Marion, AR 72364 Contact: Mr. Jim Shempert Phone: 870-739-5413, 870-739-5415(fax) Email: jshempert.waterdept@yahoo.com	Laboratory: Waypoint Analytical , Inc. Address: 2790 Whitten Road Memphis, TN 38133 Contact: Ms. Connie Cook, Lab Supervisor Phone: 901-213-2454, 901-213-2440(fax) Email: ccook@etcmemphis

Comments:

Acute Toxicity Evaluation

Endpoint	Criteria	Conc-%	IWC	Decision	Method
48h Survival Rate	NOEL/LOEL	1.3/>1.3	1	Passes IWC	Steel Many-One Rank Sum Test

48h Survival Rate Data Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	L	5	1	1	1	1	1	0	0	0.00%	0.0%
0.45		5	1	1	1	1	1	0	0	0.00%	0.0%
0.56		5	1	1	1	1	1	0	0	0.00%	0.0%
0.75		5	1	1	1	1	1	0	0	0.00%	0.0%
1		5	1	1	1	1	1	0	0	0.00%	0.0%
1.3		5	1	1	1	1	1	0	0	0.00%	0.0%

CETIS Summary Report

Report Date: 30 Dec-15 13:04 (p 1 of 1)
 Test Code: FH 15-342-0192 | 18-5585-5853

Fathead Minnow 48-h Acute Survival Test				Waypoint Analytical, Inc.			
Batch ID: 20-6953-8654	Test Type: Survival (48h)	Analyst: Ava Davis					
Start Date: 08 Dec-15 16:30	Protocol: EPA/821/R-02-012 (2002)	Diluent: Perrier Water					
Ending Date: 10 Dec-15 14:00	Species: Pimephales promelas	Brine: Not Applicable					
Duration: 46h	Source: Aquatic Biosystems, CO	Age: < 24					
Sample ID: 02-3148-1642	Code: 15-342-0192	Client: City of Marion Water Department					
Sample Date: 07 Dec-15 07:00	Material: POTW Effluent	Project: WET Biannual Compliance Test (2nd)					
Receipt Date: 08 Dec-15 12:51	Source: Marion Water Department (AR0021971)						
Sample Age: 34h (1.7 °C)	Station:						

Multiple Comparison Summary

Analysis ID	Endpoint	Comparison Method	NOEL	LOEL	TOEL	TU	PMSD ✓
16-4247-5511	48h Survival Rate	Steel Many-One Rank Sum Test	1.3	> 1.3	n/a	76.92	n/a

48h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	L	5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.45		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.56		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.75		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
1		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
1.3		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

48h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	L	1.0000	1.0000	1.0000	1.0000	1.0000
0.45		1.0000	1.0000	1.0000	1.0000	1.0000
0.56		1.0000	1.0000	1.0000	1.0000	1.0000
0.75		1.0000	1.0000	1.0000	1.0000	1.0000
1		1.0000	1.0000	1.0000	1.0000	1.0000
1.3		1.0000	1.0000	1.0000	1.0000	1.0000

48h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	L	8/8	8/8	8/8	8/8	8/8
0.45		8/8	8/8	8/8	8/8	8/8
0.56		8/8	8/8	8/8	8/8	8/8
0.75		8/8	8/8	8/8	8/8	8/8
1		8/8	8/8	8/8	8/8	8/8
1.3		8/8	8/8	8/8	8/8	8/8

CETIS Measurement Report

Report Date: 30 Dec-15 13:04 (p 1 of 3)
Test Code: FH 15-342-0192 | 18-5585-5853

Fathead Minnow 48-h Acute Survival Test

Waypoint Analytical, Inc.

