

3R - 079

**MONITORING
REPORT**

05/11/2005



Animas Environmental Services, LLC

624 E. Comanche • Farmington, NM 87401
TEL 505-564-2281 • FAX 505-324-2022

RECEIVED
3RP079

April 18, 2005

MAY 11 2005

Mr. William Olson
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Oil Conservation Division
Environmental Bureau

Mr. Denny Foust
New Mexico Oil Conservation Division
District 3 Office
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: Annual Groundwater Monitoring and Sampling Report for the Burlington Resources Oil and Gas Company's Thomas No. 1 Well Location, Bloomfield, New Mexico

Dear Sirs:

Pursuant to New Mexico Oil Conservation Division (OCD) requirements, Animas Environmental Services, LLC (AES), on behalf of Clayton Investments, submits this Annual Groundwater Monitoring and Sampling Report for 2004 for the Burlington Resources Oil and Gas Company's Thomas No.1 well, which is located west of Bloomfield in the NW ¼, SW ¼, Section 30, T29N, R11W, San Juan County, New Mexico. A site location map is included as Figure 1.

GROUNDWATER MONITORING AND SAMPLING

On July 12, 2004, and January 3, 2005, BioTech Remediation, Inc. (BioTech) personnel completed groundwater elevation monitoring at all five monitoring wells located at the site and collected groundwater samples from monitoring wells MW-2 and MW-3 for laboratory analysis of volatile organics per EPA Method 8021 and C₆ – C₁₀ range total petroleum hydrocarbons (TPH) per EPA Method 8015. All samples were submitted to Pinnacle Laboratories in Albuquerque, New Mexico, for analysis. Laboratory analytical reports are found in Appendix A.

Depth to Groundwater Measurements and Hydraulic Gradient

Depth to groundwater measurements for all wells were made with a Heron Electronic Water Level and recorded prior to sampling activities. Depths to groundwater were generally consistent with those observed during previous monitoring events. During the July, 2004, event, depth to groundwater measurements ranged from 3.40 feet below ground surface (bgs) in MW-3 up to 5.13 feet bgs in MW-5. In January, 2005, groundwater elevations were observed to have increased by approximately 0.5 foot

across the site, and depth to groundwater ranged from 2.82 feet bgs in MW-3 up to 4.60 feet bgs in MW-5. Based on the depth to groundwater measurements during both sampling events, the hydraulic gradient was calculated at 0.003 ft/ft in a southwest direction. Historical groundwater elevation data is summarized in Table 1, and groundwater elevation data for the July 12, 2004, and January 3, 2005, monitoring events are included on Figures 2 and 3, respectively.

Groundwater Sample Collection

Following well measurement during each sampling event, MW-2 and MW-3 were each purged of about three well volumes with disposable bailers, and a groundwater sample was collected from each well. The groundwater samples were then transferred into appropriate sample containers with a slow release valve, labeled accordingly, and the Chain of Custody Record was completed. The samples were subsequently stored in an insulated cooler at approximately 4°C and transported to Pinnacle Laboratories, Albuquerque, New Mexico, for laboratory analyses.

Dissolved Phase Contaminant Concentrations

Analytical results of the groundwater samples collected from MW-2 during the July 12, 2004, and January 3, 2005, sampling events indicate that petroleum hydrocarbon contaminants continue to impact groundwater at the site within a limited area. During the July 12, 2004, event, the benzene concentration in MW-2 exceed the New Mexico WQCC standard of 10 µg/L with a concentration of 89 µg/L, and the reported xylene concentration exceeded the New Mexico WQCC standard of 620 µg/L with 1,100 µg/L. Results of the January 3, 2005 sampling event showed that only the benzene concentration measured in MW-2 exceeded the New Mexico WQCC standard with a reported concentration of 16 µg/L.

Historical groundwater contaminant concentration data is summarized in Table 2. Groundwater contaminant concentration data for the July 12, 2004, and January 3, 2005, sampling events are included on Figures 2 and 3, respectively.

CONCLUSIONS

Based on groundwater elevation data, the hydraulic gradient at the site was calculated to be approximately 0.003 ft/ft in a southwest direction. Analytical results from both sampling events indicate that contaminant concentrations exceeded the WQCC standard for benzene in MW-2. MW-2 had xylene concentrations during the July 12, 2004, event, which also exceeded the WQCC standard.

