3R. 409

ANNUAL MONITORNG REPORT

03/07/2008



March 7, 2008

Mr. Glenn von Gonten Hydrologist-Groundwater Remediation New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: Annual Groundwater Remediation Reports

Dear Mr. von Gonten,

XTO Energy Inc. (XTO) is submitting the Annual Groundwater Remediation Reports in accordance with the NMOCD approved Groundwater Management Plan (GMP). Enclosed are summary reports with analytical data, summary tables, site maps, potentiometric surface diagrams and recommendations/proposed actions for:

- Bruington Gas Com #1- 3RP106
- Carson Gas Com #1E
- EJ Johnson C #1E- 3RP385
- Federal Gas Com #H1 3R 110
- Frost, Jack B #2
- McCoy GC D #1E

- OH Randel #7- 3RP386
- PO Pipken #3E 3 ใ 4 อร
- Rowland Gas Com #1- 3RP124
- Snyder Gas Com #1A- 3RP126
- Sullivan Gas Com D #1- 3RP131
- Valdez A #1E- 3RP134

We have also enclosed an Annual Report for ten sites that meet the closure requirements outlined in the GMP. XTO respectfully requests closure of:

- Baca Gas Com A #1A- 3RP104
- Garcia Gas Com B #1- 3RP111
- Haney Gas Com B #1E- 3RP113
- Hare Gas Com B #1
- Hare Gas Com B #1E- 3RP384
- Hare Gas Com I #1
- Masden Gas Com #1E- 3RP120
- McDaniel Gas Com B #1E- 3RP121
- Stedie Gas Com #1- 3RP128
- Sullivan Frame A #1E- 3RP130

In previously submitted reports five sites met the closure requirements outlined in the GMP and XTO requested closure on those sites in 2006 and 2007. The reports for the below listed sites are being submitted again for your review.

- Abrams J #1- 3RP100
- Armenta Gas Com C #1E- 3RP394
- Bergin Gas Com #1E- 3RP105
- Romero Gas Com A #1- 3RP123
- State Gas Com BS #1- 3RP127

Thank you for your review of the reports. XTO looks forward to hearing from you regarding closure requests and proposed remediation actions. If you have any questions please do not hesitate to contact me at (505) 333-3100.

Respectfully,

Lisa Winn

EH & S Manager San Juan Division

CC:

Mr. Brandon Powell, Environmental, NMOCD District III Office, Aztec, NM Mr. Martin Nee, Lodestar Services Inc. File- San Juan Groundwater

XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2007

P.O. PIPKEN #3E (F) SECTION 17 – T27N – R10W, NMPM SAN JUAN COUNTY, NEW MEXICO

PREPARED FOR:
MR. GLENN VON GONTEN
NEW MEXICO OIL CONSERVATION DIVISION

January 2008

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Attachment 1:	2007 Laboratory Reports	



2007 XTO GROUNDWATER REPORT

PO PIPKEN #3E

SITE DETAILS

LEGALS - TWN: 27N

RNG: 10W

SEC: 17

UNIT: I

NMOCD HAZARD RANKING: 20

LAND TYPE: FEDERAL

PREVIOUS ACTIVITIES

Excavation: Sep-94 (450 CY)

Quarterly Sampling Initiated: Dec-99

Monitoring Wells: Dec-99

Additional Monitoring Wells: Jun-00

SITE MAP

A site map is presented as Figure 1.

SUMMARY TABLES

A summary of laboratory results from historical and current groundwater monitoring is presented as Table 1. General water quality data from 1999 and 2000 is presented as Tables 2 and 3. Copies of the laboratory data sheets and associated quality assurance/quality control data for 2007 are presented as Attachment 1.

POTENTIOMETRIC SURFACE DIAGRAMS

Field data collected during site monitoring activities indicate a groundwater gradient that trends towards the northwest, which parallels the nearby surface drainage (Kutz Wash). Figure 2 illustrates the estimated groundwater gradient for October 2006.

Note: Due to site conditions (MW-5 was dry) only 2 data points were collected in October 2007 so no gradient map was submitted.

ANNUAL GROUNDWATER REMEDIATION REPORTS

The 2005 annual groundwater report was submitted to New Mexico Oil Conservation Division (NMOCD) in January 2006, proposing annual sampling for benzene, toluene, ethyl benzene and total xylenes (BTEX) of groundwater monitoring well MW-2 and termination of sampling in monitoring wells MW-1, MW-3, MW-4, and MW-5, in accordance with the NMOCD approved Groundwater Management Plan.