Batch ID: 20-6953-8654	Test Type: Survival (48h)	Analyst: Ava Davis
Start Date: 08 Dec-15 16:30	Protocol: EPA/821/R-02-012 (2002)	Diluent: Perrier Water
Ending Date: 10 Dec-15 14:00	Species: Pimephales promelas	Brine: Not Applicable
Duration: 46h	Source: Aquatic Biosystems, CO	Age: < 24
Sample ID: 02-3148-1642	Code: 15-342-0192	Client: City of Marion Water Department
Sample Date: 07 Dec-15 07:00	Material: POTW Effluent	Project: WET Biannual Compliance Test (2nd)
Receipt Date: 08 Dec-15 12:51	Source: Marion Water Department (AR0021971)	
Sample Age: 34h (1.7 °C)	Station:	

CETIS Measurement Report

Report Date: 30 Dec-15 13:04 (p 2 of 3)
 Test Code: FH 15-342-0192 | 18-5585-5853

Fathead Minnow 48-h Acute Survival Test

Waypoint Analytical, Inc.

Alkalinity (CaCO3)-mg/L

Conc-%	Code	1	2
0	L	62	62
0.45			
0.56			
0.75			
1			
1.3			

Total Residual Chlorine-mg/L

Conc-%	Code	1	2
0	L	0	0
0.45			
0.56			
0.75			
1			
1.3		0	0

Conductivity-µS/cm

Conc-%	Code	1	2
0	L	178	173
0.45			
0.56			
0.75			
1			
1.3		450	427

Final Dissolved Oxygen-mg/L

Conc-%	Code	1	2
0	L	7.9	7.6
0.45		7.8	7.6
0.56		7.9	7.6
0.75		7.9	7.8
1		7.9	7.8
1.3		7.6	7.7

Initial Dissolved Oxygen-mg/L

Conc-%	Code	1	2
0	L	8	8.4
0.45		8.3	8.4
0.56		8.3	8.2
0.75		8.2	8.3
1		8.3	8.6
1.3		8.3	8.6

Hardness (CaCO3)-mg/L

Conc-%	Code	1	2
0	L	91	91
0.45			
0.56			
0.75			
1			
1.3			

CETIS Measurement Report

Report Date: 30 Dec-15 13:04 (p 3 of 3)
 Test Code: FH 15-342-0192 | 18-5585-5853

Fathead Minnow 48-h Acute Survival Test

Waypoint Analytical, Inc.

Final pH-Units

Conc-%	Code	1	2
0	L	7.5	7.7
0.45		7.5	7.8
0.56		7.4	7.8
0.75		7.5	7.8
1		7.6	7.7
1.3		7.6	7.6

Initial pH-Units

Conc-%	Code	1	2
0	L	7.9	7.8
0.45		8	7.9
0.56		8	7.9
0.75		8	8
1		8	8
1.3		8	8

Final Temperature-°C

Conc-%	Code	1	2
0	L	23	23
0.45		23	23
0.56		23	23
0.75		23	23
1		23	23
1.3		23	23

Initial Temperature-°C

Conc-%	Code	1	2
0	L	23	23
0.45		23	23
0.56		23	23
0.75		23	23
1		23	23
1.3		23	23

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 2002.0
 - Test chambers: 30 mL disposable plastic beakers
 - Volume per chamber: 15 mL
 - Number of organisms per chamber: 8
 - Number of replicates: 5
 - Food: Organisms are not fed during test.

4. Method 2000.0
 - 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 during holding, prior to test.
 - 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



02608
 City of Marion Water Department
 Mr. Jim Shempert
 PO Box 814
 Marion, AR 72364

Project Bioassay
 Information :

Report Date : 12/30/2015

Report Number : 15-342-0192

REPORT OF ANALYSIS

Received : 12/8/2015

Lab No : 98797
 Sample ID : Outfall 001 - Composite 1

Matrix: Aqueous
 Sampled: 12/7/2015 7:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Alkalinity (as CaCO ₃)	79	mg/L	1	1	12/17/15 09:15	CJR	2320B-2011
Total Calcium	10.8	mg/L	0.100	1	12/11/15 19:03	BKN	EPA-200.7
Hardness as CaCO ₃ (SM-2340B)	38.7	mg/L	0.100	1	12/11/15 19:03		EPA-200.7
Total Magnesium	2.86	mg/L	0.100	1	12/11/15 19:03	BKN	EPA-200.7