The next groundwater monitoring and sampling event is scheduled to be conducted at the site in July, 2005. If you have any questions regarding this report, please contact Ms. Terry Griffin, BioTech, at (505) 327-4965.

Mr. William Olson
Mr. Denny Foust
April 18, 2005
Page 3 of 3

Sincerely,



Ross Kennemer
Project Manager

Cc: Terry Griffin
BioTech Remediation
501 Airport Drive, Suite 104
Farmington, NM 87401

Attachments: Tables
Figures
Appendix A. Laboratory Analytical Results

Files:2005/Thomas Wells/2004 Annual Monitoring and Sampling Report.doc

TABLE 1. WATER QUALITY AND WELL DATA

Burlington Resources Oil and Gas Company's Thomas No. 1 Location, Bloomfield, NM

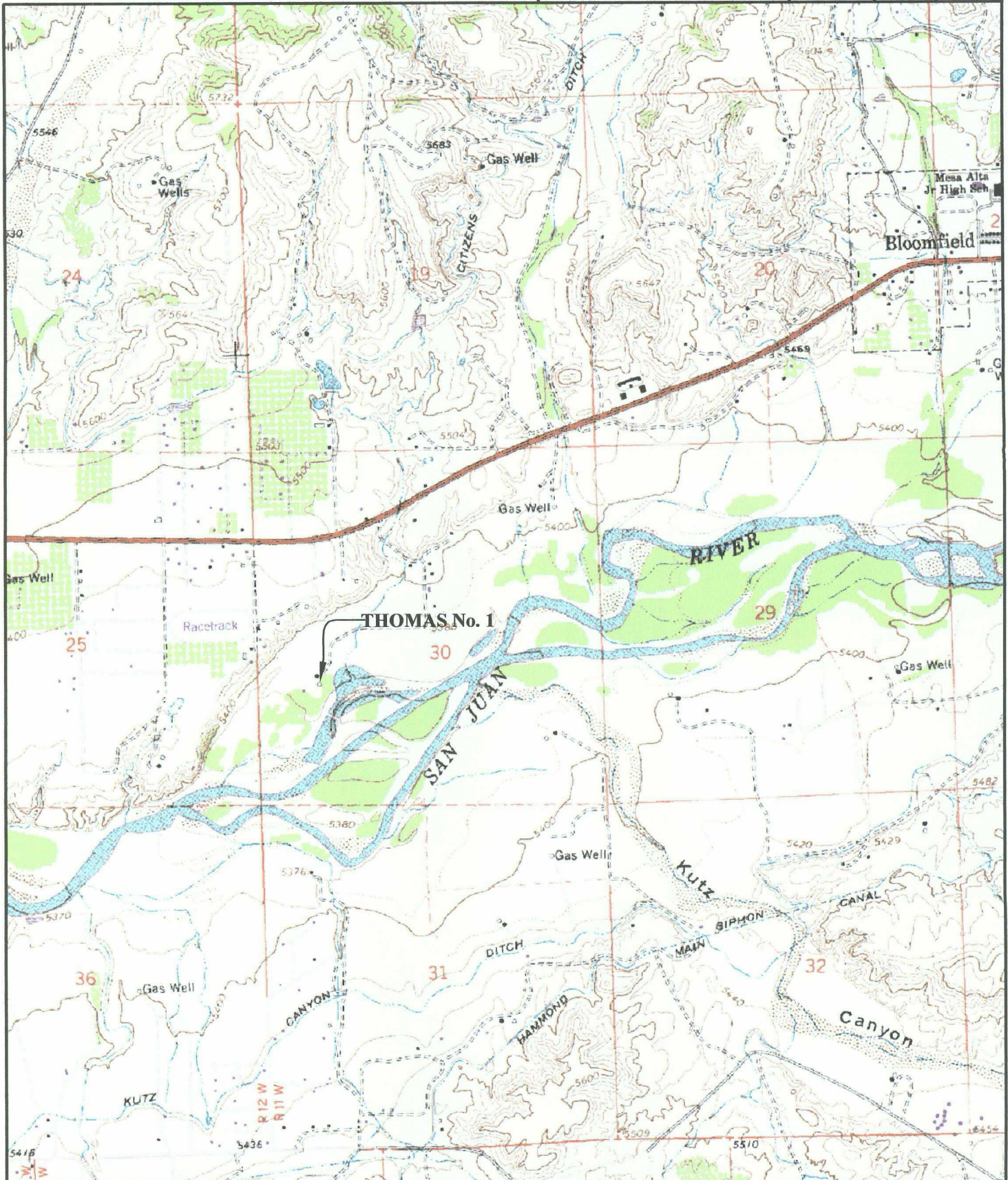
Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH
MW-1	09/07/01	5376.91	4.69	5372.22				
	02/04/02		3.66	5373.25				
	07/30/02		4.14	5372.77				
	12/04/02		3.47	5373.44				
	07/03/03		3.15	5373.76				
	12/19/03		3.53	5373.38				
	07/12/04		4.05	5372.86				
	01/03/05		3.50	5373.41				
MW-2	09/07/01	5376.97	4.99	5371.98				
	02/04/02		4.21	5372.76				
	07/30/02		4.61	5372.36				
	12/04/02		4.05	5372.92				
	07/03/03		4.45	5372.52				
	12/19/03		4.06	5372.91				
	07/12/04		4.60	5372.37				
	01/03/05		4.22	5372.75				
MW-3	09/07/01	5375.56	4.10	5371.46				
	02/04/02		2.46	5373.10				
	07/30/02		3.47	5372.09				
	12/04/02		2.69	5372.87				
	07/03/03		3.54	5372.02				
	12/19/03		2.78	5372.78				
	07/12/04		3.40	5372.16				
	01/03/05		2.82	5372.74				
MW-4	09/07/01	5375.56	3.91	5371.65				
	02/04/02		2.82	5372.74				
	07/30/02		3.53	5372.03				
	12/04/02		2.81	5372.75				
	07/03/03		3.38	5372.18				
	12/19/03		2.87	5372.69				
	07/12/04		3.46	5372.10				
	01/03/05		3.00	5372.56				
MW-5	09/07/01	5376.35	5.86	5370.49				
	02/04/02		4.19	5372.16				
	07/30/02		5.27	5371.08				
	12/04/02		4.49	5371.86				
	07/03/03		3.89	5372.46				
	12/19/03		4.23	5372.12				
	07/12/04		5.13	5371.22				
	01/03/05		4.60	5371.75				

