

# ADEQ

ARKANSAS  
Department of Environmental Quality

April 9, 2012

Mr. Isaac Keeling  
Water and Sewer Manager  
City of Clinton  
PO Box 277  
Clinton, AR 72031

Re: AFIN: No. 71-00018, NPDES Permit No. AR0048836

Dear Mr. Keeling:

On February 21 and 22, 2012, I performed a Compliance Sampling Inspection of the waste water treatment facility in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. This inspection did not reveal evidence of any violations.

If I can be of any assistance, please contact me at (870) 446-6170 or by e-mail at [Kirkpatrick@adeq.state.ar.us](mailto:Kirkpatrick@adeq.state.ar.us).

Sincerely,



Bruce Kirkpatrick  
District 2 Field Inspector  
Water Division

cc: Water Division Enforcement Branch  
Water Division Permits Branch

 <p style="text-align: center;">UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460</p> <h2 style="text-align: center;">NPDES Compliance Inspection Report</h2>	Form Approved OMB No. 2040-0003
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Section A: National Data System Coding																												
Transaction Code			NPDES								Yr/Mo/Day					Inspec. Type		Inspector		Fac. Type								
1	N	2	5	3	A	R	0	0	4	8	8	3	6	11	12	1	2	0	2	2	2	17	18	S	19	S	20	1
Remarks																												
Inspection Work Days			Facility Evaluation Rating								BI		QA		Reserved													
67			69	70	5	71	N	72	N	73		74	75															80

Section B: Facility Data					
Name and Location of Facility Inspected ( <i>For industrial users discharging to POTW, also include POTW name and NPDES permit number</i> ) <b>City of Clinton</b> <b>East Wastewater Treatment Plant</b> <b>Section 23, Township 11 North, Range 14 West in Van Buren County, AR</b>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Entry Time/Date 1035 hrs / 2-21-2012 0802 hrs / 2-22-2012</td> <td style="width:50%;">Permit Effective Date <b>December 1, 2010</b></td> </tr> <tr> <td>Exit Time/Date 1351 hrs / 2-21-2012 0903 hrs / 2-22-2012</td> <td>Permit Expiration Date <b>November 30, 2015</b></td> </tr> </table>	Entry Time/Date 1035 hrs / 2-21-2012 0802 hrs / 2-22-2012	Permit Effective Date <b>December 1, 2010</b>	Exit Time/Date 1351 hrs / 2-21-2012 0903 hrs / 2-22-2012	Permit Expiration Date <b>November 30, 2015</b>
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Exit Time/Date 1351 hrs / 2-21-2012 0903 hrs / 2-22-2012	Permit Expiration Date <b>November 30, 2015</b>				
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) <b>Mr. Kevin Donahue / Plant Operator / ph 501-745-4320 / fax 501-745-2164</b> <b>Mr. Isaac Keeling, Water and Sewer Manager</b>	Other Facility Data PDS #064952				
Name, Address of Responsible Official/Title/Phone and Fax Number <b>Mr. Isaac Keeling, Water and Sewer Manager</b> <b>PO Box 277</b> <b>Clinton, AR 72031 / same as above</b>	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Section C: Areas Evaluated During Inspection							
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)							
S	Permit	S	Flow Measurement	S	Operations & Maintenance	S	Sampling
S	Records/Reports	S	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

**Section D: Summary of Findings/Comments (Attach additional sheets if necessary)**

**A Compliance Sampling Inspection was performed on 2-21-2012 and 2-22-2012. Samples were taken at Outfall 001 by the ADEQ Inspector and analyzed at the ADEQ Laboratory and in field by ADEQ Inspector. Results revealed that the facility was producing a high quality effluent well within the permitted pollutant limits. The inspection revealed that the facility was in compliance with the terms of its permit.**

Name(s) and Signature(s) of Inspector(s) Bruce Kirkpatrick 	Agency/Office/Telephone/Fax <b>AR Dept. of Environmental Quality-Jasper</b> <b>PHONE# (870) 446-6170 / FAX# (870) 446-2181</b>	Date <b>April 5, 2012</b>
Signature of Reviewer	Agency/Office/Phone and Fax Numbers	Date

**SECTION A: PERMIT VERIFICATION**

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS

S M U NA NE

## DETAILS:

- |  |  |
|--|--|
| 1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:                            | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES: | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:           | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. ALL DISCHARGES ARE PERMITTED:   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE |

**SECTION B: RECORDKEEPING AND REPORTING EVALUATION**

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT

S M U NA NE

## DETAILS:

- |  |   |
|--|---|
| 1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:                         | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:                                  | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| a. DATES AND TIME(S) OF SAMPLING:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| b. EXACT LOCATION(S) OF SAMPLING:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| c. NAME OF INDIVIDUAL PERFORMING SAMPLING:   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| d. ANALYTICAL METHODS AND TECHNIQUES:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| e. RESULTS OF CALIBRATIONS:  | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE                            |
| f. RESULTS OF ANALYSES:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| g. DATES AND TIMES OF ANALYSES:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| h. NAME OF PERSON(S) PERFORMING ANALYSES:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE:                | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE |
| 4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:       | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA: | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |

**SECTION C: OPERATIONS AND MAINTENANCE**

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED

S M U NA NE

## DETAILS:

- |   |   |
|---|---|
| 1. TREATMENT UNITS PROPERLY OPERATED:   | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 2. TREATMENT UNITS PROPERLY MAINTAINED:   | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED:  | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE:   | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 5. ALL NEEDED TREATMENT UNITS IN SERVICE:   | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED:   | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED:   | <input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE |
| 8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR:                         | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS:  | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT:   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |
| 15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT: <u>Slight overflow of pond levee. No discharge to state waters.</u> | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE                            |

**SECTION D: SAMPLING**

PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS

S M U NA NE

## DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. SAMPLES REFRIGERATED DURING COMPOSITING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER PRESERVATION TECHNIQUES USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE

**SECTION E: FLOW MEASUREMENT**

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS

S M U NA NE

## DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED:___ TYPE OF DEVICE: <u>6 inch Parshall flume</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. CALIBRATION FREQUENCY ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. HEAD MEASURED AT PROPER LOCATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

**SECTION F: LABORATORY**

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS

S M U NA NE

## DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
4. QUALITY CONTROL PROCEDURES ADEQUATE:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
5. DUPLICATE SAMPLES ARE ANALYZED $\geq$ 10% OF THE TIME:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
6. SPIKED SAMPLES ARE ANALYZED $\geq$ 10% OF THE TIME:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
7. COMMERCIAL LABORATORY USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. LAB NAME: <u>Environmental Services</u>	
b. LAB ADDRESS: <u>13715 West Markham, Little Rock, AR 72211</u>	
c. PARAMETERS PERFORMED: <u>CBOD, TSS, DO, NH3-N, FECAL COLIFORM, NO2+N03, Ph, Biomonitoring, Ecoli</u>	
8. BIOMONITORING PROCEDURES ADEQUATE:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
a. PROPER ORGANISMS USED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
b. PROPER DILUTION SERIES FOLLOWED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
c. PROPER TEST METHODS AND DURATION:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE

**SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS**

BASED ON VISUAL OBSERVATIONS ONLY

S M U NA NE

DETAILS:

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	none	none	none	slight	none	clear	

**SECTION H: SLUDGE DISPOSAL**

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS

S M U NA NE

DETAILS:

- 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY: S M U NA NE
- 2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503: S M U NA NE
- 3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE):

**SECTION I: SAMPLING INSPECTION PROCEDURES**

SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS

S M U NA NE

DETAILS:

- 1. SAMPLES OBTAINED THIS INSPECTION: Y N NA NE
- 2. TYPE OF SAMPLE: GRAB:\_\_ COMPOSITE:\_\_ METHOD:\_\_ FREQUENCY: 4 hour composite
- 3. SAMPLES PRESERVED: Y N NA NE
- 4. FLOW PROPORTIONED SAMPLES OBTAINED: Y N NA NE
- 5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE: Y N NA NE
- 6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE: Y N NA NE
- 7. SAMPLE SPLIT WITH PERMITTEE: Y N NA NE
- 8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED: Y N NA NE
- 9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT: Y N NA NE

**SECTION J: STORM WATER POLLUTION PREVENTION PLAN**

STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS

S M U NA NE

DETAILS:

- 1. SWPPP UPDATED AS NEEDED:\_\_ DATE OF LAST UPDATE: Y N NA NE
- 2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS: Y N NA NE
- 3. POLLUTION PREVENTION TEAM IDENTIFIED: Y N NA NE
- 4. POLLUTION PREVENTION TEAM PROPERLY TRAINED: Y N NA NE
- 5. LIST OF POTENTIAL POLLUTANT SOURCES: Y N NA NE
- 6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS: Y N NA NE
- 7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED: Y N NA NE
- 8. LIST OF STRUCTURAL BMPS: Y N NA NE
- 9. LIST OF NON-STRUCTURAL BMPS: Y N NA NE
- 10. BMPS PROPERLY OPERATED AND MAINTAINED: Y N NA NE
- 11. INSPECTIONS CONDUCTED AS REQUIRED: Y N NA NE

