3R - 79

REPORTS

DATE:
3/31/2007

AES | Animas Environmental Services, LLC

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

3R0079

March 31, 2007

Mr. Glenn Von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Mr. Brandon Powell
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 Conoco Phillips and Clayton Investments Thomas No. 1 Well Location, Bloomfield, New Mexico; Permit #3RP-79-0 (July 1, 1988)

Dear Sirs:

Pursuant to New Mexico Oil Conservation Division (OCD) requirements, Animas Environmental Services, LLC (AES), on behalf of Walsh Engineering and Production Corporation (Walsh Engineering) and Clayton Investments, submits this Annual Groundwater Monitoring and Sampling Report for 2006 for the 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. Groundwater at the site has been monitored and sampled since 1988 under Permit #3RP-79-0. A site location map is included as Figure 1.

1.0 Groundwater Monitoring and Sampling

On June 8, 2006, and January 10, 2007, BioTech Remediation, Inc. (BioTech) personnel completed groundwater elevation monitoring at two monitoring wells (MW-2 and MW-3) located at the site. Note that MW-1 was not sampled in January 2007 because it was covered by road base material. Groundwater samples from monitoring wells MW-2 and MW-3 were collected in June 2006 and January 2007 for laboratory analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) per EPA Method 8021 and C_6 through C_{10} 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.

1.1 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. In June 2006, groundwater elevations indicated a general decrease by approximately 0.3 feet across the site since

last measured in December 2005. Depths to groundwater varied between 3.2 feet below top of casing (TOC) in MW-3 up to 4.63 feet below TOC in MW-5. Groundwater elevations across the site ranged from 5371.72 ft above mean sea level (AMSL) in MW-5 to 5373.01 ft AMSL in MW-1. Based on groundwater elevation data, hydraulic gradient was calculated to be approximately 0.004 ft/ft in a southwest direction across the site.

In January 2007, groundwater measurements indicated a general increase in elevations by approximately 0.3 feet across the site. Depth to groundwater varied between 2.86 feet below TOC in MW-3 to 4.30 feet below TOC in MW-5. Groundwater elevations across the site ranged from 5372.05 ft AMSL in MW-5 up to 5372.70 ft AMSL in MW-3. Hydraulic gradient was estimated to be approximately 0.002 ft/ft in a southwest direction across the site.

Historical groundwater elevation data are summarized in Table 1, and groundwater elevation data for the June 8th, 2006, and January 10, 2007, monitoring events are included on Figures 2 and 3, respectively.

1.2 Groundwater Sample Collection

Following well measurements in June 2006 and January 2007, MW-2 and MW-3 were each purged with a new disposable bailer, and a groundwater sample was collected from each well. The groundwater samples were then transferred into new clean 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.

1.3 Dissolved Phase Contaminant Concentrations

Analytical results of the groundwater samples collected from MW-2 and MW-3 on June 8th, 2006, and January 10, 2007, indicate that benzene concentrations were below the New Mexico Water Quality Control Commission (WQCC) standard of 10 µg/L. Benzene was reported at 6.1 µg/L and 6.6 µg/L in MW-2 for June 2006 and January 2007, respectively. Benzene concentrations in MW-3 were below analytical laboratory detection limits for both 2006 sampling events. Toluene, ethylbenzene, and xylene concentrations in MW-2 and MW-3 were below applicable New Mexico WQCC standards or below laboratory detection limits in June 2006 and January 2007. Trace amounts of TPH (C_6 through C_{10}) were reported for both sampling events in 2006 and ranged from 0.62 mg/L in MW-3 for January 2007 up to 1.4 mg/L in MW-2 for June 2006.

Historical groundwater contaminant concentration data are summarized in Table 2. Groundwater contaminant concentration data for the June 8, 2006, and January 10, 2007, sampling events are included on Figures 2 and 3, respectively.

2.0 Conclusions

Based on groundwater elevation data in June 2006 and January 2007, the hydraulic gradient at the site was calculated to be approximately 0.004 ft/ft and 0.002 ft/ft, respectively, in a southwest direction. Fluctuations in groundwater elevations during 2006 appear to be part of seasonal changes in the localized groundwater table. Analytical results from both sampling events indicate that BTEX and MTBE concentrations are below applicable WQCC standards for MW-2 and MW-3.

Because groundwater contaminant concentrations have remained below all applicable WQCC standards since at least December 2005, AES requests no further action status for this site.

