



1702 East Central Avenue Suite 10  
 Bentonville, AR 72712  
 479-271-7996 phone  
 479-271-8394 fax

# Analytical Report

07/01/10 15:55

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

Work Order: BF00331  
 Project Name: Quarterly  
 Project Number: Quarterly

Attn: Frank Holzkamper

Date Received: 06/18/10

Sample ID	Laboratory ID	Date and Time Sampled	Sampled By	Sample Type
Lysimeter #1	BF00331-01	06/18/10 09:35	Joshua Marshall	Grab
Lysimeter #2	BF00331-02	06/18/10 10:13	Joshua Marshall	Grab
Lysimeter #3	BF00331-03	06/18/10 09:45	Joshua Marshall	Grab
Lysimeter #4	BF00331-04	06/18/10 09:50	Joshua Marshall	Grab
Lysimeter #5	BF00331-05	06/18/10 10:08	Joshua Marshall	Grab
Lysimeter #6	BF00331-06	06/18/10 10:03	Joshua Marshall	Grab
Well #1	BF00331-07	06/18/10 09:40	Joshua Marshall	Grab
Well #2	BF00331-08	06/18/10 09:57	Joshua Marshall	Grab

Samples were received into laboratory at a temperature of 2.00 °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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Work Order: BF00331  
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Attn: Frank Holzkamper

Date Received: 06/18/10

### Lysimeter #1 BF00331-01 (Water) Sampled: 06/18/10 09:35

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

NA	Ammonia as N	0.303		mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	ND		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.249		"	0.0111	0.0555	1.11	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	1	06/18/10 09:35	JHM	SM 4500-Cl B	B0F2103

### Lysimeter #2 BF00331-02 (Water) Sampled: 06/18/10 10:13

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

NA	Ammonia as N	0.036	J	mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	0.916		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.247		"	0.0167	0.0835	1.67	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	1	06/18/10 10:13	JHM	SM 4500-Cl B	B0F2103

### Lysimeter #3 BF00331-03 (Water) Sampled: 06/18/10 09:45

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

NA	Ammonia as N	0.037	J	mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	0.465		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.301		"	0.0135	0.0675	1.35	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	1	06/18/10 09:45	JHM	SM 4500-Cl B	B0F2103



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## Analytical Report

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 Gentry AR, 72734

Work Order: BF00331  
 Project Name: Quarterly  
 Project Number: Quarterly

Attn: Frank Holzkamper

Date Received: 06/18/10

**Lysimeter #4**  
**BF00331-04 (Water) Sampled: 06/18/10 09:50**

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**

NA	Ammonia as N	0.038	J	mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	ND		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.248		"	0.0100	0.0500	"	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	"	06/18/10 09:50	JHM	SM 4500-Cl B	B0F2103

**Lysimeter #5**  
**BF00331-05 (Water) Sampled: 06/18/10 10:08**

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**

NA	Ammonia as N	ND		mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	2.58		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.212		"	0.0217	0.108	2.17	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	1	06/18/10 10:08	JHM	SM 4500-Cl B	B0F2103

**Lysimeter #6**  
**BF00331-06 (Water) Sampled: 06/18/10 10:03**

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**

NA	Ammonia as N	0.046	J	mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	0.509		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.352		"	0.0100	0.0500	"	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	"	06/18/10 10:03	JHM	SM 4500-Cl B	B0F2103

**Well #1**  
**BF00331-07 (Water) Sampled: 06/18/10 09:40**

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

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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 Gentry AR, 72734

Work Order: BF00331  
 Project Name: Quarterly  
 Project Number: Quarterly

Attn: Frank Holzkamper

Date Received: 06/18/10

### Well #1

**BF00331-07 (Water) Sampled: 06/18/10 09:40**

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

NA	Ammonia as N	0.071	J	mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	3.76		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.0800		"	0.0100	0.0500	"	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	"	06/18/10 09:40	JHM	SM 4500-Cl B	B0F2103

### Well #2

**BF00331-08 (Water) Sampled: 06/18/10 09:57**

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

NA	Ammonia as N	0.750		mg/L	0.030	0.100	1	06/18/10 16:07	JHM	EPA 350.1	B0F1806
NA	Nitrate/Nitrite as N	2.97		"	0.0500	0.100	"	06/21/10 14:53	JHM	EPA 353.2	B0F2107
NA	Phosphorus, Total as P	0.198		"	0.0100	0.0500	"	06/25/10 16:18	JHM	EPA 365.1	B0F2504
7782-50-5	Residual Chlorine	ND		"	0.200	0.200	"	06/18/10 09:57	JHM	SM 4500-Cl B	B0F2103

### Notes and Definitions

J Estimated Value. Compound was detected below minimum quantitation levels.

ND Analyte NOT DETECTED at MDL MDL Method Detection Limit

PQL Practical Quantitation Limit ug/L Micrograms/Liter (PPB)

mg/L Milligrams/Liter (PPM) ug/Kg Micrograms/Kilogram (PPB)

mg/Kg Milligrams/Kilogram (PPM) dry Sample results reported on a dry weight basis



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# Town of Highfill CHAIN OF CUSTODY RECORD

**CLIENT INFORMATION**  
 Town of Highfill  
 11978 Highfill Ave.  
 Quarterly

**Reporting Information**  
 Project Name: Highfill Wastewater Treatment System  
 E-Mail: frank.holtzkammer@highfillar.com  
 Telephone (479) 936-4646  
 Fax: (479) 736-5921  
 Bill to/ P O #:

Customer Number: **2015**  
 Project Manager: Frank Holtzkammer

**Bottle Type:**  
 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

**Preservative Code:**  
 Bottle Type:

**Sampler(s) Signature:** *[Signature]*  
**Sampler(s) Printed:** Joshua H. Marshall

LAB ID #	SAMPLE COLLECTION Dates	Times	Grab	Comp	Number of Bottles	Sample Matrix S=Solid W=Water	SAMPLE IDENTIFICATION, DESCRIPTION	Total residual Chlorine (field)	NH3-N, TP, NO2+NO3	TEST PARAMETERS						
										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
BF00331-01	6/18/10	0935	X		1	W	Lysimeter #1	X	X							
-02		1013	X		1	W	Lysimeter #2	X	X							
-03		0945	X		1	W	Lysimeter #3	X	X							
-04		0950	X		1	W	Lysimeter #4	X	X							
-05		1008	X		1	W	Lysimeter #5	X	X							
-06		1003	X		1	W	Lysimeter #6	X	X							
-07		0940	X		1	W	Monitoring well #1	X	X							
-08		0957	X		1	W	Monitoring well #2	X	X							

Town of Highfill  
 Lysimeter #1  
 Sampled: 06/18/10 09:35  
 Water-Work Order Label

1. Relinquished by: (Signature) \_\_\_\_\_ Date/Time \_\_\_\_\_

2. Received by: (Signature) \_\_\_\_\_ Date/Time \_\_\_\_\_

3. Relinquished by: (Signature) *[Signature]* Date/Time **06/18/10 1232**

4. Received by lab: (Signature) *[Signature]*

**SAMPLE CONDITION UPON RECEIPT'S IN LAB**

1. CUSTODY SEALS:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. CONTAINERS CORRECT:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3. COC/LABELS AGREE:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4. PRESERVATION CONFIRMED:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
5. RECEIVED ON ICE:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
6. TEMPERATURE UPON RECEIPT _____ °C	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

FOR COMPLETION BY LAB ONLY

REMARKS / COMMENTS: *C12 - ND on all samples*

FEDEX \_\_\_\_\_ UPS \_\_\_\_\_

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