TABLE 2. GROUNDWATER ANALYTICAL RESULTS
 Burlington Resources Oil and Gas Company's Thomas No. 1 Location, Bloomfield, NM

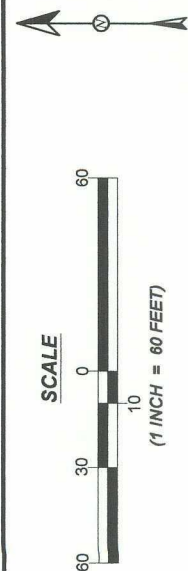
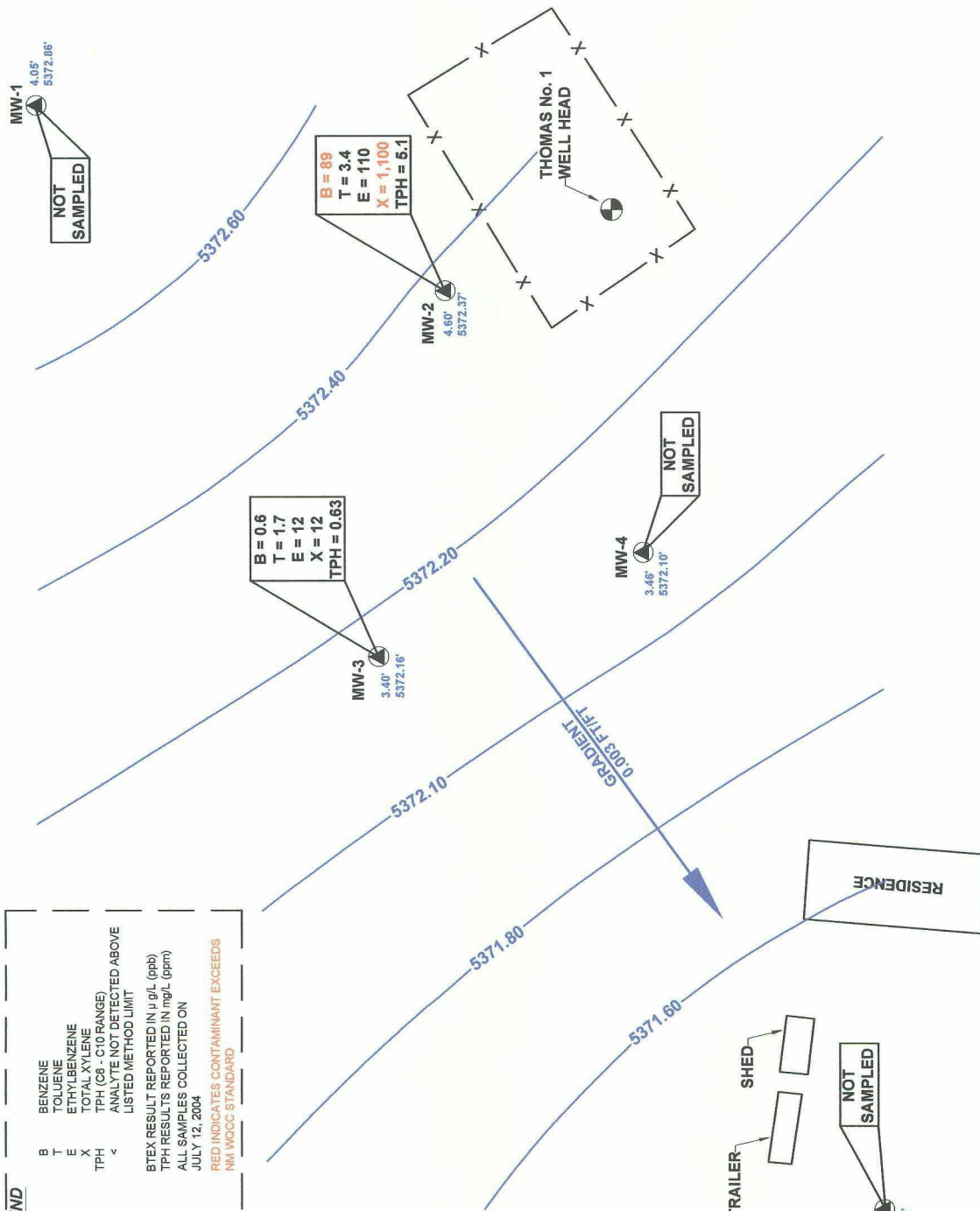
Sample ID	Sample Date	Analytical Method	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TPH C6 - C10 (mg/L)
NM WQCC Standards			10	750	750	620	100	NE
MW-1	09/07/01	8021/8015	ns	ns	ns	ns	ns	ns
	02/04/02	8021/8015	ns	ns	ns	ns	ns	ns
	07/30/02	8021/8015	ns	ns	ns	ns	ns	ns
	12/04/02	8021/8015	ns	ns	ns	ns	ns	ns
	07/03/03	8021/8015	ns	ns	ns	ns	ns	ns
	12/19/03	8021/8015	ns	ns	ns	ns	ns	ns
	07/12/04	8021/8015	ns	ns	ns	ns	ns	ns
	01/03/05	8021/8015	ns	ns	ns	ns	ns	ns
MW-2	09/07/01	8021/8015	<2.5	<2.5	25	63.2	<5.0	ns
	02/04/02	8021/8015	120	9.0	76	373.6	2.8	ns
	07/30/02	8021/8015	50	<2.5	49	245.6	<5.0	ns
	12/04/02	8021/8015	87	<2.5	67	270	<13	ns
	07/03/03	8021/8015	150	<2.5	87	430	<13	ns
	12/19/03	8021/8015	56	<2.5	74	150	<13	ns
	07/12/04	8021/8015	89	3.4	110	1100	<13	5.1
	01/03/05	8021/8015	16	<2.5	35	420	<13	2.4