If you have any questions regarding site conditions or this report, please contact me or Elizabeth McNally at (505) 564-2281.

Sincerely,

Gwen Frost

Gwen Frost
Project Manager

Cc: Walsh Engineering and Production Corporation
7415 E. Main St.
Farmington, NM 87402

Robert Moss
General Counsel
Clayton Investments
501 Airport Drive, Suite 100
Farmington, NM 87401

Attachments: Tables
Figures
Appendix A. Laboratory Analytical Results

Files:2007/Thomas Wells/2006 Annual Monitoring and Sampling Report

TABLE 1
WATER QUALITY AND WELL DATA
Burlington Resources Oil and Gas Company's Thomas No. 1 Location
Bloomfield, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)
MW-1	09/07/01	5376.91	4.69	5372.22
MW-1	02/04/02	5376.91	3.66	5373.25
MW-1	07/30/02	5376.91	4.14	5372.77
MW-1	12/04/02	5376.91	3.47	5373.44
MW-1	07/03/03	5376.91	3.15	5373.76
MW-1	12/19/03	5376.91	3.53	5373.38
MW-1	07/12/04	5376.91	4.05	5372.86
MW-1	01/03/05	5376.91	3.50	5373.41
MW-1	07/25/05	5376.91	4.23	5372.68
MW-1	12/30/05	5376.91	3.62	5373.29
MW-1	06/08/06	5376.91	3.90	5373.01
MW-1	01/10/07	Buried by Oil Well Construction		
MW-2	09/07/01	5376.97	4.99	5371.98
MW-2	02/04/02	5376.97	4.21	5372.76
MW-2	07/30/02	5376.97	4.61	5372.36
MW-2	12/04/02	5376.97	4.05	5372.92
MW-2	07/03/03	5376.97	4.45	5372.52
MW-2	12/19/03	5376.97	4.06	5372.91
MW-2	07/12/04	5376.97	4.60	5372.37
MW-2	01/03/05	5376.97	4.22	5372.75
MW-2	07/25/05	5376.97	4.82	5372.15
MW-2	12/30/05	5376.97	4.26	5372.71
MW-2	06/08/06	5376.97	4.42	5372.55
MW-2	01/10/07	5376.97	4.28	5372.69
MW-3	09/07/01	5375.56	4.10	5371.46
MW-3	02/04/02	5375.56	2.46	5373.10
MW-3	07/30/02	5375.56	3.47	5372.09
MW-3	12/04/02	5375.56	2.69	5372.87
MW-3	07/03/03	5375.56	3.54	5372.02
MW-3	12/19/03	5375.56	2.78	5372.78
MW-3	07/12/04	5375.56	3.40	5372.16
MW-3	01/03/05	5375.56	2.82	5372.74
MW-3	07/25/05	5375.56	3.72	5371.84
MW-3	12/30/05	5375.56	2.84	5372.72
MW-3	06/08/06	5375.56	3.20	5372.36
MW-3	01/10/07	5375.56	2.86	5372.70

TABLE 1
WATER QUALITY AND WELL DATA
Burlington Resources Oil and Gas Company's Thomas No. 1 Location
Bloomfield, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Water Level Elevation (ft amsl)
MW-4	09/07/01	5375.56	3.91	5371.65
MW-4	02/04/02	5375.56	2.82	5372.74
MW-4	07/30/02	5375.56	3.53	5372.03
MW-4	12/04/02	5375.56	2.81	5372.75
MW-4	07/03/03	5375.56	3.38	5372.18
MW-4	12/19/03	5375.56	2.87	5372.69
MW-4	07/12/04	5375.56	3.46	5372.10
MW-4	01/03/05	5375.56	3.00	5372.56
MW-4	07/25/05	5375.56	3.74	5371.82
MW-4	12/30/05	5375.56	3.03	5372.53
MW-4	06/08/06	5375.56	3.24	5372.32
MW-4	01/10/07	5375.56	3.03	5372.53
MW-5	09/07/01	5376.35	5.86	5370.49
MW-5	02/04/02	5376.35	4.19	5372.16
MW-5	07/30/02	5376.35	5.27	5371.08
MW-5	12/04/02	5376.35	4.49	5371.86
MW-5	07/03/03	5376.35	3.89	5372.46
MW-5	12/19/03	5376.35	4.23	5372.12
MW-5	07/12/04	5376.35	5.13	5371.22
MW-5	01/03/05	5376.35	4.60	5371.75
MW-5	07/25/05	5376.35	DRY	DRY
MW-5	12/30/05	5376.35	4.28	5372.07
MW-5	06/08/06	5376.35	4.63	5371.72
MW-5	01/10/07	5376.35	4.30	5372.05