The 2006 annual groundwater report was submitted to NMOCD in February 2007, proposing the addition of nutrients or application of an oxidizer to MW-2 and continued annual sampling for BTEX until natural attenuation reduces BTEX concentrations.

2007 ACTIVITIES

Socks containing an oxidizer (ORC®) were installed in MW-2 in April 2007. Groundwater samples were collected from MW-2 and submitted for laboratory analysis of BTEX in October 2007. Laboratory results reveal BTEX constituents were not detected above the laboratory equipment detection limits (0.2 ug/L) or were below New Mexico Water Quality Control Commission (NMWQCC) standards during the 2007 sampling event.



2007 XTO GROUNDWATER REPORT

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

Bore/Test Hole Reports are presented as Figures 3 - 7 representing drilling that occurred on site in December 1999 and June 2000.

DISPOSITION OF GENERATED WASTES

Waste generated (groundwater) during monitoring well sampling and development was placed in the produced water tank located on the well site.

CONCLUSIONS

In January 1998 XTO Energy Inc. (XTO) acquired the PO Pipken #3E from Amoco Production Company (Amoco). Remedial activities continued from the closure of three earthen production pits. Several groundwater monitoring wells were installed between 1999 and 2000 to evaluate impact to groundwater.

With the exception of monitoring well MW-2, analyses of groundwater from other groundwater monitoring wells are below the NMWQCC standards for BTEX. Groundwater monitoring well MW-2 is located within the original source area of the earthen dehydrator pit (Figure 1). Down-gradient from the source area is MW-1, which has tested below NMWQCC closure standards and establishes the extent of impact. Monitoring well MW-3 is located cross-gradient of the source area and demonstrates natural attenuation of petroleum hydrocarbons. The up-gradient monitoring wells, MW-4 and MW-5, have shown no detectable levels of BTEX constituents.

In April 2007 ORC socks that produce a controlled release of oxygen into the groundwater for up to 12 months were installed in MW-2. The socks hang the vertical length of the water column within the monitoring well. Groundwater analytical data from MW-2 has demonstrated no detectable levels of BTEX constituents or levels well below NMWQCC standards.

XTO proposes removal of the ORC socks and quarterly monitoring of MW-2. The quarterly sampling will continue until analytical results show hydrocarbon constituents are below NMWQCC standards for four consecutive quarters.

RECOMMENDATIONS

- Remove ORC socks from MW-2.
- Begin quarterly sampling until the well is below New Mexico groundwater standards for four (4) consecutive quarters.
- Following OCD approval for closure, all monitoring well locations will be abandoned in accordance with the monitoring well abandonment plan.



XTO ENERGY INC. GROUNDWATER LAB RESULTS

P.O. PIPKEN #3E- DEHYDRATOR PIT UNIT I, SEC. 17, T27N, R10W

					BTEX EPA Method 801 (PPB)				
Sample Date	Monitor Well No.	DTW (ft)	TD (ft)	Product (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	
21-Dec-99	MW #1	25.01	33.00		1.2	ND	2.3	15.9	
28-Jun-00		25.33			ND	ND	ND	ND	
21-Dec-99	MW #2	24.66	33.00		510	45	140	990	
28-Jun-00		24.69			600	5.4	120	277	
05-May-01		24.79			260	ND	67	153	
26-Jun-02		25.64			52	0.6	7.5	7.4	
23-Jun-03		25.79			5.2	1.5	0.99	1.6	
26-Aug-03		25.49			160	ND	14	140	
16-Jun-04		25.10			110	ND	12	24	
28-Jun-05		25.44			200	2.9	33	73	
19-Oct-06		26.04	33.34		54	2.9	5.6	50	
11-Oct-07		25.88	33.34		1.9	ND	ND	ND	
21-Dec-99	MW #3	24.14	33.00		1,500	5.6	520	935	
28-Jun-00		24.44			300	ND	77	218.8	
15-May-01.		24.53			56	0.8	17	26	
26-Jun-02		23.58	30.50		1.4	ND	1	ND	
28-Aug-02		23.82			ND	ND	ND	ND	
09-Dec-02		23.12	29.89		ND	ND	ND	ND	
14-Mar-03		25.68			0.9	ND	ND	ND	
28-Jun-00	MW #4	23.66	30.00		ND	ND	ND	ND	
28-Jun-00	MW #5	23.52	30.00		ND	ND	ND	ND	
NMWQC	C GROUNI	OWATER S	TANDAF	RDS	10	750	750	620	

