



# Analytical Report

1702 East Central Avenue  
Bentonville, AR 72712  
479-271-7996 phone  
479-271-8394 fax

06/23/09 17:45

Client: Town of Highfill  
11978 Highfill Ave  
Gentry AR, 72734

Work Order: BF90286  
Project Name: Quarterly  
Project Number: Quarterly

Attn: Frank Holzkamper

Date Received: 06/17/09

Sample ID	Laboratory ID	Date and Time Sampled	Sampled By	Sample Type
Lysimeter #1	BF90286-01	06/17/09 12:13	Joshua Marshall	Grab
Lysimeter #2	BF90286-02	06/17/09 12:22	Joshua Marshall	Grab
Lysimeter #3	BF90286-03	06/17/09 12:26	Joshua Marshall	Grab
Lysimeter #4	BF90286-04	06/17/09 12:30	Joshua Marshall	Grab
Lysimeter #5	BF90286-05	06/17/09 12:33	Joshua Marshall	Grab
Lysimeter #6	BF90286-06	06/17/09 12:38	Joshua Marshall	Grab
Well #1	BF90286-07	06/17/09 12:18	Joshua Marshall	Grab
Well #2	BF90286-08	06/17/09 12:42	Joshua Marshall	Grab

Samples were received into laboratory at a temperature of 3.00 °C

Comments:

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager. Any opinions, if expressed, are outside the scope of the laboratory's accreditation.

This report and any attachment(s) contains information from Environmental Testing Group, Inc ("ETG"), and is confidential and privileged. The information is intended for the use of the individual or entity named above. If you are not the intended recipient, be aware that any review, disclosure, printing, copying, distribution, retransmission, dissemination or other use of the information and/or contents of this message is prohibited. If you receive this message in error, please contact the sender immediately and delete any and all copies of this message from your computer(s).

Results are reported on a wet weight basis unless otherwise noted.

The reported results were obtained in compliance with 2003 NELAC standards unless otherwise noted.

These results relate only to the items tested.

Estimated uncertainty is available upon request.

This report has been electronically signed.

David D'Amico  
Laboratory Director

ADEQ 04-0574/07-087-0  
NELAP/FL DOH E871035





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06/23/09 17:45

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Work Order: BF90286  
 Project Name: Quarterly  
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Attn: Frank Holzkamper

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## Lysimeter #1 BF90286-01 (Water) Sampled: 06/17/09 12:13

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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### Environmental Testing Group

#### Chemistry Parameters by APHA/EPA Methods

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:15	JHM	SM 4500-Cl B	B9F1801
NA	Nitrate/Nitrite as N	ND		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611
NA	<b>Phosphorus, Total as P</b>	0.374		"	0.0100	0.0500	"	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	<b>Ammonia as N</b>	0.281		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301

## Lysimeter #2 BF90286-02 (Water) Sampled: 06/17/09 12:22

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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### Environmental Testing Group

#### Chemistry Parameters by APHA/EPA Methods

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:24	JHM	SM 4500-Cl B	B9F1801
NA	<b>Phosphorus, Total as P</b>	0.273		"	0.0100	0.0500	"	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	Ammonia as N	ND		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301
NA	Nitrate/Nitrite as N	ND		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611

## Lysimeter #3 BF90286-03 (Water) Sampled: 06/17/09 12:26

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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### Environmental Testing Group

#### Chemistry Parameters by APHA/EPA Methods

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:28	JHM	SM 4500-Cl B	B9F1801
NA	<b>Phosphorus, Total as P</b>	0.266		"	0.0200	0.100	2	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	<b>Nitrate/Nitrite as N</b>	0.771		"	0.0500	0.100	1	06/22/09 11:44	JHM	EPA 353.2	B9F1611
NA	Ammonia as N	ND		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301

Environmental Testing Group

David D'Amico  
 Laboratory Director

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06/23/09 17:45

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Work Order: BF90286  
 Project Name: Quarterly  
 Project Number: Quarterly

Attn: Frank Holzkamper

Date Received: 06/17/09

**Lysimeter #4**  
**BF90286-04 (Water) Sampled: 06/17/09 12:30**

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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**Environmental Testing Group**

**Chemistry Parameters by APHA/EPA Methods**

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:32	JHM	SM 4500-Cl B	B9F1801
NA	Nitrate/Nitrite as N	ND		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611
NA	Ammonia as N	0.400		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301
NA	Phosphorus, Total as P	0.310		"	0.0200	0.100	2	06/23/09 09:53	JHM	EPA 365.1	B9F2201

**Lysimeter #5**  
**BF90286-05 (Water) Sampled: 06/17/09 12:33**

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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**Environmental Testing Group**

**Chemistry Parameters by APHA/EPA Methods**

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:35	JHM	SM 4500-Cl B	B9F1801
NA	Nitrate/Nitrite as N	0.363		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611
NA	Phosphorus, Total as P	0.292		"	0.0200	0.100	2	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	Ammonia as N	ND		"	0.030	0.100	1	06/23/09 15:36	JHM	EPA 350.1	B9F2301

**Lysimeter #6**  
**BF90286-06 (Water) Sampled: 06/17/09 12:38**

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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**Environmental Testing Group**

**Chemistry Parameters by APHA/EPA Methods**

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:41	JHM	SM 4500-Cl B	B9F1801
NA	Phosphorus, Total as P	0.381		"	0.0100	0.0500	"	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	Ammonia as N	ND		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301
NA	Nitrate/Nitrite as N	0.333		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611