TABLE 2. GROUNDWATER ANALYTICAL RESULTS

Burlington Resources Oil and Gas Comapny's Thomas No. 1 Location, Bloomfield, New Mexico

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
MW-1	02/04/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	07/30/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	12/04/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	07/03/03	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	12/19/03	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	07/12/04	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	01/03/05	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	06/08/06	8021/8015	ns	ns	ns	ns	ns	ns
MW-1	01/10/07	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
MW-2	02/04/02	8021/8015	**120**	9.0	76	373.6	2.8	ns
MW-2	07/30/02	8021/8015	**50**	<2.5	49	245.6	<5.0	ns
MW-2	12/04/02	8021/8015	**87**	<2.5	67	270	<13	ns
MW-2	07/03/03	8021/8015	**150**	<2.5	87	430	<13	ns
MW-2	12/19/03	8021/8015	**56**	<2.5	74	150	<13	ns
MW-2	07/12/04	8021/8015	**89**	3.4	110	**1100**	<13	5.1
MW-2	01/03/05	8021/8015	**16**	<2.5	35	420	<13	2.4
MW-2	07/25/05	8021/8015	**46**	<2.5	59	360	<13	3.0
MW-2	12/30/05	8021/8015	5.2	<0.5	15	33	<2.5	1.5
MW-2	06/08/06	8021/8015	6.6	<0.5	25	86	<2.5	1.3
MW-2	01/10/07	8021/8015	6.1	21	21	96	<2.5	1.4
MW-3	09/07/01	8021/8015	**130**	<0.5	51	372.9	<1.0	<3.0
MW-3	02/04/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-3	07/30/02	8021/8015	<0.5	2.3	9.5	8.6	<1.0	ns
MW-3	12/04/02	8021/8015	0.6	1.7	2.4	6.2	<2.5	ns
MW-3	07/03/03	8021/8015	<0.5	2.3	6.2	8.5	<2.5	ns
MW-3	12/19/03	8021/8015	<0.5	1.2	6.6	9.5	<2.5	ns
MW-3	07/12/04	8021/8015	0.6	1.7	12	12	<2.5	0.6
MW-3	01/03/05	8021/8015	<0.5	1.7	5.7	7	<2.5	0.4
MW-3	07/25/05	8021/8015	<0.5	1.2	12	10	<2.5	0.81
MW-3	12/30/05	8021/8015	<0.5	0.8	5.8	6	<2.5	0.54
MW-3	06/08/06	8021/8015	<0.5	<0.5	16	23	<2.5	0.76
MW-3	01/10/07	8021/8015	<0.5	<0.5	4.7	8.7	<2.5	0.62

TABLE 2. GROUNDWATER ANALYTICAL RESULTS

Burlington Resources Oil and Gas Comapny's Thomas No. 1 Location, Bloomfield, New Mexico

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-4	09/07/01	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	02/04/02	8021/8015	<0.5	6.9	8.2	18.7	1.0	ns
MW-4	07/30/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	12/04/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	07/03/03	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	12/19/03	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	07/12/04	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	01/03/05	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	06/08/06	8021/8015	ns	ns	ns	ns	ns	ns
MW-4	01/10/07	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	09/07/01	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	02/04/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	07/30/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	12/04/02	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	07/03/03	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	12/19/03	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	07/12/04	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	01/03/05	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	06/08/06	8021/8015	ns	ns	ns	ns	ns	ns
MW-5	01/10/07	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