XTO ENERGY INC. GROUNDWATER LAB RESULTS

P.O. PIPKEN #3E- DEHYDRATOR PIT UNIT I, SEC. 17, T27N, R10W

Sample Date: December 21, 1999

PARAMETERS	MW #1R	MW #2R	MW #3	UNITS
LAB Ph	7.89	7.3	7.56	s.u.
LAB CONDUCTIVITY @ 25 C	15,020	5,210	40,300	umhos/cm
TOTAL DISSOLVED SOLIDS @ 180 C	13,200	3,216	22,112	mg/L
TOTAL DISSOLVED SOLIDS (Calc)	12,410	3,030	19,820	mg/L
SODIUM ABSORPTION RATIO	64.5	39.9	86.2	ratio
TOTAL ALKALINITY AS CaCO3	540	1,092	1,872	mg/L
TOTAL HARDNESS AS CaCO3	648	116	964	mg/L
BICARBONATE AS HCO3	540	1,092	1,872	mg/L
CARBONATE AS CO3	< 0.1	< 0.1	< 0.1	mg/L
HYDROXIDE AS OH	< 0.1	< 0.1	< 0.1	mg/L
NITRATE NITORGEN	0.4	0.1	0.7	mg/L
NITRITE NITROGEN	0.038	0.011	0.006	mg/L
CHLORIDE	84	28	208	mg/L
FLUORIDE	8.2	1.98	11.7	mg/L
PHOSPHATE	1.2	1.4	6	mg/L
SULFATE	7,960	1,290	12,000	mg/L
IRON	0.043	0.053	0.044	mg/L
CALCIUM	211	46	142	mg/L
MAGNESIUM	29	< 0.1	148	mg/L
POTASSIUM	15.0	15.0	12.5	mg/L
SODIUM	3,770	988	6,152	mg/L
CATION/ANION DIFFERENCE	0.06	0.04	0	%