Lab No : 98798
 Sample ID : Outfall 001 - Composite 2

Matrix: Aqueous
 Sampled: 12/8/2015 7:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Alkalinity (as CaCO ₃)	79	mg/L	1	1	12/17/15 09:15	CJR	2320B-2011
Total Calcium	10.8	mg/L	0.100	1	12/11/15 19:08	BKN	EPA-200.7
Hardness as CaCO ₃ (SM-2340B)	38.6	mg/L	0.100	1	12/11/15 19:08		EPA-200.7
Total Magnesium	2.82	mg/L	0.100	1	12/11/15 19:08	BKN	EPA-200.7

Lab No : 98799
 Sample ID : River Water

Matrix: Aqueous
 Sampled: 12/8/2015 7:00

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Alkalinity (as CaCO ₃)	108	mg/L	1	1	12/17/15 09:15	CJR	2320B-2011
Total Calcium	43.9	mg/L	0.100	1	12/11/15 19:13	BKN	EPA-200.7
Hardness as CaCO ₃ (SM-2340B)	166	mg/L	0.100	1	12/11/15 19:13		EPA-200.7
Total Magnesium	13.8	mg/L	0.100	1	12/11/15 19:13	BKN	EPA-200.7

Qualifiers/ Definitions	DF	Dilution Factor	MQL	Method Quantitation Limit
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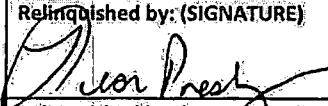
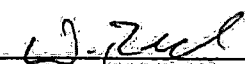

CHAIN-OF-CUSTODY

Kit ID: 0000058292
 Initiated By: Connie Cook

 15-342-0192
 02608
 City of Marion Water Department 12-08-2015
 Bioassay 13:45:58

Company Name	Company Number	Client Project Manager/Contact	Purchase Order Number
City of Marion Water Department	02608	City of Marion Water Department	
Site Name	Project Number	<input type="checkbox"/> RUSH – Additional charges apply <input type="checkbox"/> Special Detection Limits(s) Date Results Needed:	Method of Shipment <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Courier <input type="checkbox"/> Client Drop Off Other
Quarterly Bioassay Kit 4A 12/06-07/15			
LIMS Project ID	Project Manager Phone #	Project Manager Email	Site/Facility ID #
Marion - Bioassay	(870) 739-5413		

Date	Time	Sample ID	Matrix	Grab/Comp	# of Cont	Container Type	Preservation	Analyses
12/7/15	7:00 AM	Outfall 001 - Composite 1	Aqueous	C	1	Plastic - Pint	HNO ₃ - Nitric Acid	hardness
12/7/15	7:00 AM	Outfall 001 - Composite 1	Aqueous	C	1	Plastic - Pint	NONE	Alkalinity
12/7/15	7:00 AM	Outfall 001 - Composite 1	Aqueous	C	1	Plastic - Quart	NONE	48 hr bioassay - renewal

For Laboratory Use Only			Sampled by (Name - Print)	Client Remarks/Comments			
Ice	Custody	Lab Comments	ZP Relinquished by: (SIGNATURE)  Relinquished by: (SIGNATURE) Relinquished by: (SIGNATURE)	Date Time	Received by: (SIGNATURE)	Date Time	
Seals							
Blank/Cooler Temp							
Y/N	Y/N			12-8-15		12-8-15	
				11:53		11:53	
				12-8-15		12-8-15	
				12:51		12:51	