DRAWN BY	NCW	CHECKED BY	EM	04-19-07	REVISIONS
	03-08-05	APPROVED BY	EM	04-19-07	BY: Nathan DATE: 04-19-07

S:\ANIMAS 2000\2007 PROJECTS\THRIFTWAY\THOMAS WELLS\DRAWINGS\FIGURE 1 TOPOGRAPHICAL SITE LOCATION MAP.DWG

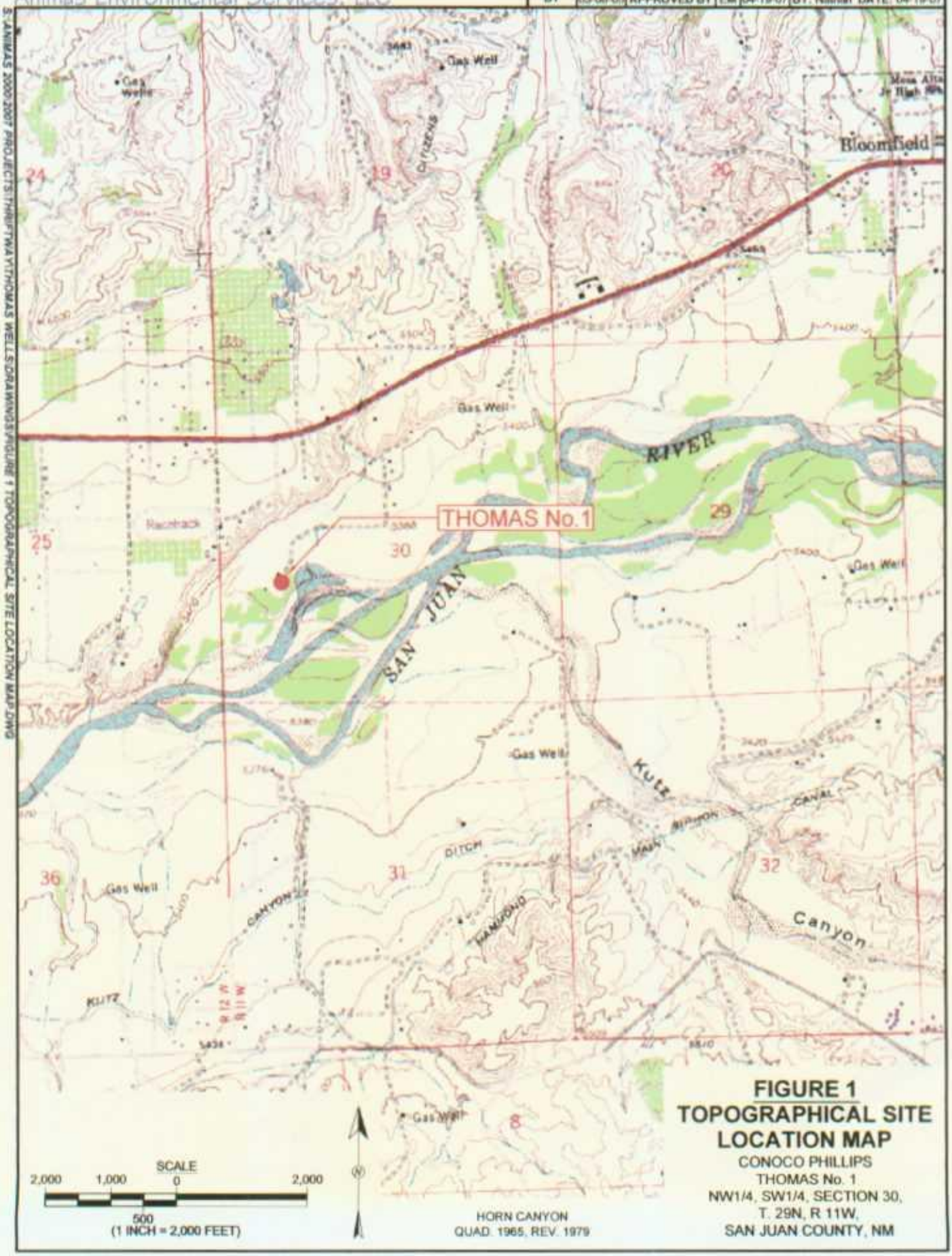

FIGURE 1
TOPOGRAPHICAL SITE LOCATION MAP
CONOCO PHILLIPS
THOMAS No. 1
NW1/4, SW1/4, SECTION 30,
T. 29N, R 11W,
SAN JUAN COUNTY, NM

S:\ANIMAS 2000\2007 PROJECTS\THRIFTWAY\THOMAS WELLS\DRAWINGS\FIGURE 2 SITE PLAN WITH MONITORING & SAMPLING RESULTS 060606.DWG