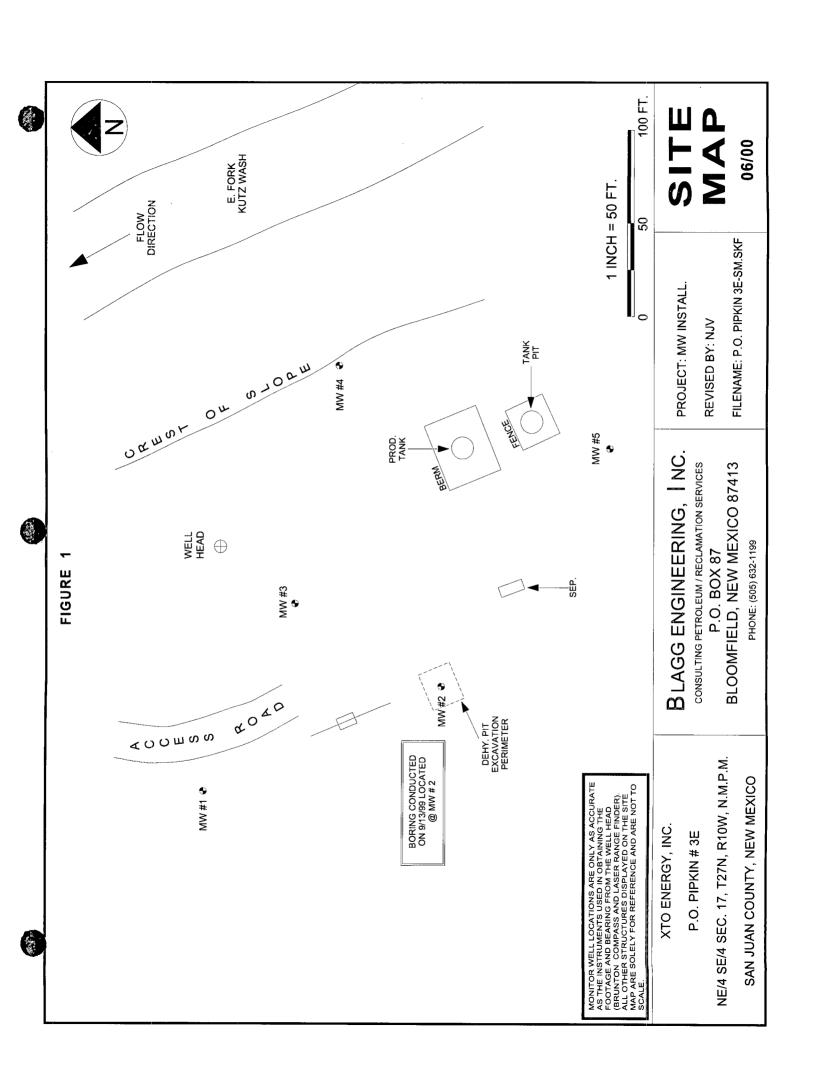


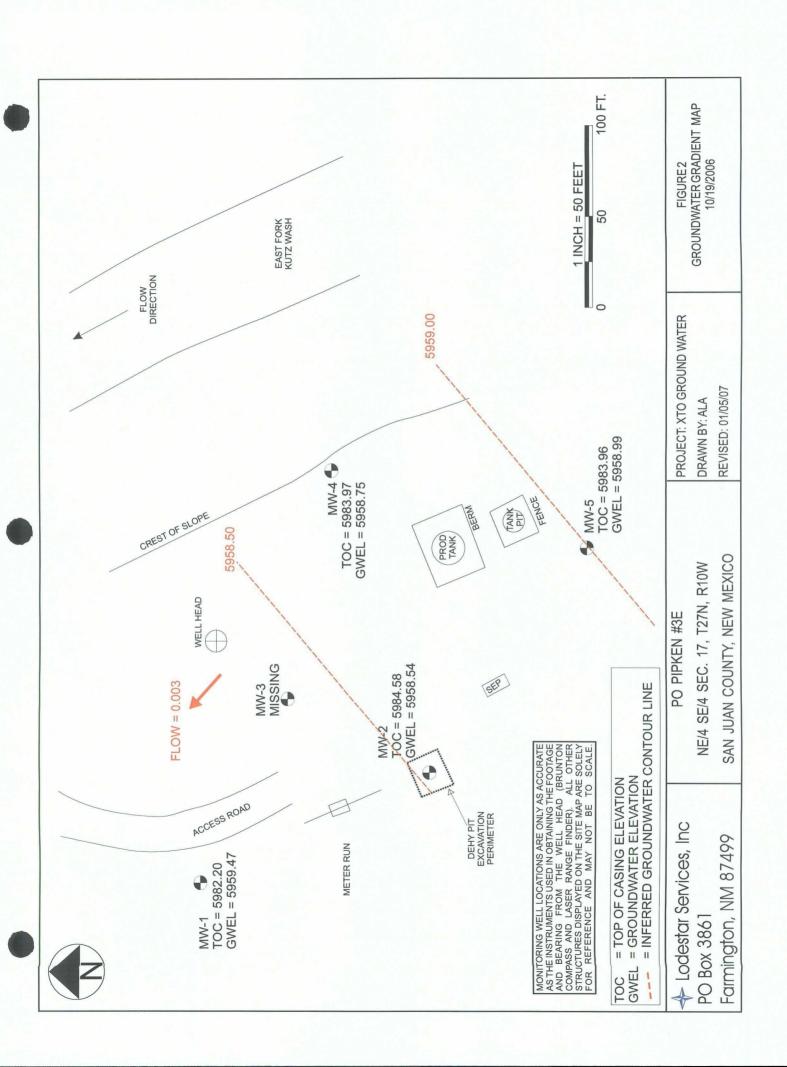
XTO ENERGY INC. GROUNDWATER LAB RESULTS

P.O. PIPKEN #3E- DEHYDRATOR PIT UNIT I, SEC. 17, T27N, R10W

Sample Date: June 28, 2000

PARAMETERS	MW #1R	MW 2R	MW #3	MW #4	MW #5	UNITS
LAB Ph	7.79	7.44	7.84	7.95	7.93	s.u.
LAB CONDUCTIVITY @ 25 C	17,000	6,720	19,600	8,030	7,540	umhos/cm
TOTAL DISSOLVED SOLIDS @ 180 C	8,340	3,350	9,700	4,000	3,760	mg/L_
TOTAL DISSOLVED SOLIDS (Calc)	8,270	3,330	9,630	3,980	3,700	mg/L
SODIUM ABSORPTION RATIO	95.1	39.6	80.6	46.7	44.7	ratio
TOTAL ALKALINITY AS CaCO3	512	788	1,020	484	452	mg/L
TOTAL HARDNESS AS CaCO3	148	148	284	138	130	mg/L
BICARBONATE AS HCO3	512	788	1,020	484	452	mg/L
CARBONATE AS CO3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	mg/L
HYDROXIDE AS OH	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	mg/L_
NITRATE NITORGEN	0.2	0.1	0.3	2.3	< 0.1	mg/L
NITRITE NITROGEN	0.003	< 0.001	0.002	0.017	< 0.001	mg/L_
CHLORIDE	124	44	588	46	18	mg/L
FLUORIDE	7.05	4.55	7.4	4.45	4.4	mg/L