**Well #1**  
**BF90286-07 (Water) Sampled: 06/17/09 12:18**

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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**Environmental Testing Group**

Environmental Testing Group

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Work Order: BF90286  
 Project Name: Quarterly  
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Attn: Frank Holzkamper

Date Received: 06/17/09

**Well #1**  
**BF90286-07 (Water) Sampled: 06/17/09 12:18**

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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**Environmental Testing Group**

**Chemistry Parameters by APHA/EPA Methods**

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:20	JHM	SM 4500-Cl B	B9F1801
NA	<b>Phosphorus, Total as P</b>	0.0301	J	"	0.0100	0.0500	"	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	<b>Nitrate/Nitrite as N</b>	3.97		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611
NA	Ammonia as N	ND		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301

**Well #2**  
**BF90286-08 (Water) Sampled: 06/17/09 12:42**

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
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**Environmental Testing Group**

**Chemistry Parameters by APHA/EPA Methods**

7782-50-5	Residual Chlorine	ND		mg/L	0.200	0.200	1	06/17/09 12:44	JHM	SM 4500-Cl B	B9F1801
NA	<b>Nitrate/Nitrite as N</b>	4.79		"	0.0500	0.100	"	06/22/09 11:44	JHM	EPA 353.2	B9F1611
NA	<b>Phosphorus, Total as P</b>	0.0189	J	"	0.0100	0.0500	"	06/23/09 09:53	JHM	EPA 365.1	B9F2201
NA	Ammonia as N	ND		"	0.030	0.100	"	06/23/09 15:36	JHM	EPA 350.1	B9F2301

**Notes and Definitions**

- J Estimated Value. Compound was detected below minimum quantitation levels.
- ND Analyte NOT DETECTED at MDL
- PQL Practical Quantitation Limit
- mg/L Milligrams/Liter (PPM)
- mg/Kg Milligrams/Kilogram (PPM)
- MDL Method Detection Limit
- ug/L Micrograms/Liter (PPB)
- ug/Kg Micrograms/Kilogram (PPB)
- dry Sample results reported on a dry weight basis

Environmental Testing Group  
 David D'Amico  
 Laboratory Director

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# Town of Highfill

## CHAIN OF CUSTODY RECORD

<b>CLIENT INFORMATION</b> Town of Highfill 11978 Higfill Ave. Quarterly	<b>Reporting Information</b> Project Name Highfill Wastewater Treatment System E-Mail: frank.holtzkamper@highfillar.com  Telephone: (479) 936-4646  Fax: (479) 736-5921  Bill to/ P.O.#:	<b>Bottle Type:</b> A) 1 Liter Poly B) 500 mL Poly C) 250 mL Poly D) 1 L Amber Glass E) 330 mL Amber Glass F) 100 mL Snap Cap G) 43 mL VOA H) 50 mL centrifuge tube	<b>Preservation Codes:</b> 1. Cool, 4 Degrees Centigrade Non-preserved 2. Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> ), pH < 2 3. Nitric Acid (HNO <sub>3</sub> ), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid (HCl) 6. Sodium Hydroxide (NaOH), pH > 12 7. H <sub>3</sub> PO <sub>4</sub> Phosphoric Acid
Customer Number <b>2015</b>	Project Manager: Frank Holtzkamper	Preservative Code: <b>1</b>	<b>TEST PARAMETERS</b>
		Bottle Type: <b>C</b>	

Sampler(s) Signature: <i>[Signature]</i>		Sampler(s) Printed: <b>Joshua H. Marshall</b>														
LAB ID #	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix S=Solid W=Water	SAMPLE IDENTIFICATION . DESCRIPTION	Total residual Chlorine (field)	NH <sub>3</sub> -N, TP, NO <sub>2</sub> +NO <sub>3</sub>							
BF90286-01	6/17/09	1213	X		1	W	Lysimeter #1	X	X							
-02		1222	X		1	W	Lysimeter #2	X	X							
-03		1226	X		1	W	Lysimeter #3	X	X							
-04		1230	X		1	W	Lysimeter #4	X	X							
-05		1233	X		1	W	Lysimeter #5	X	X							
-06		1238	X		1	W	Lysimeter #6	X	X							
-07		1218	X		1	W	Monitoring well #1	X	X							
-08		1242	X		1	W	Monitoring well #2	X	X							

Cl<sub>2</sub> 0.18

**BF90286-01 B**  
 Lysimeter #1  
 Sampled: 06/17/09 12:13  
 Water-. Work Order Label

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)	<b>SAMPLE CONDITION UPON RECEIPTS IN LAB</b> 1 CUSTODY SEALS: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 2. CONTAINERS CORRECT: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 3. COC/LABELS AGREE: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 4. PRESERVATION CONFIRMED: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 5 RECEIVED ON ICE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6 TEMPERATURE UPON RECEIPT <b>3</b> °C	<b>REMARKS / COMMENTS</b> Samples preserved in lab. Tested Cl <sub>2</sub> w/ clients meter. Samples preserved in Lab.
3. Relinquished by: (Signature)	6/17/09 1449	Deanna Blankenship	FOR COMPLETION BY LAB ONLY	FEDEX UPS

Receipt of samples by Environmental Testing Group, Inc. acknowledges acceptance of Standard Terms and Conditions (available upon request).