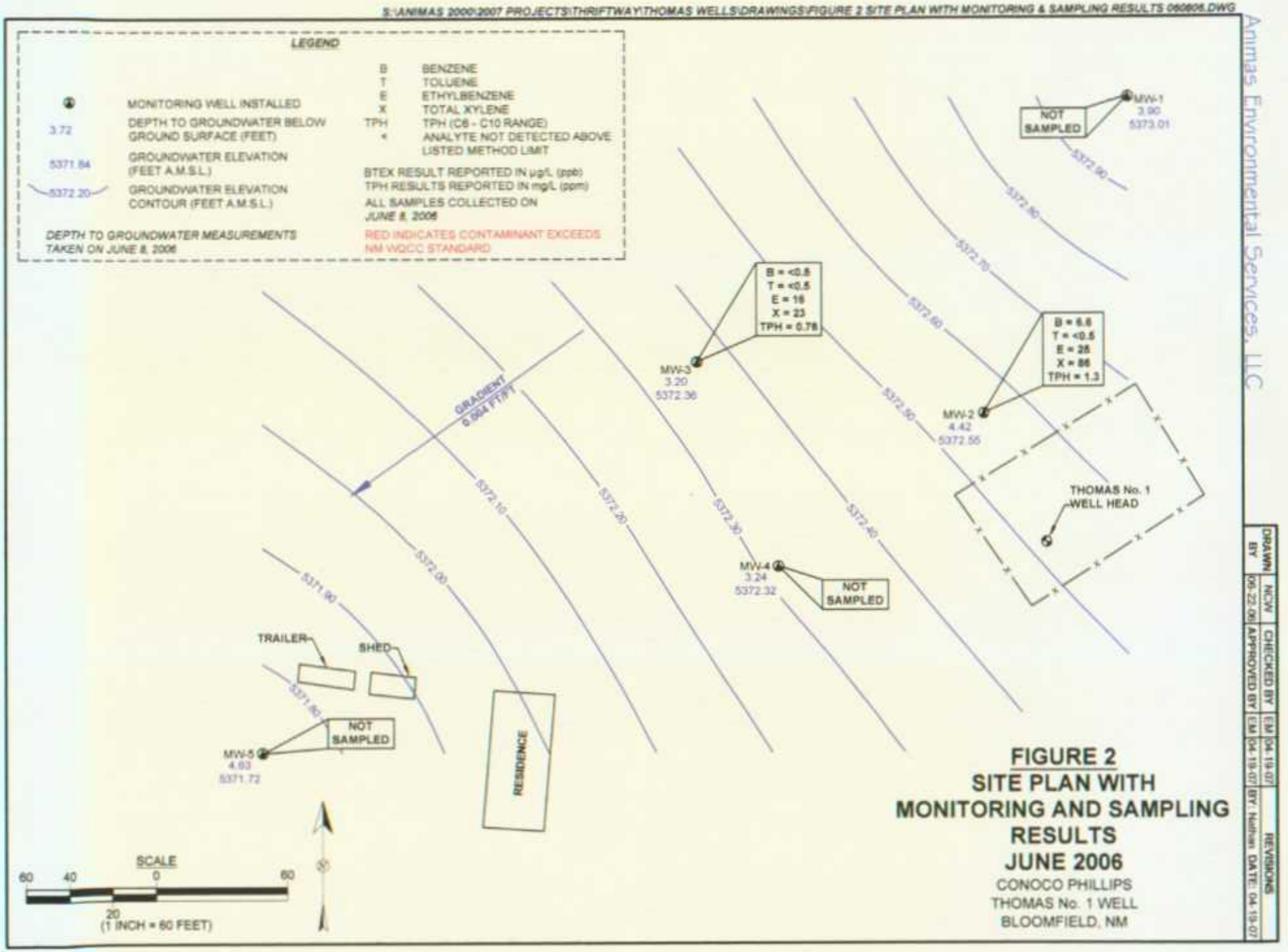

FIGURE 2
SITE PLAN WITH MONITORING AND SAMPLING RESULTS JUNE 2006

CONOCO PHILLIPS
THOMAS No. 1 WELL
BLOOMFIELD, NM

DRAWN BY	CHECKED BY		REVISIONS
NCW	EM	04-19-07	
06-22-06	EM	04-19-07	BY: Nathan DATE: 04-19-07
APPROVED BY			

Animas Environmental Services, LLC

S:\ANIMAS 2000\2007 PROJECTS\THRIFTWAY\THOMAS WELLS\DRAWINGS\FIGURE 3 SITE PLAN WITH MONITORING & SAMPLING RESULTS 011007.DWG