PHOSPHATE	3.3	0.2	2	0.5	0.5	mg/L
SULFATE	5,110	1,680	5,190	2,320	2,180	mg/L
IRON	0.021	0.028	0.07	0.021	0.014	mg/L
CALCIUM	46.4	47.2	88.	50.4	49.6	mg/L
MAGNESIUM	7.81	4.88	15.6	2.93	1.46	mg/L
POTASSIUM	1.9	3.9	2.1	2.0	2.1	mg/L
SODIUM	2,660	1,070	3,120	1,260	1,170	mg/L
CATION/ANION DIFFERENCE	0.04	0.04	0.26	0.35	0.03	%





P.O. BOX 87 **BLOOMFIELD. NM 87413**

(505) 632-1199

BORE / TEST HOL REPORT

CLIENT:

LOCATION NAME: CONTRACTOR:

EQUIPMENT USED:

BORING LOCATION:

CROSS TIMBERS OIL COMPANY
PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W

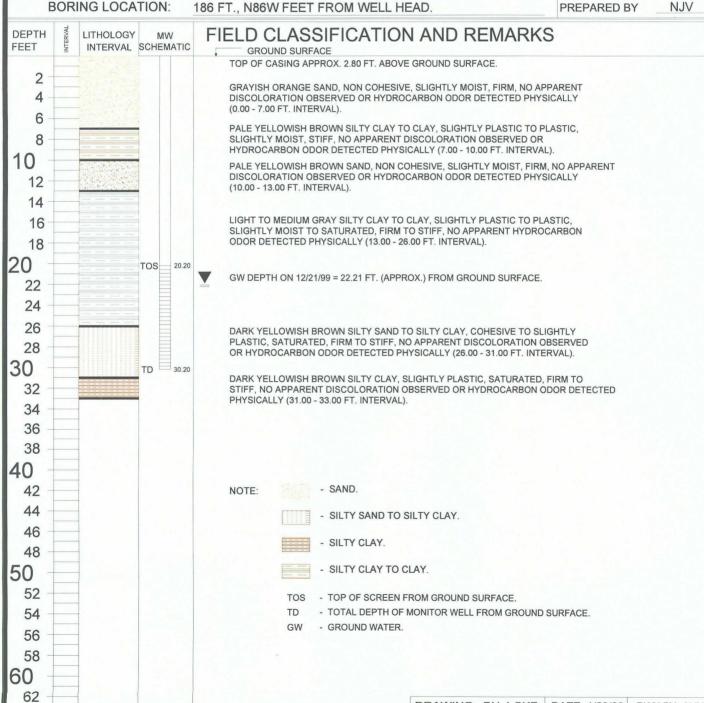
BLAGG ENGINEERING, INC.

MOBILE DRILL RIG (EARTHPROBE)

186 FT., N86W FEET FROM WELL HEAD.

BORING #	BH - 1
MW #	1
PAGE #	2
DATE STARTED	12/14/99
DATE FINISHED	12/14/99
OPERATOR	REP

DRAWING: BH-1.SKF DATE: 1/29/00 DWN BY: NJV



P.O. BOX 87 BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:

LOCATION NAME:

CONTRACTOR: EQUIPMENT USED: CROSS TIMBERS OIL COMPANY
PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W

BLAGG ENGINEERING, INC.