MW-3	09/07/01	8021/8015	130	<0.5	51	372.9	<1.0	<3.0
	02/04/02	8021/8015	ns	ns	ns	ns	ns	ns
	07/30/02	8021/8015	<0.5	2.3	9.5	8.6	<1.0	ns
	12/04/02	8021/8015	0.6	1.7	2.4	6.2	<2.5	ns
	07/03/03	8021/8015	<0.5	2.3	6.2	8.5	<2.5	ns
	12/19/03	8021/8015	<0.5	1.2	6.6	9.5	<2.5	ns
	07/12/04	8021/8015	0.6	1.7	12	12	<2.5	0.6
	01/03/05	8021/8015	<0.5	1.7	5.7	7.0	<2.5	0.4
MW-4	09/07/01	8021/8015	ns	ns	ns	ns	ns	ns
	02/04/02	8021/8015	<0.5	6.9	8.2	18.7	1.0	ns
	07/30/02	8021/8015	ns	ns	ns	ns	ns	ns
	12/04/02	8021/8015	ns	ns	ns	ns	ns	ns
	07/03/03	8021/8015	ns	ns	ns	ns	ns	ns
	12/19/03	8021/8015	ns	ns	ns	ns	ns	ns
	07/12/04	8021/8015	ns	ns	ns	ns	ns	ns
	01/03/05	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	09/07/01	8021/8015	ns	ns	ns	ns	ns	ns
	02/04/02	8021/8015	ns	ns	ns	ns	ns	ns
	07/30/02	8021/8015	ns	ns	ns	ns	ns	ns
	12/04/02	8021/8015	ns	ns	ns	ns	ns	ns
	07/03/03	8021/8015	ns	ns	ns	ns	ns	ns
	12/19/03	8021/8015	ns	ns	ns	ns	ns	ns
	07/12/04	8021/8015	ns	ns	ns	ns	ns	ns
	01/03/05	8021/8015	ns	ns	ns	ns	ns	ns