CHAIN-OF-CUSTODY

Kit ID: 000058295
 Initiated By: Connie Cook


 City of Marion Water Department
 Bioassay

15-342-0
 02608
 12-08-20
 13:45:58

Company Name City of Marion Water Department	Company Number 02608	Client Project Manager/Contact City of Marion Water Department	Purchase Order Number
Site Name Quarterly Bioassay Kit 4B 12/07-08/15	Project Number	<input type="checkbox"/> RUSH - Additional charges apply <input type="checkbox"/> Special Detection Limits(s) Date Results Needed	Method of Shipment: <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Courier <input type="checkbox"/> Client Drop Off Other
LIMS Project ID Marion - Bioassay	Project Manager Phone # (870) 739-5413	Project Manager Email	Site/Facility ID: #

Date	Time	Sample ID	Matrix	Grab/Comp	# of Cont	Container Type	Preservation	Analyses
12/8/15	7A	Outfall 001 - Composite 2	Aqueous	C	1	Plastic - Pint	HNO3 - Nitric Acid	hardness
12/8/15	7A	Outfall 001 - Composite 2	Aqueous	C	1	Plastic - Pint	NONE	Alkalinity
12/8/15	7A	Outfall 001 - Composite 2	Aqueous	C	1	Plastic - Quart	NONE	48 hr bioassay - renewal
12/8/15	7A	River Water	Aqueous	C	1	Plastic - Pint	HNO3 - Nitric Acid	hardness
12/8/15	7A	river water	Aqueous	C	1	Plastic - Pint	NONE	Alkalinity
12/8/15	7A	river water	Aqueous	C	4	Plastic - Gallon	NONE	dilution water

For Laboratory Use Only			Sampled by (Name - Print)		Client Remarks/Comments			
Ice	Custody Seals	Lab Comments	<i>AP</i>					
<i>YN</i>	<i>YN</i>							
Blank/ Cooler Temp								
<i>7.8°C/155 15</i>								
Relinquished by: (SIGNATURE)			Date Time	Received by: (SIGNATURE)		Date Time		
<i>Yuan P. ...</i>			<i>12-8-15 1153</i>	<i>W. J. ...</i>		<i>12-8-15 1153</i>		
Relinquished by: (SIGNATURE)			Date Time	Received by: (SIGNATURE)		Date Time		
<i>W. J. ...</i>			<i>12-8-15 1251</i>	<i>W. J. ...</i>		<i>12-8-15 1251</i>		

NAME:
ADDRESS:

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

PERMIT NUMBER	DISCHARGE NUMBER

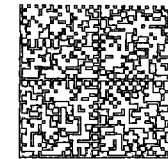
FACILITY:
LOCATION:
ATTN:

MONITORING PERIOD

YEAR	MONTH	DAY	TO	YEAR	MONTH	DAY

PARAMETER	SAMPLE MEASUREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
P/F STATRE 48 HR ACUTE DAPHNIA PULEX M3D 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0	*****	(9A)	0	QTRLY COMP24	
								PASS=0 FAIL=1			
P/F STATRE 48 HR ACUTE PIMEPHALES PROMELAS M6C 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0	*****	(9A)	0	QTRLY COMP24	
								PASS=0 FAIL=1			
NOEL LETHAL STATRE 48 HR ACUTE D. PULEX 43D 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	1.33	*****	(23)	0	QTRLY COMP24	
								PER-CENT			
NOEL LETHAL STATRE 48 HR ACUTE PIMEPHALES M6C 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	1.33	*****	(23)	0	QTRLY COMP24	✓
								PER-CENT			
COEF OF VAR STATRE 48 HR ACUTE D. PULEX M3D 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.0	*****	(23)	0	QTRLY COMP24	
								PER-CENT			
COEF OF VAR STATRE 48 HR ACUTE PIMEPHALES M6C 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.0	*****	(23)	0	QTRLY COMP24	
								PER-CENT			

MARION WATER
31 MILITARY RD.
MARION, AR
72364



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