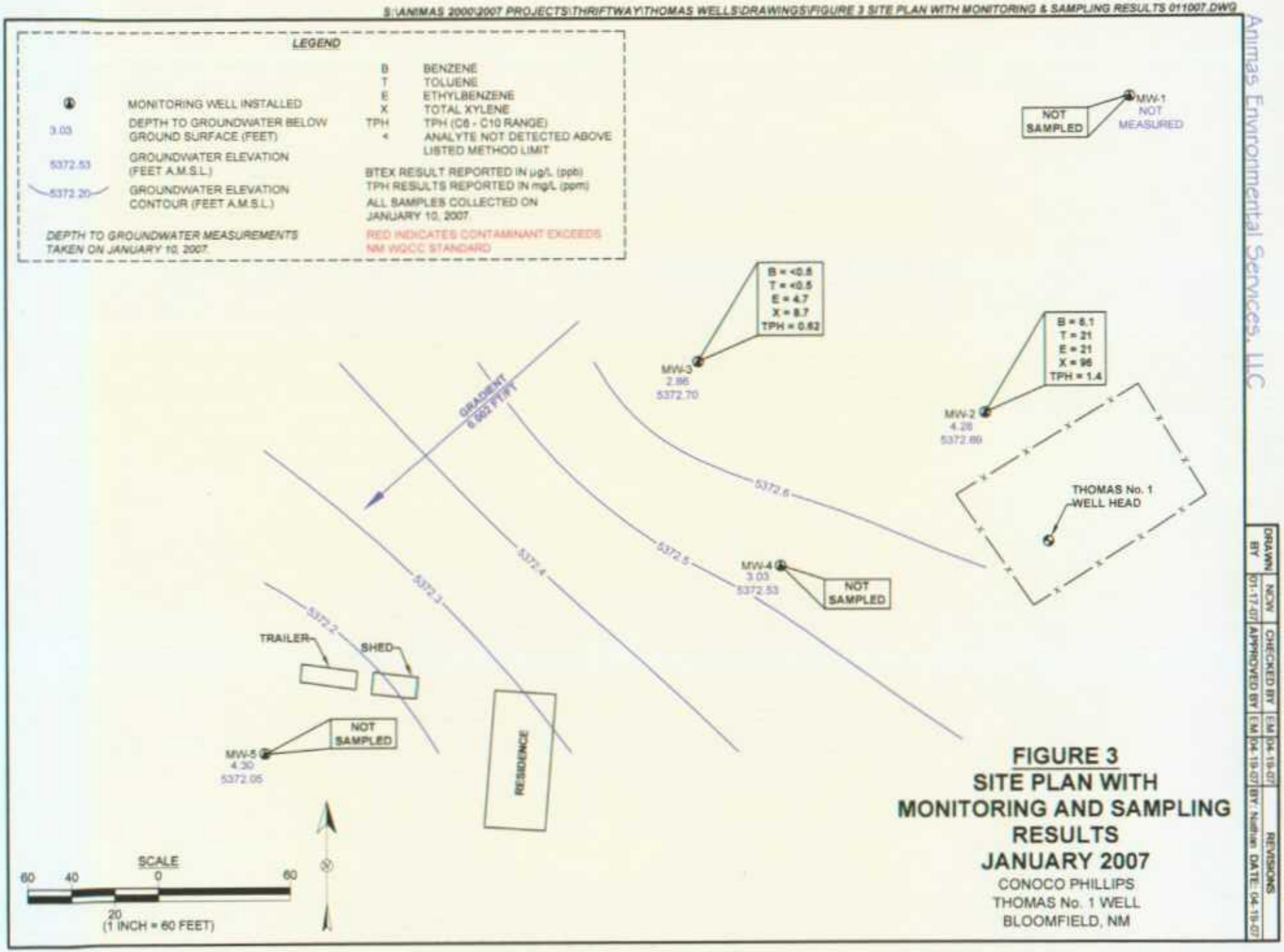

FIGURE 3
SITE PLAN WITH MONITORING AND SAMPLING RESULTS JANUARY 2007

CONOCO PHILLIPS
THOMAS No. 1 WELL
BLOOMFIELD, NM

REVISIONS	BY	DATE
	Nathan	04-19-07

DRAWN BY	CHECKED BY	APPROVED BY
NCW 01-17-07	EM 04-19-07	EM 04-19-07

PINNACLE LABS
Environmental Testing

Pinnacle Lab ID number **606073**
June 23, 2006

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

ANIMAS ENVIRONMENTAL
624 E. COMANCHE
FARMINGTON, NM 87401

Project Name THOMAS WELLS BLOOMFIELD, NM
Project Number (NONE)