Notes:

<	Analyte not detected above listed method limit
(µg/L)	Micrograms per Liter (ppb)
(mg/L)	Milligrams per Liter (ppm)
ns	Not Sampled



LEGEND	
	B T E X TPH <
MONITORING WELL INSTALLED DEPTH TO GROUNDWATER BELOW GROUND SURFACE (FEET)	BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENE TPH (C8 - C10 RANGE) ANALYTE NOT DETECTED ABOVE LISTED METHOD LIMIT
GROUNDWATER ELEVATION (FEET A.M.S.L.)	BTEX RESULT REPORTED IN μ g/L (ppb) TPH RESULTS REPORTED IN mg/L (ppm) ALL SAMPLES COLLECTED ON JULY 12, 2004
GROUNDWATER ELEVATION CONTOUR (FEET A.M.S.L.)	RED INDICATES CONTAMINANT EXCEEDS NM MOCC STANDARD
DEPTH TO GROUNDWATER MEASUREMENTS TAKEN ON JULY 12, 2004	



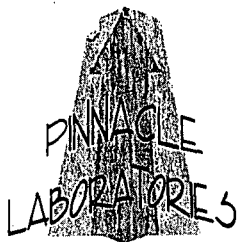
BURLINGTON RESOURCES OIL AND GAS COMPANY'S THOMAS No. 1 WELL BLOOMFIELD, NM	
Drm. By: MRK	Date: 03/8/05
Rev. By:	Date:
file:thomasno.1/siteplan.dwg	

FIGURE 2

**SITE MAP WITH
MONITORING AND SAMPLING
RESULTS
JULY, 2004**



BURLINGTON RESOURCES OIL AND GAS COMPANY'S THOMAS NO. 1 WELL BLOOMFIELD, NM	FIGURE 3	
	SITE MAP WITH MONITORING AND SAMPLING RESULTS JANUARY, 2005	
Drawn By: MRK	Date: 03/08/05	
Rev. By:	Date:	thomasno.1/siteplan.dwg



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **501101**
January 21, 2005

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name (NONE)
Project Number THOMAS WELLS

Attention: TERRY GRIFFIN

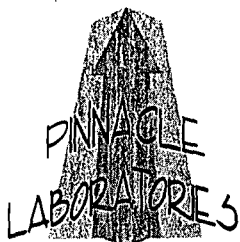
On 01/15/2005 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT : BIOTECH REMEDIATION
PROJECT # : THOMAS WELLS
PROJECT NAME : (NONE)