MOBILE DRILL RIG (EARTHPROBE)

BORING LOCATION: 141 FT., S32W FEET FROM WELL HEAD

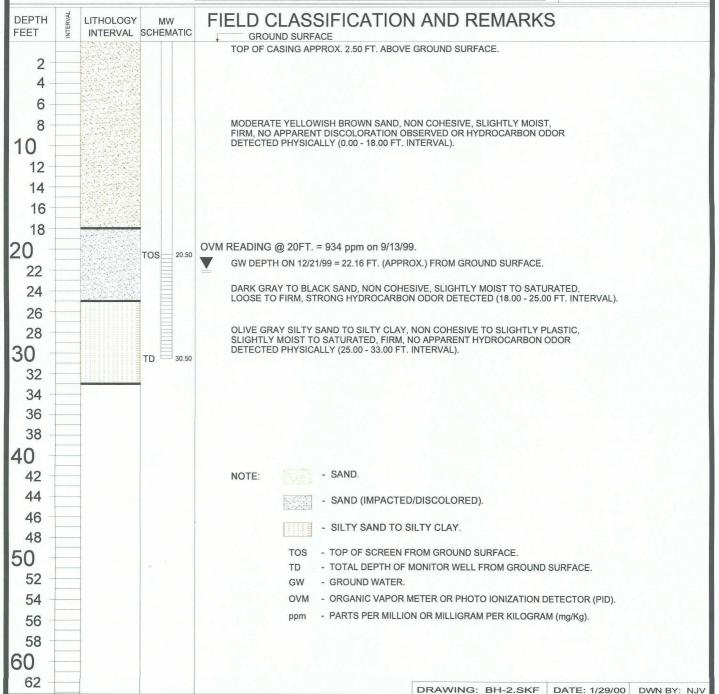
BORING #...... BH - 2
MW #....... 2

PAGE #....... 3

DATE STARTED 12/17/99

DATE FINISHED 12/17/99

OPERATOR...... REP
PREPARED BY NJV



P.O. BOX 87 BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT: CROSS TIMBERS OIL COMPANY

CROSS TIMBERS OIL COMPANY
PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W

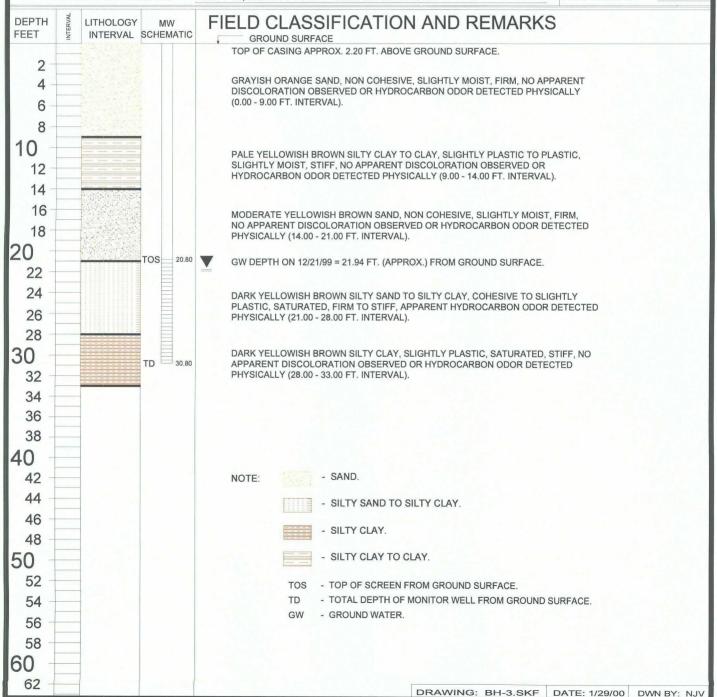
CONTRACTOR: BLAGG ENGINEERING, INC.

LOCATION NAME:

EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)

BORING LOCATION: 50.5 FT., S37W FEET FROM WELL HEAD.

BORING #	BH - 3
MW #	3
PAGE #	4
DATE STARTED	12/17/99
DATE FINISHED	12/17/99
OPERATOR	REP
PREPARED BY	NJV



P.O. BOX 87 BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CROSS TIMBERS OIL COMPANY PIPKIN P.O. #3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W

BLAGG ENGINEERING, INC.

EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)

CLIENT:

LOCATION NAME:

CONTRACTOR:

BORING LOCATION: 116 FT., S56.5E FEET FROM WELL HEAD.