## FLOW CALCULATION SHEET

Date:	<b>2-21-2012</b>	Time:	<b>1102 hrs</b>	
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Head in Inches:	<b>10.5</b>	Feet:	<b>.875</b>	
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Type & Size of Primary Flow Measurement Device: **6" Parshall flume**

Name & Model of Secondary Flow Measurement Device:	<b>BIF Chart Recorder Polysonics MSP 90</b>
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Date of last Calibration of Secondary Flow Device: **2-12-12**

Recorded Flow at Date & Time Listed Above:	<b>1.04 mgd</b>	(Facility Flow Meter)
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Calculated Flow at Date & Time Listed Above:	<b>1.078 mgd</b>	
(Flow is calculated using flow charts in: <u>ISCO Open Channel Flow Measurement Handbook-5<sup>th</sup> Edition</u> )		

% Error =	Recorded Value	-	Calculated Value		X 100	
	Calculated Value					

% Error =	1.04	-	1.078		X 100	
	1.078					

% Error =					X 100	
-----------	--	--	--	--	-------	--

% Error =					X 100	
-----------	--	--	--	--	-------	--

% Error =	<b>-3.5</b>				%	
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Comments:	<b>Ok, &lt; 10%</b>
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**LAB RESULTS**

Arkansas Department of Environmental Quality Laboratory Contact:  
**Client:** CSI **Client Sample ID:** Clinton Outfall 001  
**Lab ID:** 2012-0527 **Collection Date:** 2/22/2012 8:03:00 AM  
**Matrix:** Water

**Analyses**  
**Total Suspended Solids EPA 160.2 Batch: 12022401 Run: 1**

**Result Reporting**  
**Limit**

**MDL Qual Unit**  
Analysis Date/Time 2/22/2012 7:30  
**Total Kjeldahl Nitrogen SM 4500-N C Batch: 12022407 Run: 1**

**Result Reporting**  
**Limit**

**MDL Qual Unit**  
Total Kjeldahl Nitrogen 1.05 0.05 0.05 mg/L  
Dilution Factor 1.0  
Analyzed By Chad Carrington  
Analysis Date/Time 2/23/2012 11:15:31 AM

**Total Phosphorus SM 4500-P J Batch: 12022406 Run: 1**

**Result Reporting**  
**Limit**

**MDL Qual Unit**  
Phosphorus-total 0.473 0.01 0.01 mg/L  
Dilution Factor 1.0  
Analyzed By Chad Carrington  
Analysis Date/Time 2/23/2012 11:15:31 AM

Page 3 of 14  
501-682-0955  
Ruehr@adeq.state.ar.us  
Jeff Ruehr  
North Little Rock, AR 72118  
5301 Northshore Drive

Arkansas Department of Environmental Quality Laboratory Contact:  
**Client:** CSI **Client Sample ID:** Clinton Outfall 001  
**Lab ID:** 2012-0527 **Collection Date:** 2/22/2012 8:03:00 AM  
**Matrix:** Water

**Analyses**  
**E.Coli by MF EPA 1103.1 Batch: 12022304 Run: 1**

**Result Reporting**  
**Limit**

**MDL Qual Unit**  
E. Coli 104 4 1 cfu/100ml  
Analyzed By Alan Price  
Analysis Date/Time 2/22/2012 13:30  
**Fecal Coliforms SM 9222 D Batch: 12022302 Run: 1**

**Result Reporting**  
**Limit**

**MDL Qual Unit**  
Fecal Coliforms 300 4 4 cfu/100ml  
Analyzed By Alan Price  
Analysis Date/Time 2/22/2012 13:30

Page 4 of 14  
501-682-0955  
Ruehr@adeq.state.ar.us

Jeff Ruehr

North Little Rock, AR 72118

5301 Northshore Drive

Arkansas Department of Environmental Quality Laboratory Contact:

**Client:** CSI **Client Sample ID:** Clinton Outfall 001

**Lab ID:** 2012-0527 **Collection Date:** 2/22/2012 8:03:00 AM

**Matrix:** Water

**Analyses**

**Field Data Batch:** 12030203 **Run:** 1

**Result Reporting**

**Limit**

**MDL Qual Unit**

Dissolved Oxygen 10.2 mg/L

pH NA SU

Temperature 9.5 C

Analyzed By Bruce Kirkpatrick

Analysis Date/Time 2/22/2012 08:03



**Re-aeration cascade**





**Sampling location for Outfall 001 at base of cascade**