PINNACLE ID : 501101
DATE RECEIVED : 01/15/2005
REPORT DATE : 01/21/2005

PINNACLE	ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
	501101 - 01	MW #2	AQUEOUS	01/10/2005
	501101 - 02	MW #3	AQUEOUS	01/10/2005



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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : THOMAS WELLS
PROJECT NAME : (NONE)

PINNACLE I.D. : 501101
ANALYST : BP

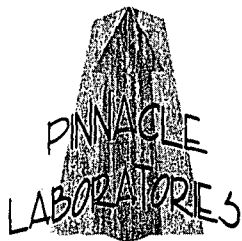
SAMPLE		DATE		DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	MW #2	AQUEOUS	01/10/2005	NA	01/18/2005	5
02	MW #3	AQUEOUS	01/10/2005	NA	01/18/2005	1

PARAMETER	DET. LIMIT	UNITS	MW #2	MW #3
FUEL HYDROCARBONS	0.10	MG/L	2.4	0.38
HYDROCARBON RANGE			C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE

BENZENE	0.5	UG/L	16	< 0.5
TOLUENE	0.5	UG/L	< 2.5	0.9
ETHYLBENZENE	0.5	UG/L	35	5.7
TOTAL XYLENES	1.0	UG/L	420	7.0
METHYL-t-BUTYL ETHER	2.5	UG/L	< 13	< 2.5

SURROGATE:				
BROMOFLUOROBENZENE (%)			112	120
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A



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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 501101
BLANK I.D.	: 011705	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2005
PROJECT #	: THOMAS WELLS	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5

SURROGATE:
BROMOFLUOROBENZENE (%) 99
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A



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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

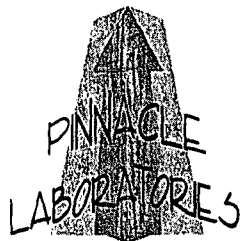
TEST	: EPA 8015B GRO	PINNACLE I.D.	: 501101
BATCH #	: 011705	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2005
PROJECT #	: THOMAS WELLS	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.973	97	0.914	91	6	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING		GASOLINE							

CHEMIST NOTES:
N/A

% Recovery = $\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$

RPD (Relative Percent Difference) = $\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$



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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

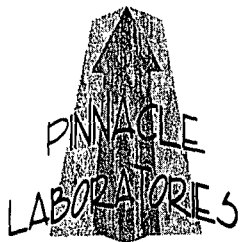
TEST	: EPA 8021B	PINNACLE I.D.	: 501101
BATCH #	: 011705	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2005
PROJECT #	: THOMAS WELLS	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.6	103	20.6	103	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.7	104	20.7	104	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.6	103	20.7	104	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.8	103	62.2	104	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.5	93	18.9	95	2	(70 - 133)	20

CHEMIST NOTES:
N/A

% Recovery =
$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

RPD (Relative Percent Difference) =
$$\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

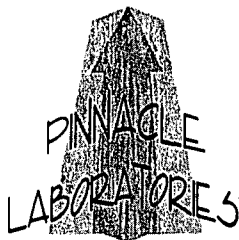
TEST	: EPA 8015B GRO	PINNACLE I.D.	: 501101
MSMSD #	: 501101-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/18/2005
PROJECT #	: THOMAS WELLS	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	0.38	1.00	1.28	90	1.21	83	6	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING		GASOLINE							

CHEMIST NOTES:
N/A

% Recovery =
$$\frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

RPD (Relative Percent Difference) =
$$\frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST : EPA 8021B
MSMSD # : 501099-04
CLIENT : BIOTECH REMEDIATION
PROJECT # : THOMAS WELLS
PROJECT NAME : (NONE)

PINNACLE I.D. : 501101
DATE EXTRACTED : N/A
DATE ANALYZED : 01/18/2005
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.2	101	20.4	102	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.5	103	20.4	102	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.3	102	20.2	101	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.3	102	60.9	102	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.6	93	18.8	94	1	(70 - 133)	20