Attention: MIKE BEAUPARLANT/GWEN FROST

On 06/09/06 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 Fwy, NE Albuquerque, NM 87107 505.344.3777 505.344.4413 FAX 877.PIN.1998 TOLL FREE
www.pinnaclelabs.org www.pinnaclelabsonline.com

PINNACLE LABS
Environmental Testing

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 606073
PROJECT #	: (NONE)	DATE RECEIVED	: 06/09/06
PROJECT NAME	: THOMAS WELLS BLOOMFIELD, NM	REPORT DATE	: 06/23/06

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
606073 - 01	MW #2	AQUEOUS	06/08/06
606073 - 02	MW #3	AQUEOUS	06/08/06

2709-D Pan American Fwy, NE Albuquerque, NM 87107 505.344.3777 505.344.4413 FAX 877.PIN.1998 TOLL FREE
www.pinnaclelabs.org www.pinnaclelabsonline.com

PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY RESULTS

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

PINNACLE I.D. : 606073
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW #2	AQUEOUS	06/08/06	NA	06/20/06	1
02	MW #3	AQUEOUS	06/08/06	NA	06/20/06	1

PARAMETER	DET. LIMIT	UNITS	MW #2	MW #3
FUEL HYDROCARBONS	**0.10**	**MG/L**	**1.3**	**0.76**
HYDROCARBON RANGE			**C6-C10**	**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**
BENZENE	**0.5**	**UG/L**	**6.6**	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**25**	**16**
TOTAL XYLENES	**2.0**	**UG/L**	**86**	**23**
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			113	120
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 606073
BLANK I.D.	: 062006	DATE EXTRACTED	: NA
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/20/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS BLOOMFIELD, NM	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	<2.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

2709-D Pan American Fwy, NE Albuquerque, NM 87107 505.344.3777 505.344.4413 FAX 877.PIN.1998 TOLL FREE
www.pinnaclelabs.org www.pinnaclelabsonline.com

PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 606073
BATCH ID	: 062006	DATE EXTRACTED	: NA
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/20/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS BLOOMFIELD, NM	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	20.7	104	19.0	95	9	(80 - 120)	20
TOLUENE	<0.5	20.0	21.1	106	19.0	95	10	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.8	104	18.8	94	10	(80 - 120)	20
TOTAL XYLENES	<2.0	60.0	63.3	106	56.2	94	12	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.3	92	17.0	85	7	(70 - 133)	20

CHEMIST NOTES:
N/A

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

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

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 606073
BATCH ID	: 062006	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/20/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS BLOOMFIELD, NM	UNITS	: MG/L

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.02	102	0.968	97	5	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

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

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

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 606073
SAMPLE ID	: 606112-01	DATE EXTRACTED	: NA
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/20/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS BLOOMFIELD, NM	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	19.7	99	19.6	98	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.5	98	19.4	97	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.6	98	19.5	98	1	(80 - 120)	20
TOTAL XYLENES	<2.0	60.0	58.6	98	58.3	97	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.5	93	18.5	93	0	(70 - 133)	20

CHEMIST NOTES:
N/A

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

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

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 606073
SAMPLE ID	: 606102-11	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/20/06
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS BLOOMFIELD, NM	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	0.982	98	0.964	96	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

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

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

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PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 6-8-06 PAGE: 1 OF 1

PLI Accession #: 0606073

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PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Gwen Frost

COMPANY: Animas Environmental Services

ADDRESS: 624 E. Comanche
Farmington, N.M. 87401

PHONE: (505) 564-2281

FAX:

BILL TO: Biotech Remediation Inc.

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
MW#2	6-8-06	~~1112~~ 1128	3 H_2O	01
MW#3	6-8-06	1128	H_2O	02

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:		NUMBER OF CONTAINERS
			✓																						
			✓																						

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

PROJECT INFORMATION

PROJ. NO.:

PROJ. NAME: Thomas Wells

P.O. NO.: Bloomfield, NM

SHIPPED VIA:

SAMPLE RECEIPT

NO CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/ICE	5.2°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☑
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☑NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS: GW samples

RELINQUISHED BY: 1.

Signature: [signature] Time: 1200

Printed Name: Michael Beaumont Date: 6-8-6

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY: 1

Signature: [signature] Time: 3:01 pm

Printed Name: Gwen Frost Date: 6-8-06

Company: HES

RELINQUISHED BY: 2.

Signature: [signature] Time: 3:15pm

Printed Name: Gwen Frost Date: 6-8-06

Company: HES

RECEIVED BY: (LAB) 2.