BORING #...... BH - 4

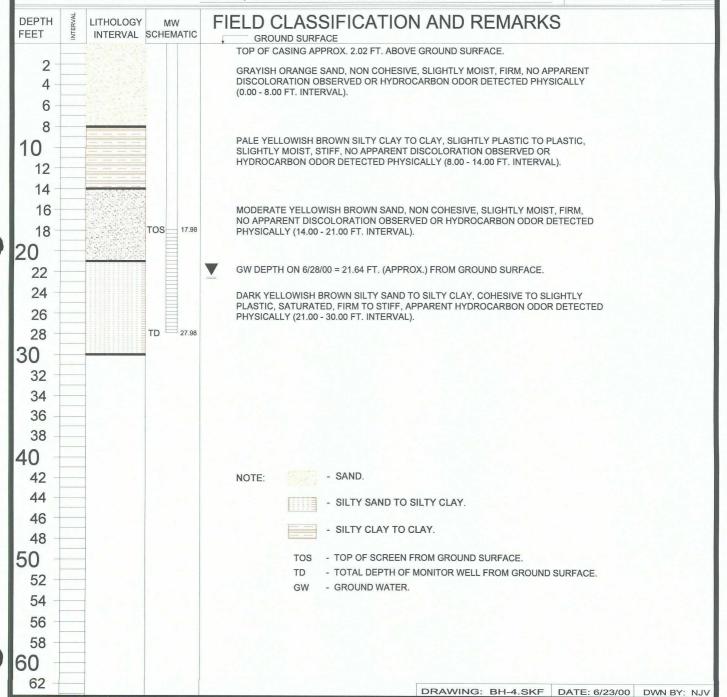
MW #............ 5

DATE STARTED 06/23/00

DATE FINISHED 06/23/00

OPERATOR...... JCB

PREPARED BY NJV



P.O. BOX 87 BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:

58 60 62 LOCATION NAME:

CONTRACTOR: **EQUIPMENT USED:**

BORING LOCATION:

CROSS TIMBERS OIL COMPANY PIPKIN P.O. #3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W

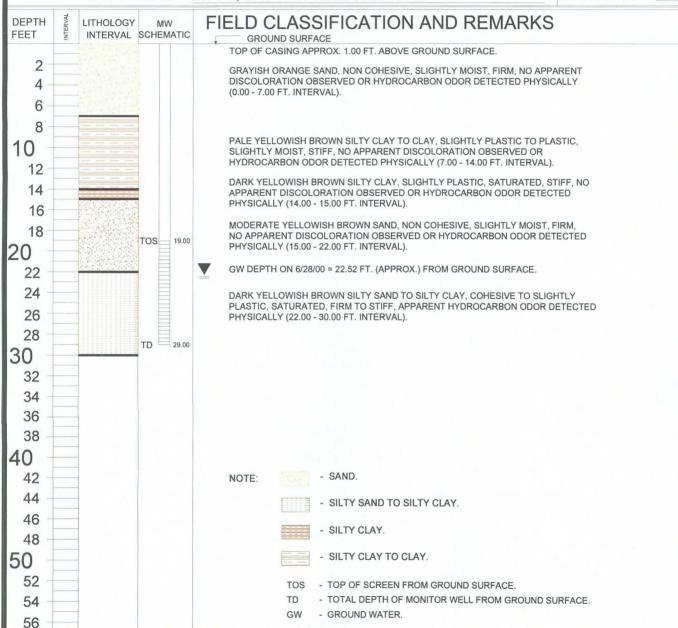
BLAGG ENGINEERING, INC.

MOBILE DRILL RIG (EARTHPROBE)

217 FT., S14E FEET FROM WELL HEAD.

BH - 5 BORING #..... 5 MW #..... 6 PAGE #..... 06/23/00 DATE STARTED DATE FINISHED 06/23/00 **JCB** OPERATOR..... PREPARED BY NJV

DRAWING: BH-5.SKF DATE: 6/23/00 DWN BY: NJV





Hall Environmental Analysis Laboratory, Inc.