CHEMIST NOTES:
N/A

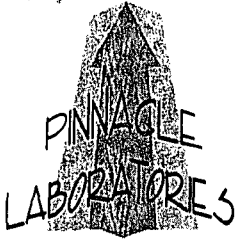
$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **407072**
July 20, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name Thomas Wells
Project Number (None)

Attention: Terry Griffin

On 07/14/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 407072
PROJECT #	: (None)	DATE RECEIVED	: 07/14/04
PROJECT NAME	: Thomas Wells	REPORT DATE	: 07/20/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
407072 - 01	MW # 2	AQUEOUS	07/12/04
407072 - 02	MW # 3	AQUEOUS	07/12/04
407072 - 03	TB	AQUEOUS	07/06/04



GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : (None)
PROJECT NAME : Thomas Wells

PINNACLE I.D.: 407072
ANALYST : BP

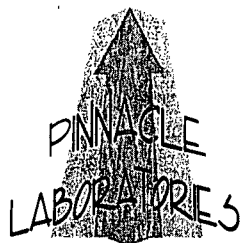
SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	MW # 2	AQUEOUS	07/12/04	NA	07/15/04	5
02	MW # 3	AQUEOUS	07/12/04	NA	07/15/04	1
03	TB	AQUEOUS	07/06/04	NA	07/15/04	1

PARAMETER	DET. LIMIT	UNITS	MW # 2	MW # 3	TB
FUEL HYDROCARBONS	0.10	MG/L	5.1	0.63	< 0.10
HYDROCARBON RANGE			C6-C14	C6-C14	C6-C14
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	GASOLINE

BENZENE	0.5	UG/L	89	0.6	< 0.5
TOLUENE	0.5	UG/L	3.4	1.7	< 0.5
ETHYLBENZENE	0.5	UG/L	110	12	< 0.5
TOTAL XYLENES	1.0	UG/L	1100	12	< 1.0
METHYL-t-BUTYL ETHER	2.5	UG/L	< 13	< 2.5	< 2.5

SURROGATE:					
BROMOFLUOROBENZENE (%)			110	116	101
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A



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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 407072
MSMSD #	: 407072-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 07/15/04
PROJECT #	: (None)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Thomas Wells	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	0.6	20.0	21.7	106	22.1	108	2	(80 - 120)	20
TOLUENE	1.7	20.0	22.6	105	22.8	106	1	(80 - 120)	20
ETHYLBENZENE	12	20.0	33.1	106	33.3	107	1	(80 - 120)	20
TOTAL XYLENES	12	60.0	74.5	104	76.0	107	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	22.6	113	22.8	114	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PROJECT MANAGER: Terry Griffin		DATE		TIME		MATRIX		LAB ID	
COMPANY:	BIGBEN REMEDIATION INC.		7-12-4	1135					
ADDRESS:	501 Airport Dr.		h	1200					
PHONE:	FARMINGTON, NM 87401		7-06	1725					
FAX:									
BILL TO:									
COMPANY:									
ADDRESS:									

ANALYSIS REQUEST	8260 (TCL) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Full) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polyuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:
504.1 EDB □/DBCP □														
8021 (CUST)														
8021 (HALO)														
8021 (EDX)														
8021 (TCL)														
8021 (BTEX) □MTBE □TMB □PCE														
8021 (BTEX)/8015 (Gasoline) MTBE														
(M8015) Gas/Purge & Trap														
(MOD.8015) Diesel/Direct Inject														
Petroleum Hydrocarbons (418.1) TRPH														

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION	PRIOR AUTHORIZATION REQUIRED FOR RUSH PROJECTS	RELINQUISHED BY
PROJ. NO.: PROJ. NAME: Thomas Wells P.O. NO.: SHIPPED VIA:	(RUSH) □24hr □48hr □72hr □1 WEEK (NORMAL) □ CERTIFICATION REQUIRED □ NM □ SOWA □ AZ □ OTHER METHANOL PRESERVATION □ METALS □ TOTAL □ DISSOLVED COMMENTS:	Signature: [Signature] Printed Name: [Name] Date: [Date]

RECEIVED BY (LAB)	RECEIVED BY (CUST)
Signature: [Signature] Printed Name: [Name] Date: [Date]	Signature: [Signature] Printed Name: [Name] Date: [Date]

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.