Signature: [signature] Time: 1630

Printed Name: Francine Tanco Date: 6/9/06

Pinnacle Laboratories Inc.

PINNACLE LABS
Environmental Testing

Pinnacle Lab ID number **701085**
January 19, 2007

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name THOMAS WELLS
Project Number (NONE)

Attention: ROSS KENNEMER

On 01/10/2007 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

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PINNACLE LABS
Environmental Testing

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 701085
PROJECT #	: (NONE)	DATE RECEIVED	: 01/10/2007
PROJECT NAME	: THOMAS WELLS	REPORT DATE	: 01/19/2007

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
701085 - 01	MW #2	AQUEOUS	01/10/2007
701085 - 02	MW #3	AQUEOUS	01/10/2007

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY RESULTS

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

PINNACLE I.D. : 701085
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW #2	AQUEOUS	01/10/2007	NA	01/17/2007	1
02	MW #3	AQUEOUS	01/10/2007	NA	01/17/2007	1

PARAMETER	DET. LIMIT	UNITS	MW #2	MW #3
FUEL HYDROCARBONS	**0.10**	**MG/L**	**1.4**	**0.62**
HYDROCARBON RANGE			**C6-C10**	**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**
BENZENE	**0.5**	**UG/L**	**6.1**	< 0.5
TOLUENE	**0.5**	**UG/L**	**21**	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**21**	**4.7**
TOTAL XYLENES	**2.0**	**UG/L**	**96**	**8.7**
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			107	100
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 701085
BLANK I.D.	: 011707	DATE EXTRACTED	: NA
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS	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	<2.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		96
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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PINNACLE LABS
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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 701085
BATCH ID	: 011707	DATE EXTRACTED	: NA
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2007
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	<0.5	20.0	20.3	102	21.2	106	4	(80 - 120)	20
TOLUENE	<0.5	20.0	19.5	98	20.3	102	4	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.6	98	20.4	102	4	(80 - 120)	20
TOTAL XYLENES	<2.0	60.0	59.0	98	61.6	103	4	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	20.3	102	20.2	101	0	(70 - 133)	20

CHEMIST NOTES:
N/A

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

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

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 701085
BATCH ID	: 011707	DATE EXRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS	UNITS	: MG/L

PARAMETER	BLANK RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.06	106	0.999	100	6	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

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

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

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 701085
SAMPLE ID	: 701085-01	DATE EXTRACTED	: NA
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2007
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	**6.1**	20.0	24.8	94	24.9	94	0	(80 - 120)	20
TOLUENE	**21**	20.0	38.2	86	38.9	90	2	(80 - 120)	20
ETHYLBENZENE	**21**	20.0	38.0	85	37.8	84	1	(80 - 120)	20
TOTAL XYLENES	**96**	60.0	143	78 - **M4**	148	87	3	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.9	95	19.3	97	2	(70 - 133)	20

CHEMIST NOTES:
M4 = % REC is outside of PLI criteria.

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

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

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PINNACLE LABS
Environmental Testing

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 701085
SAMPLE ID	: 701085-01	DATE EXRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/17/2007
PROJECT #	: (NONE)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THOMAS WELLS	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	**1.4**	1.00	2.41	101	2.07	67 - **M4**	15	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
M4 = % REC is outside of PLI criteria.

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

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

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Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 1-10-07 PAGE: 1 OF 1

PLI Accession #: 701085

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PROJECT MANAGER: ROSS KENNEMER

COMPANY: BIOTECH REMEDIATION INC.

ADDRESS: 501 AIRPORT DR. FARMINGTON N.M. 87401

PHONE:

FAX:

BILL TO:

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D
MW#2	1-10-7	1455	H20	01
MW#3	1-10-07	1516	H20	02

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject		(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:		NUMBER OF CONTAINERS
				✓																						2
				✓																						2

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

PROJECT INFORMATION

PROJ. NO.:

PROJ. NAME: THOMAS WELLS

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO CONTAINERS	4
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	YES
BLUE ICE/ICE	2.3°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☑

*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1.

Signature: Time: 1630

Printed Name: M. BEAUPARLANT Date: 1-10-07

Company: BIOTECH

See Reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time: 1630

Printed Name: JIM CORURN Date: 1/10/07

Company: AES

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1026

Printed Name: GREG M. SERTICH Date: 1/12/07

Pinnacle Laboratories Inc.

July, 2003 PLI Inc.: Pinnacle Laboratories, Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413 • E-mail: PIN_LAB@ATT.NET

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