Date: 17-Oct-07

CLIENT:

XTO Energy

Project:

Ground Water

Lab Order:

0710268

Lab ID:

0710268-01

Client Sample ID: PO Pipken 3E MW-2

Collection Date: 10/11/2007 11:08:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	1.9	1.0	μg/L	1 ·	10/13/2007 9:57:18 AM
Toluene	ND	1.0	μg/L	1	10/13/2007 9:57:18 AM
Ethylbenzene	ND	1.0	μg/L	1	10/13/2007 9:57:18 AM
Xylenes, Total	ND	2.0	µg/L	1	10/13/2007 9:57:18 AM
Surr: 4-Bromofluorobenzene	85.7	70.2-105	%REC	1	10/13/2007 9:57:18 AM

Lab ID:

0710268-02

Collection Date: 10/11/2007 12:52:00 PM

Client Sample ID: Federal GC HI MW-1

Matrix: AQUEOUS

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	50	5.0	µg/L	5	10/15/2007 5:07:33 PM
Toluene	18	5.0	μg/L	5	10/15/2007 5:07:33 PM
Ethylbenzene	440	20	μg/L	20	10/16/2007 5:07:47 PM
Xylenes, Total	1500	40	μg/L	20	10/16/2007 5:07:47 PM
Surr: 4-Bromofluorobenzene	102	70.2-105	%REC	20	10/16/2007 5:07:47 PM

Lab ID:

0710268-03

Collection Date: 10/11/2007 1:15:00 PM

Client Sample ID: Federal GC Hi MW 2

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	86	1.0	μg/L	1	10/13/2007 10:59:44 AM
Toluene	ND .	1.0	μg/L	1	10/13/2007 10:59:44 AM
Ethylbenzene	97	1.0	µg/L	1	10/13/2007 10:59:44 AM
Xylenes, Total	140	2.0	µg/L	1	10/13/2007 10:59:44 AM
Surr: 4-Bromofluorobenzene	105	70.2-105	%REC	1	10/13/2007 10:59:44 AM



Value exceeds Maximum Contaminant Level

E Value above quantitation range

Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 17-Oct-07

QA/QC SUMMARY REPOR

Elient:

XTO Energy

Project: Ground Water

Work Order:

0710268

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD RI	PDLimit Qual
Method: SW8021	, , , , , , , , , , , , , , , , , , , ,							
Sample ID: 5ML RB		MBLK			Batch i	D: R25551	Analysis Date:	10/12/2007 10:24:23 AM
Benzene	ND	µg/L	1.0					
Toluene	ND	µg/L	1.0					,
Ethylbenzene	ND	μg/L	1.0					
Xylenes, Total	ND	μg/L	2.0					
Sample ID: 5ML RB		MBLK			Batch I	D: R25568	Analysis Date:	10/15/2007 9:04:35 AM
Benzene	ND	μg/L	1.0					
Toluene	ND	μg/L	1.0				•	
Ethylbenzene	ND	μg/L	- 1.0					
Xylenes, Total	ND	µg/L	2.0					
Sample ID: 5ML RB		MBLK			Batch I	D: R25596	Analysis Date:	10/16/2007 8:55:55 AM
Benzene	ND	μg/L	1.0					
Toluene	ND	μg/L	1.0					
Ethylbenzene	ND	µg/L	1.0					
Xylenes, Total	ND	μg/L	2.0					
Sample ID: 100NG BTEX LCS		LCS			Batch II	D: R25551	Analysis Date:	10/12/2007 12:54:50 PM
Benzene	19.63	μg/L	1.0	98.2	85.9	113		
Toluene '	18.95	µg/L	1.0	94.8	86.4	113		
toluene thylbenzene vienes. Total	18.80	μ g/L	1.0	94.0	83.5	118		
Xylenes, Total	55.71	µg/L	2.0	92.9	83.4	122		
Sample ID: 100NG BTEX LCS		LCS			Batch II	D: R25596	Analysis Date:	10/16/2007 6:40:33 PM
Benzene	20.00	μg/L	1.0	100	85.9	113		
Toluene	19.14	μg/L	1.0	95.7	86.4	113		
Ethylbenzene	19.32	µg/L	1.0	96.6	83.5	118		
Xylenes, Total	57.49	μg/Ł	2.0	95.8	83.4	122		
Sample ID: 100NG BTEX LCSD		LCSD	•		Batch II	D: R25551	Analysis Date:	10/13/2007 12:12:27 PM
Benzene	20.51	μg/L	1.0	103	85.9	113	4.39	27
Toluene	19.23	μg/L	1.0	96.2	86.4	113		19
Ethylbenzene	19.41	μg/L	1.0	97.1	83.5	118		10
Xylenes, Total	57.77	μg/L	2.0	96.3	83.4	122		13



E Value above quantitation range

R RPD outside accepted recovery limits

S Spike recovery outside accepted recovery limits

Page 1

J Analyte detected below quantitation limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit