3R - 409

2009 AGWMR

MAR 2010

XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2009

PO PIPKIN #3E
3RP-409
(I) SECTION 17 – T27N – R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO

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

MARCH 2010

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Appendices

2009 XTO GROUNDWATER REPORT

PO PIPKIN #3E
3RP-409

SITE DETAILS

LEGALS - TWN: 27N **RNG:** 10W **SEC:** 17 **UNIT:** I
OCD HAZARD RANKING: 20 **LAND TYPE:** FEDERAL
LATITUDE: 36.57212 **LONGITUDE:** 107.91272

INTRODUCTION

XTO Energy Inc. (XTO) acquired the PO Pipkin #3E well site from Amoco Production Company (Amoco) in January 1998. This is a gas producing well in the Dakota Sandstone and is currently active. A topographic map and site map are presented as Figures 1 and 2.

HISTORY

XTO learned that in September 1994 Amoco excavated three earthen production pits for closure. Of the three Pit Remediation and Closure Reports that were submitted to New Mexico Oil Conservation Division (OCD) two were denied, dehydrator pit and a separator pit (Attachment 1). Correspondence dated December 10, 1996 from OCD required Amoco address the extent of possible remaining impact.

XTO began remedial activities in December 1999 with the installation of three monitoring wells, MW-1, MW-2 and MW-3. Completion Diagrams and Borehole Logs are presented in Figures 4-6 documenting drilling that occurred on site in 1999. Monitoring well MW-2 was placed in the area of the original earthen dehydrator pit (source area). Initial groundwater sampling of the monitoring wells revealed concentrations of benzene, toluene, ethyl benzene and total xylene (BTEX) in excess of New Mexico Water Quality Control Commission (WQCC) standards in monitoring wells MW-2 and MW-3. Monitoring well MW-1 was below WQCC standards or non-detect for BTEX constituents.

In June 2000 two additional monitoring wells were installed to further delineate impact to groundwater, (MW-4 and MW-5). Completion Diagrams and Borehole Logs for the monitoring wells installed on site in 2000 are presented in Figures 7-8. Groundwater samples collected from all five monitoring wells revealed elevated concentrations of BTEX constituents in monitoring wells MW-2 and MW-3, while results for monitoring wells MW-1, MW-4 and MW-5 were non-detect. Sampling was discontinued in monitoring wells MW-1, MW-4 and MW-5 at that time.

The 2005 annual groundwater report was submitted to the OCD in January 2006 proposing annual groundwater sampling of monitoring well MW-2 for BTEX and discontinued sampling of monitoring well MW-3 in accordance with the OCD approved Groundwater Management Plan.

The 2006 annual groundwater report was submitted to the OCD in February 2007 proposing the addition of nutrients or application of an oxidizer in monitoring well MW-2

and continued annual sampling for BTEX until degradation decreases BTEX concentrations.

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

The 2007 annual groundwater report was submitted to the OCD in February 2008 proposing removal of the ORC® socks and quarterly monitoring of monitoring well MW-2 until analytical results show hydrocarbon constituents below WQCC standards for four consecutive quarters.

ORC® socks were removed from monitoring well MW-2 in October 2008 for sampling.

The 2008 annual groundwater report was submitted to the OCD in April 2009 proposing quarterly sampling of monitoring well MW-2 for closure in accordance with the OCD approved Ground Water Management Plan.

A summary of laboratory results from historical and current groundwater monitoring is presented as Table 1. A summary of general water quality data from 1999 and 2000 is presented as Tables 2-3. Copies of the laboratory data sheets and associated quality assurance/quality control data for 2009 are presented as Attachment 2.

METHODOLOGY

Quarterly groundwater samples were collected from monitoring well MW-2 and submitted for laboratory analysis of BTEX during 2009.

Water Level Measurements

Static groundwater level monitoring includes recording depth to groundwater measurements with a Keck oil/water interface probe. The interface probe is decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. These data are recorded as DTW and TD in feet on Table 1.

Groundwater Sampling

Prior to sampling groundwater, depth to groundwater and total depth of wells is measured with a Keck oil/water interface probe. Presence of any free-phase crude oil is also investigated using the interface probe. The interface probe is decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. The volume of water in the wells is calculated, and a minimum of three casing volumes of water is purged from each well using a disposable bailer or a permanent decontaminated PVC bailer. As water is extracted, pH, electric conductivity and temperature are monitored. Wells are purged until these properties stabilize, indicating that the purge water is representative of aquifer conditions. Stabilization is defined as three consecutive stable readings for each water property (±0.4 unites for pH, ±10 percent for electric conductivity and ±2° C for temperature). All purge water is disposed into tanks on site.

Once each monitoring well is properly purged, groundwater samples are collected by filling at least two 40-millititer (ml) glass vials. The pre-cleaned and pre-preserved (with

hydrochloric acid or mercuric chloride) vials are filled and capped with no air inside to prevent degradation of the sample. Samples are labeled with the date and time of collection, well designation, project name, collector's name and parameters to be analyzed. They are immediately sealed and packed on ice. The samples are shipped to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico in a sealed cooler via bus before designated holding times expire. Proper chain-of-custody (COC) procedures are followed with logs documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used, analyses required and sampler's signature.

Groundwater Contour Maps
Top of casing well elevations were surveyed using a surveyor's level; and groundwater elevations obtained from monitoring wells were used to draft groundwater contour maps during site visits. Contours were inferred based on groundwater elevations obtained and observation of physical characteristics at the site (topography, proximity to irrigation ditches, etc.).

RESULTS

Laboratory analytical results from monitoring well MW-2 have been below standards or non-detectable for 4 consecutive quarters. All laboratory analytical results are presented in Table 1. Laboratory reports are presented as Attachment 2.

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 3 illustrates the estimated groundwater gradient for October 2006.

Note: Due to site conditions (MW-1 casing was bent, MW-3 was missing, MW-5 was dry) only 2 data points were collected throughout 2009 and no groundwater contour maps could be drawn. There were no noticeable changes from previous visits in groundwater flow direction or gradient.

CONCLUSIONS

Groundwater analytical data from monitoring well MW-2 for 4 consecutive quarters has demonstrated no detectable levels or levels below WQCC standards of BTEX constituents and WQCC standards have been met.

RECOMMENDATIONS

The quarterly sampling has confirmed no rebound of BTEX constituents has occurred, therefore, XTO requests closure of this site.

Sampling will be discontinued and 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 8021 (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
13-Mar-08		25.74	33.34		9.7	ND	1.1	5.7
20-Jan-09		26.38	33.34		6.4	ND	ND	ND
29-Apr-09		26.41	33.34		1.2	ND	ND	ND
08-Jul-09		26.56	33.34		5.2	ND	ND	ND
20-Oct-09		26.69	33.34		ND	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
NMWQCC GROUNDWATER STANDARDS					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

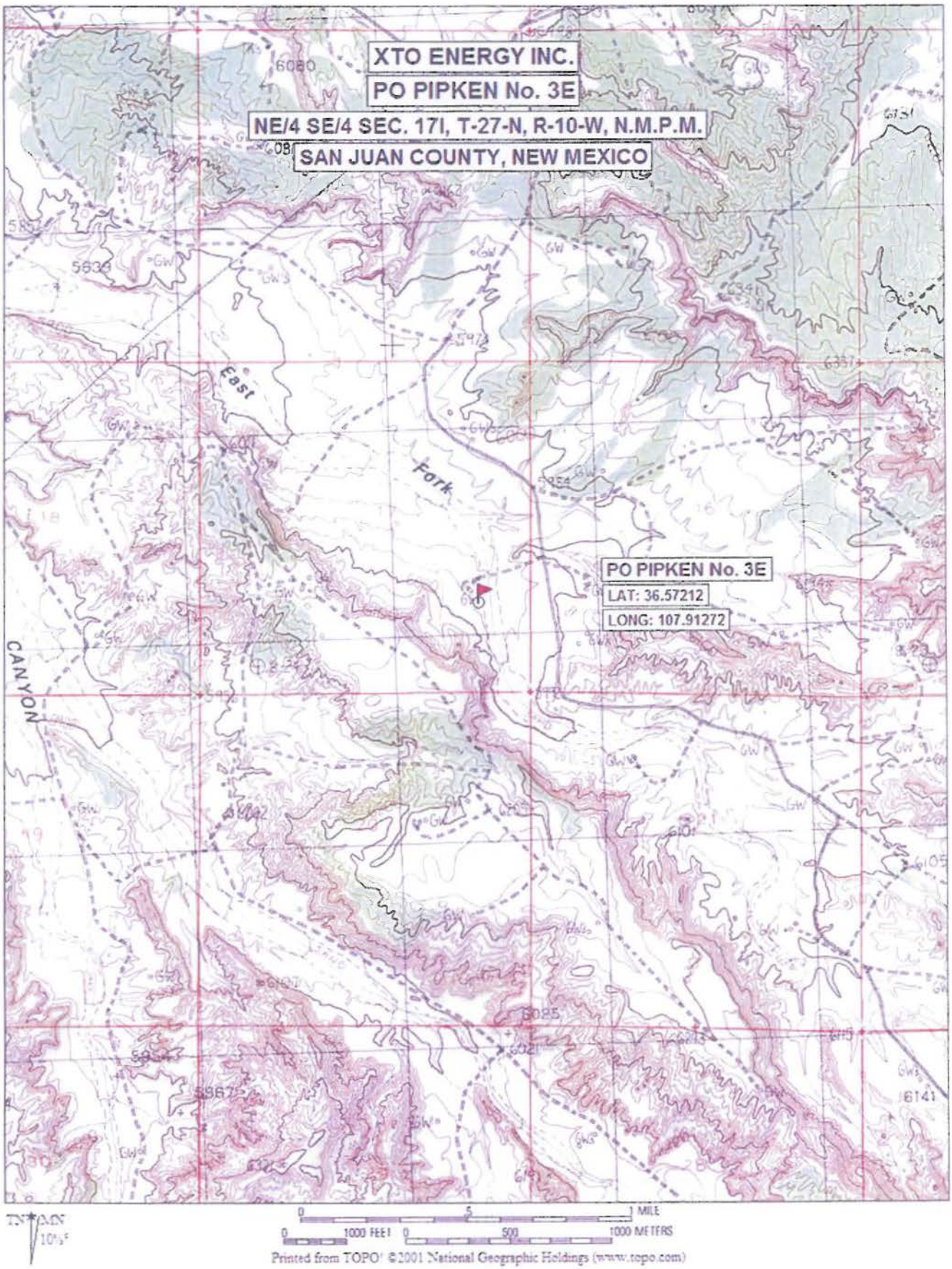
PARAMETERS	MW #1R	MW #2R	MW #3	UNITS
LAB Ph	7.89	7.3	7.56	s.u.
LAB CONDUCTIVITY @ 25 C	15,020	5,210	40,300	umhos/cm
TOTAL DISSOLVED SOLIDS @ 180 C	13,200	3,216	22,112	mg/L
TOTAL DISSOLVED SOLIDS (Calc)	12,410	3,030	19,820	mg/L
SODIUM ABSORPTION RATIO	64.5	39.9	86.2	ratio
TOTAL ALKALINITY AS CaCO3	540	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	%



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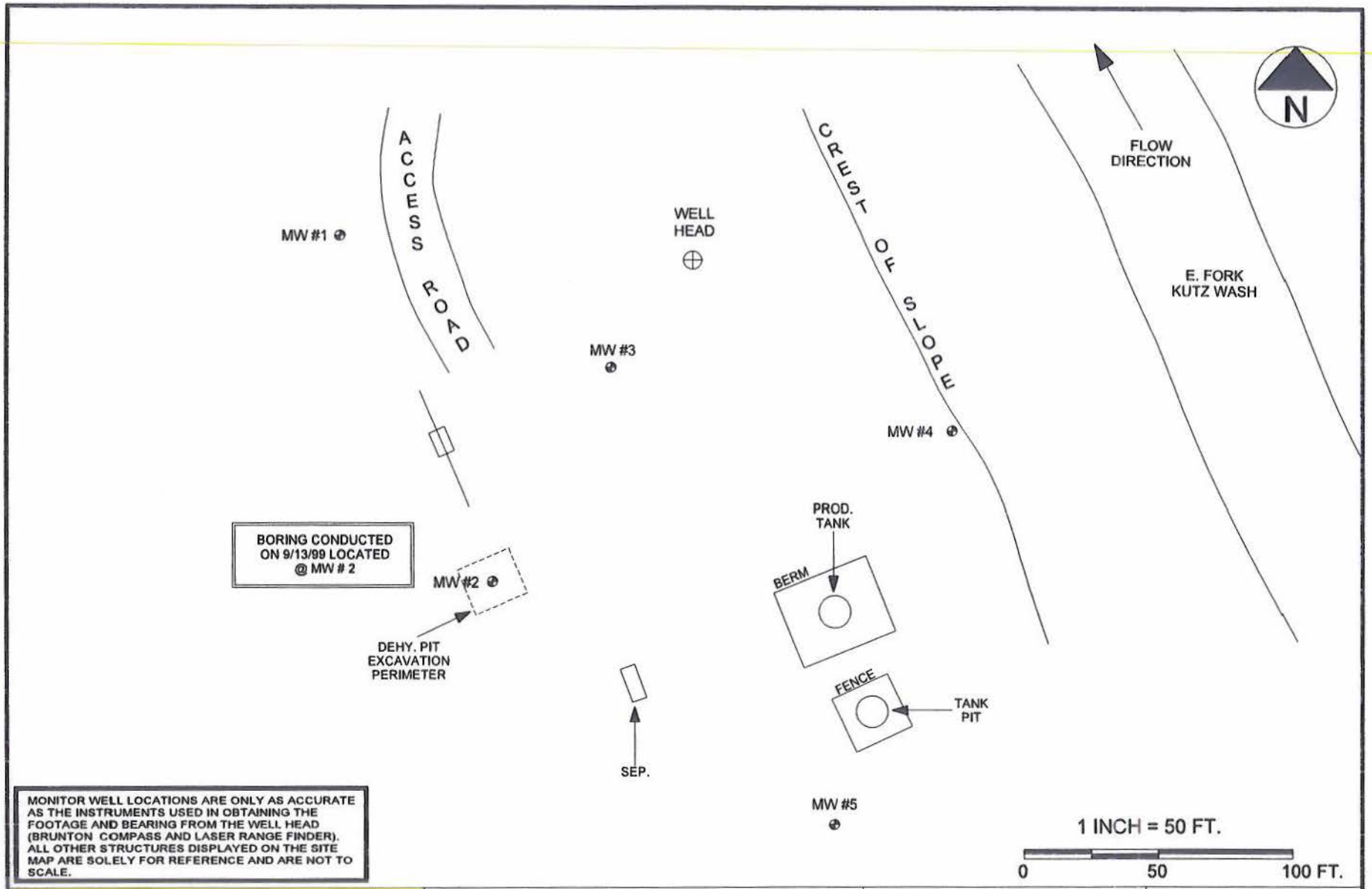


MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND ARE NOT TO SCALE.

XTO ENERGY, INC.

P.O. PIPKIN # 3E

NE/4 SE/4 SEC. 17, T27N, R10W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

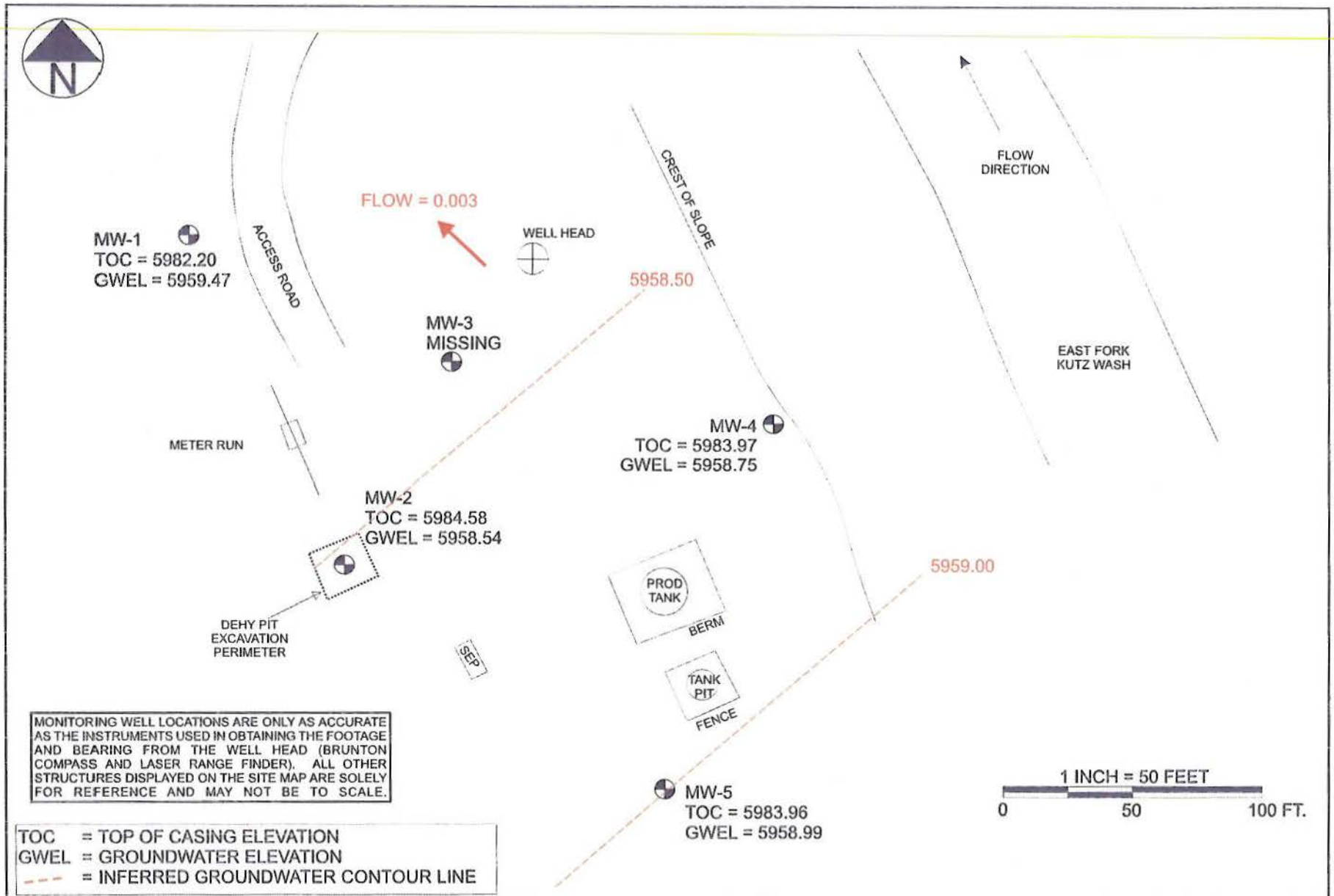
PROJECT: MW INSTALL.

REVISED BY: NJV

FILENAME: P.O. PIPKIN 3E-SM.SKF

SITE MAP

06/00



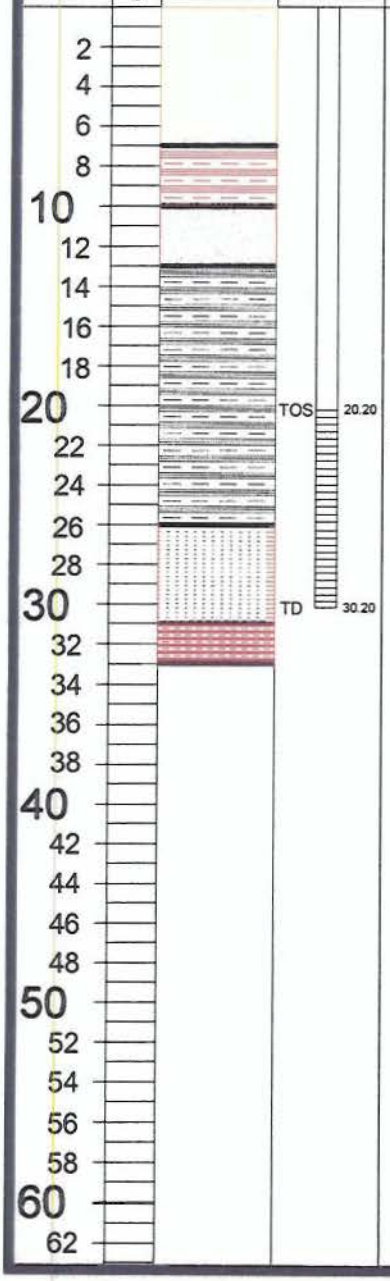
Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	PO PIPKEN #3E NE/4 SE/4 SEC. 17, T27N, R10W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 01/05/07	GROUNDWATER GRADIENT MAP 10/19/2006

BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	CROSS TIMBERS OIL COMPANY
LOCATION NAME:	PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	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
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.80 FT. ABOVE GROUND SURFACE.

GRAYISH ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.00 - 7.00 FT. INTERVAL).

PALE YELLOWISH BROWN SILTY CLAY TO CLAY, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST, STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (7.00 - 10.00 FT. INTERVAL).

PALE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (10.00 - 13.00 FT. INTERVAL).

LIGHT TO MEDIUM GRAY SILTY CLAY TO CLAY, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST TO SATURATED, FIRM TO STIFF, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY (13.00 - 26.00 FT. INTERVAL).

GW DEPTH ON 12/21/99 = 22.21 FT. (APPROX.) FROM GROUND SURFACE.

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, COHESIVE TO SLIGHTLY PLASTIC, SATURATED, FIRM TO STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (26.00 - 31.00 FT. INTERVAL).

DARK YELLOWISH BROWN SILTY CLAY, SLIGHTLY PLASTIC, SATURATED, FIRM TO STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (31.00 - 33.00 FT. INTERVAL).

NOTE:

- SAND.
- SILTY SAND TO SILTY CLAY.
- SILTY CLAY.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

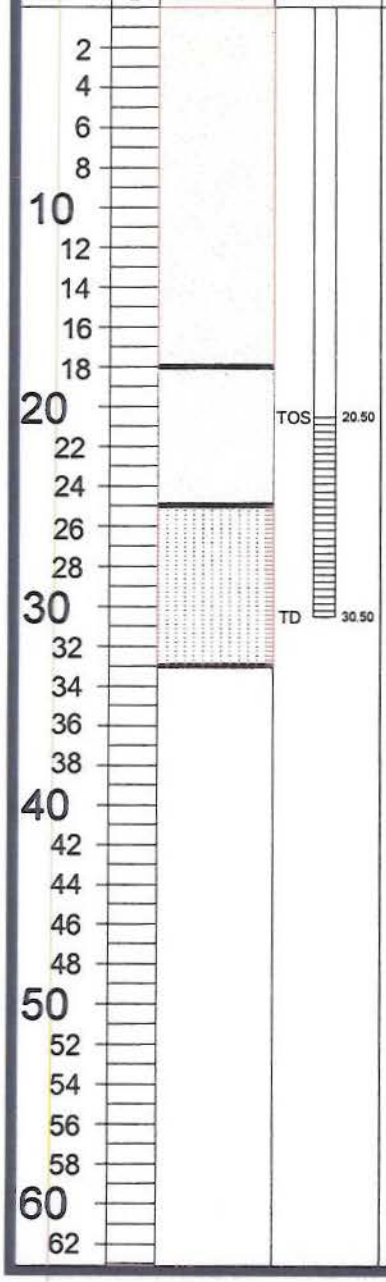
DRAWING: BH-1.SKF	DATE: 1/29/00	DWN BY: NJV

BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

BORING #.....	BH - 2
MW #.....	2
PAGE #.....	3
DATE STARTED	12/17/99
DATE FINISHED	12/17/99
OPERATOR.....	REP
PREPARED BY	NJV

CLIENT: CROSS TIMBERS OIL COMPANY
LOCATION NAME: PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W
CONTRACTOR: BLAGG ENGINEERING, INC.
EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION: 141 FT., S32W FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.50 FT. ABOVE GROUND SURFACE.

MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.00 - 18.00 FT. INTERVAL).

OVM READING @ 20FT. = 934 ppm on 9/13/99.

GW DEPTH ON 12/21/99 = 22.16 FT. (APPROX.) FROM GROUND SURFACE.

DARK GRAY TO BLACK SAND, NON COHESIVE, SLIGHTLY MOIST TO SATURATED, LOOSE TO FIRM, STRONG HYDROCARBON ODOR DETECTED (18.00 - 25.00 FT. INTERVAL).

OLIVE GRAY SILTY SAND TO SILTY CLAY, NON COHESIVE TO SLIGHTLY PLASTIC, SLIGHTLY MOIST TO SATURATED, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY (25.00 - 33.00 FT. INTERVAL).

NOTE:
- SAND.
- SAND (IMPACTED/DISCOLORED).
- SILTY SAND TO SILTY CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.
OVM - ORGANIC VAPOR METER OR PHOTO IONIZATION DETECTOR (PID).
ppm - PARTS PER MILLION OR MILLIGRAM PER KILOGRAM (mg/Kg).

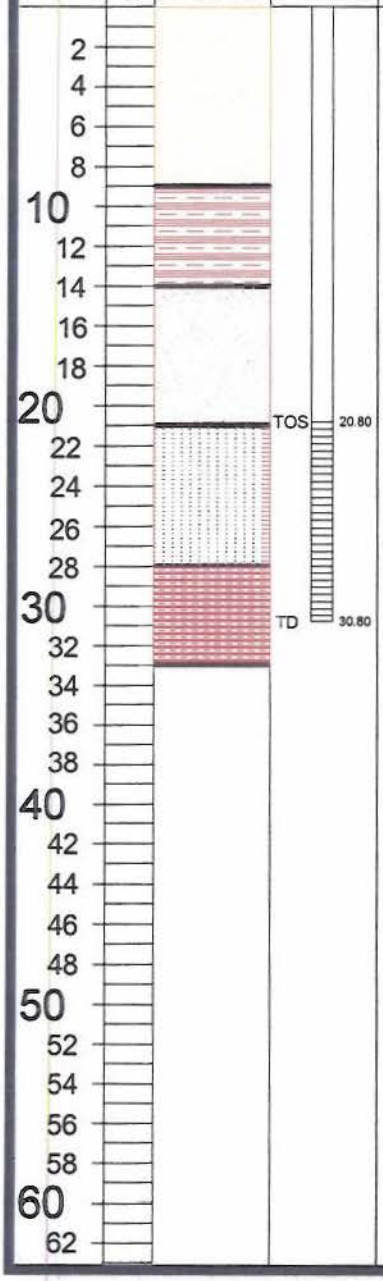
DRAWING: BH-2.SKF | DATE: 1/29/00 | DWN BY: NJV

BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

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

CLIENT: CROSS TIMBERS OIL COMPANY
LOCATION NAME: PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W
CONTRACTOR: BLAGG ENGINEERING, INC.
EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION: 50.5 FT., S37W FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.20 FT. ABOVE GROUND SURFACE.

GRAYISH ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.00 - 9.00 FT. INTERVAL).

PALE YELLOWISH BROWN SILTY CLAY TO CLAY, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST, STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (9.00 - 14.00 FT. INTERVAL).

MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (14.00 - 21.00 FT. INTERVAL).

GW DEPTH ON 12/21/99 = 21.94 FT. (APPROX.) FROM GROUND SURFACE.

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, COHESIVE TO SLIGHTLY PLASTIC, SATURATED, FIRM TO STIFF, APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY (21.00 - 28.00 FT. INTERVAL).

DARK YELLOWISH BROWN SILTY CLAY, SLIGHTLY PLASTIC, SATURATED, STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (28.00 - 33.00 FT. INTERVAL).

NOTE:
- SAND.
- SILTY SAND TO SILTY CLAY.
- SILTY CLAY.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

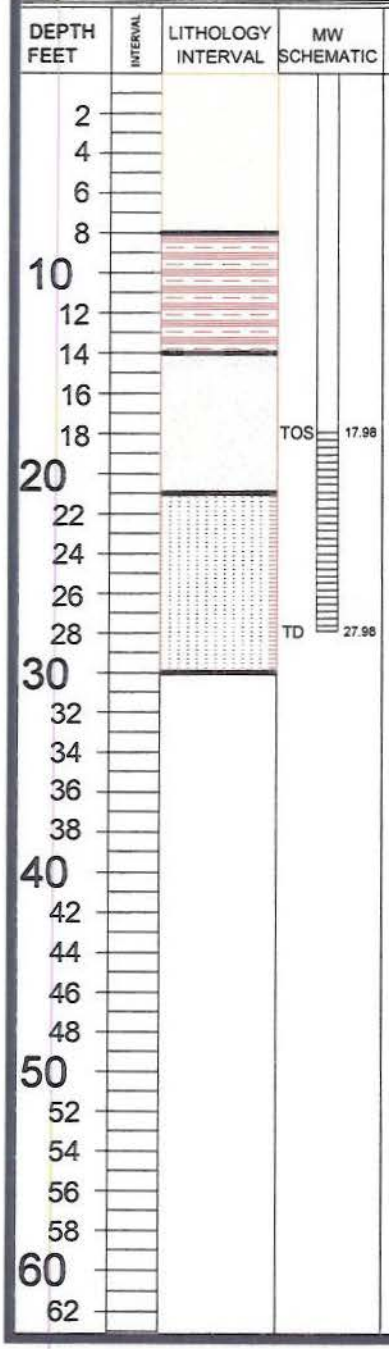
DRAWING: BH-3.SKF	DATE: 1/29/00	DWN BY: NJV

BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	CROSS TIMBERS OIL COMPANY
LOCATION NAME:	PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	116 FT., S56.5E FEET FROM WELL HEAD.

BORING #.....	BH - 4
MW #.....	4
PAGE #.....	5
DATE STARTED	06/23/00
DATE FINISHED	06/23/00
OPERATOR.....	JCB
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.02 FT. ABOVE GROUND SURFACE.

GRAYISH ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.00 - 8.00 FT. INTERVAL).

PALE YELLOWISH BROWN SILTY CLAY TO CLAY, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST, STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (8.00 - 14.00 FT. INTERVAL).

MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (14.00 - 21.00 FT. INTERVAL).

▼ GW DEPTH ON 6/28/00 = 21.64 FT. (APPROX.) FROM GROUND SURFACE.

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, COHESIVE TO SLIGHTLY PLASTIC, SATURATED, FIRM TO STIFF, APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY (21.00 - 30.00 FT. INTERVAL).

NOTE:
- SAND.
- SILTY SAND TO SILTY CLAY.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

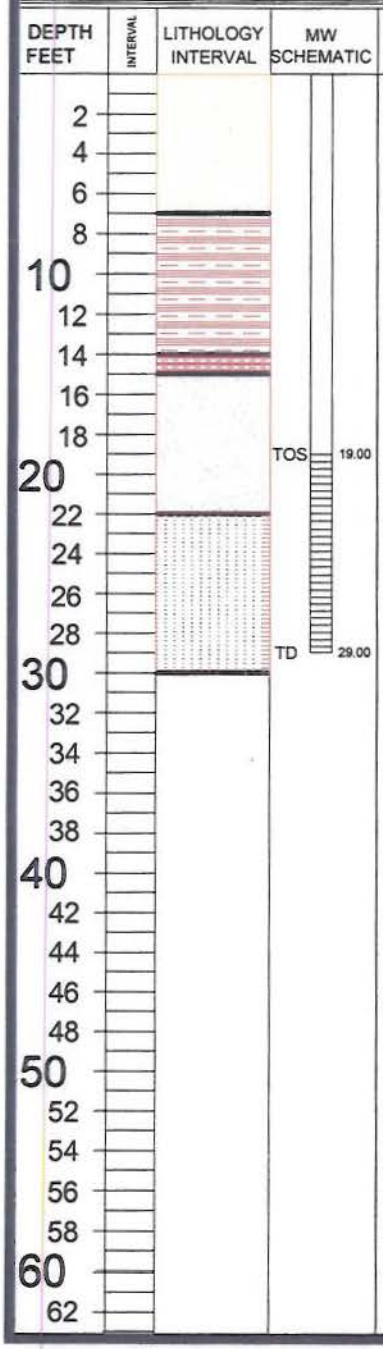
DRAWING: BH-4.SKF | DATE: 6/23/00 | DWN BY: NJV

BLAGG ENGINEERING, Inc.
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

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

CLIENT: CROSS TIMBERS OIL COMPANY
LOCATION NAME: PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W
CONTRACTOR: BLAGG ENGINEERING, INC.
EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION: 217 FT., S14E FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 1.00 FT. ABOVE GROUND SURFACE.

GRAYISH ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.00 - 7.00 FT. INTERVAL).

PALE YELLOWISH BROWN SILTY CLAY TO CLAY, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST, STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (7.00 - 14.00 FT. INTERVAL).

DARK YELLOWISH BROWN SILTY CLAY, SLIGHTLY PLASTIC, SATURATED, STIFF, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (14.00 - 15.00 FT. INTERVAL).

MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (15.00 - 22.00 FT. INTERVAL).

GW DEPTH ON 6/28/00 = 22.52 FT. (APPROX.) FROM GROUND SURFACE.

DARK YELLOWISH BROWN SILTY SAND TO SILTY CLAY, COHESIVE TO SLIGHTLY PLASTIC, SATURATED, FIRM TO STIFF, APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY (22.00 - 30.00 FT. INTERVAL).

NOTE:
- SAND.
- SILTY SAND TO SILTY CLAY.
- SILTY CLAY.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

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

B 0076

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company **Telephone:** (505) -326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: P.O. PIPKIN # 3E
Well Name

Location: Unit or Qtr/Qtr Sec I Sec 17 T 27 N R 10 W County SAN JUAN

Pit Type: Separator ___ Dehydrator X Other ___

Land Type: BLM X, State ___, Fee ___, Other ___

Pit Location: (Attach diagram)
Pit dimensions: length 21', width 18', depth 18'
Reference: wellhead X, other ___
Footage from reference: 120
Direction from reference: 45 Degrees ___ East North ___ of X West South X

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)	20
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes (20 points) No (0 points)	0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	0
	RANKING SCORE (TOTAL POINTS):	20

Date Remediation Started: _____ Date Completed: 9-2-94

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards _____

Landfarmed X Insitu Bioremediation ___

Other COMPOST

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite X Offsite _____

General Description Of Remedial Action:

Excavation - STEEL TANK TO BE INSTALLED

Ground Water Encountered: No X Yes ___ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 18'

Sample date 9-2-94 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 620

TPH _____

Ground Water Sample: Yes ___ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 9/13/94

SIGNATURE B J Shaw PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: 80076 C.O.C. NO: _____

FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: P.O. PIPKIN WELL #: 3E PIT: DEHYDRATOR
QUAD/UNIT: I SEC: 17 TWP: 27N RNG: 10W BM: CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 SE/4 CONTRACTOR: EPC/BLAGG

DATE STARTED: 9-2-94
DATE FINISHED: 9-2-94
ENVIRONMENTAL SPECIALIST: JCB

SOIL REMEDIATION: EXCAVATION APPROX. 18' FT. x 21' FT. x 18' FT. DEEP.
DISPOSAL FACILITY: ON SITE LANDFARM COMPOST CUBIC YARDAGE: 190
LAND USE: RANGE LAND LEASE: _____

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 120' FEET SW FROM WELLHEAD.
DEPTH TO GROUNDWATER: 25'± NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM

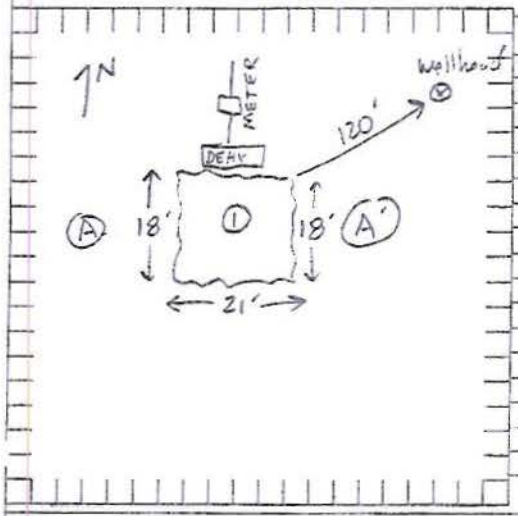
SOIL AND EXCAVATION DESCRIPTION:
SANDY SOIL. PIT WALLS VERTICAL. BLACK CONTAMINATED SOIL EVIDENT ON BASE & N wall against Dehy unit. COULD NOT EXCAVATE WITHOUT losing Dehy unit.
Sample ① collected with TEACH HOE
- CONDITIONAL CLOSURE - PIT REPORT ONLY WILL HAVE LINED TANK INSTALLED

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FT

PIT PERIMETER

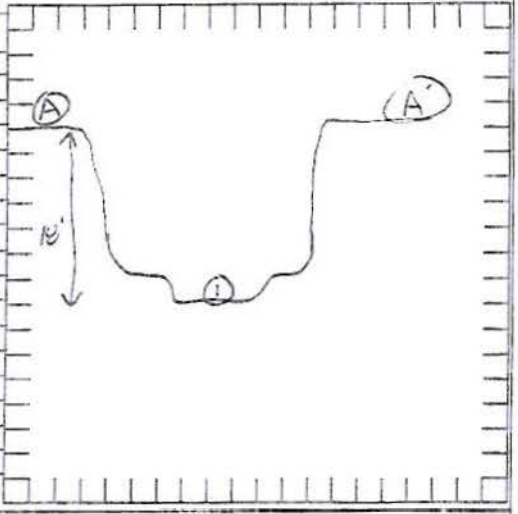


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 BASE @ 18'	620
2	
3	
4	
5	

LAB	SAMPLES

PIT PROFILE



TRAVEL NOTES: CALLOUT: 0500 9/2/94 ONSITE: 1015 9/2/94

B0076

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company **Telephone:** (505) -326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: P.O. PIPKIN # 3E
Well Name

Location: Unit or Qtr/Qtr Sec I Sec 17 T 27N R 10 W County SAN JUAN

Pit Type: Separator X Dehydrator ___ Other ___

Land Type: BLM X, State ___, Fee ___, Other ___

Pit Location: (Attach diagram)
Pit dimensions: length 27', width 24', depth 19'
Reference: wellhead X, other ___
Footage from reference: 150
Direction from reference: 45 Degrees ___ East North ___ of X West South X

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)	20
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes (20 points) No (0 points)	0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	0
	RANKING SCORE (TOTAL POINTS):	20

B0076

Date Remediation Started: _____ Date Completed: 9-2-94

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 390

Landfarmed X Insitu Bioremediation ___

Other COMPOST

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite X Offsite _____

General Description Of Remedial Action:

Excavation - PARTIAL - EQUIPMENT IN WAY.

Ground Water Encountered: No X Yes ___ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 19'

Sample date 9-2-94 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 758

TPH _____

Ground Water Sample: Yes ___ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 9/13/94

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

P Ew

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: B0076 C.O.C. NO:

FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: P.O. PIPKIN WELL #: 3E PIT: SEPARATOR
QUAD/UNIT: I SEC: 17 TWP: 27N RNG: 10W BM: CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 SE/4 CONTRACTOR: EPC / BLAGG

DATE STARTED: 9/2/94
DATE FINISHED: 9/2/94
ENVIRONMENTAL SPECIALIST: JCB

SOIL REMEDIATION: EXCAVATION APPROX. 24' FT. x 27' FT. x 19 FT. DEEP.
DISPOSAL FACILITY: ON SITE LANDFARM COMPOST CUBIC YARDAGE: 390
LAND USE: RANGE LAND LEASE:

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 150' FEET SW FROM WELLHEAD
DEPTH TO GROUNDWATER: 25'± NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION:
SANDY SOIL. PIT WALLS Vertical. BLACK CONTAMINATED SOIL EVIDENT ON BASE & EAST WALL AGAINST SEPARATOR. COULD NOT EXCAVATE WITHOUT LOSING SEPARATOR.
SAMPLE ① COLLECTED WITH TRACKHOE.

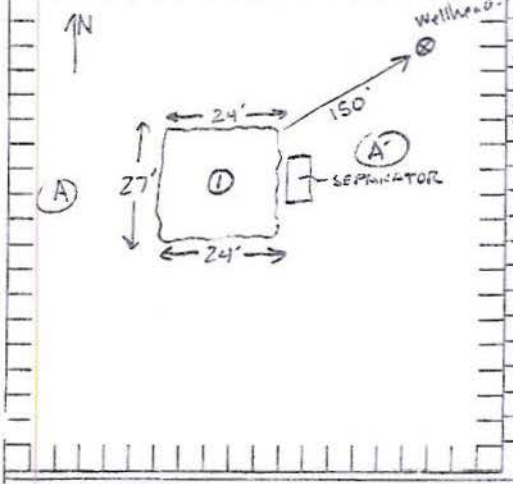
- CONDITIONAL CLOSURE -

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FT

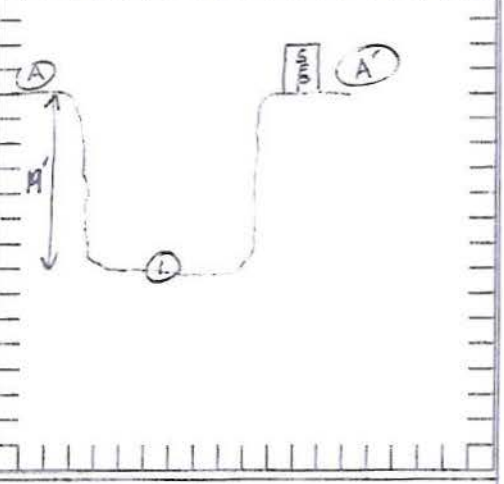
PIT PERIMETER



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 Base @ 19'	758
2	
3	
4	
5	
LAB	SAMPLES

PIT PROFILE



TRAVEL NOTES: CALLOUT: 0900 9/2/94 ONSITE: 1015 9/2/94

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Jan-09*

CLIENT: XTO Energy
Project: XTO Water Sampling
Lab Order: 0901306

Lab ID: 0901306-01 **Collection Date:** 1/20/2009 2:13:00 PM
Client Sample ID: ~~Eaton Gas Com MW-1~~ **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	1/24/2009 2:26:30 AM
Toluene	ND	1.0		µg/L	1	1/24/2009 2:26:30 AM
Ethylbenzene	ND	1.0		µg/L	1	1/24/2009 2:26:30 AM
Xylenes, Total	ND	2.0		µg/L	1	1/24/2009 2:26:30 AM
Surr: 4-Bromofluorobenzene	75.1	65.9-130		%REC	1	1/24/2009 2:26:30 AM

Lab ID: 0901306-02 **Collection Date:** 1/20/2009 3:57:00 PM
Client Sample ID: ~~Federal GC H#1 MW-1~~ **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	30	10		µg/L	10	1/27/2009 12:52:17 AM
Toluene	22	10		µg/L	10	1/27/2009 12:52:17 AM
Ethylbenzene	370	10		µg/L	10	1/27/2009 12:52:17 AM
Xylenes, Total	910	20		µg/L	10	1/27/2009 12:52:17 AM
Surr: 4-Bromofluorobenzene	94.2	65.9-130		%REC	10	1/27/2009 12:52:17 AM

Lab ID: 0901306-03 **Collection Date:** 1/20/2009 12:31:00 PM
Client Sample ID: P.O. Piphen 3G MW-2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	6.4	1.0		µg/L	1	1/24/2009 3:27:21 AM
Toluene	ND	1.0		µg/L	1	1/24/2009 3:27:21 AM
Ethylbenzene	ND	1.0		µg/L	1	1/24/2009 3:27:21 AM
Xylenes, Total	ND	2.0		µg/L	1	1/24/2009 3:27:21 AM
Surr: 4-Bromofluorobenzene	76.5	65.9-130		%REC	1	1/24/2009 3:27:21 AM

Lab ID: 0901306-04 **Collection Date:** 1/20/2009 4:14:00 PM
Client Sample ID: ~~Federal GC H#1 MW-2~~ **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	38	1.0		µg/L	1	1/24/2009 3:57:40 AM
Toluene	ND	1.0		µg/L	1	1/24/2009 3:57:40 AM
Ethylbenzene	85	1.0		µg/L	1	1/24/2009 3:57:40 AM
Xylenes, Total	49	2.0		µg/L	1	1/24/2009 3:57:40 AM
Surr: 4-Bromofluorobenzene	88.1	65.9-130		%REC	1	1/24/2009 3:57:40 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Jan-09*

CLIENT: XTO Energy
Project: XTO Water Sampling
Lab Order: 0901306

Lab ID: 0901306-05
Collection Date:
Client Sample ID: TRIP BLANK
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0		µg/L	1	1/24/2009 4:58:31 AM
Toluene	ND	1.0		µg/L	1	1/24/2009 4:58:31 AM
Ethylbenzene	ND	1.0		µg/L	1	1/24/2009 4:58:31 AM
Xylenes, Total	ND	2.0		µg/L	1	1/24/2009 4:58:31 AM
Surr: 4-Bromofluorobenzene	86.0	65.9-130		%REC	1	1/24/2009 4:58:31 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: XTO Water Sampling **Work Order:** 0901306

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: 5ML RB		*MBLK*			**Batch ID: R32139**		**Analysis Date: 1/23/2009 9:48:37 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						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name XTO ENERGY | Date Received: 1/22/2009

Work Order Number 0901306 | Received by: TLS

Checklist completed by: _____ 1/22/09 | Sample ID labels checked by: _____

Signature | Date | Initials

Matrix: | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐	
Custody seals intact on shipping container/cooler?	Yes	☑	No	☐	Not Present	☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes	☐	No	☐	N/A	☑	
Chain of custody present?	Yes	☑	No	☐			
Chain of custody signed when relinquished and received?	Yes	☑	No	☐			
Chain of custody agrees with sample labels?	Yes	☑	No	☐			
Samples in proper container/bottle?	Yes	☑	No	☐			
Sample containers intact?	Yes	☑	No	☐			
Sufficient sample volume for indicated test?	Yes	☑	No	☐			
All samples received within holding time?	Yes	☑	No	☐			
Water - VOA vials have zero headspace? No VOA vials submitted		☐	Yes	☑	No	☐	
Water - Preservation labels on bottle and cap match?	Yes	☐	No	☐	N/A	☑	
Water - pH acceptable upon receipt?	Yes	☐	No	☐	N/A	☑	

Container/Temp Blank temperature? 4° *<6° C Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

Chain-of-Custody Record

Client: XTO Energy
Kim Chaplin
Mailing Address: 382 CR 3100
Aztec NM 87410
Phone #: 505.333.3207
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: XTO Water Sampling
Project #:
Project Manager: Martin Nee
Sampler: Alex Hutt 303.319.9906
On Ice: ☒ Yes ☐ No
Sample Temperature: 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0901308
20Jan09	1413	AT	Eaton Gas Com MW1	glass/3	HCl	1
20Jan09	1557		Federal GC #1 MW1	glass/3	HCl	2
20Jan09	1231		P.O Ripken 3E MW-2	glass/3	HCl	3
20Jan09	1614		Federal GC #1 MW-2	glass/3	HCl	4
			Trip Blank	glass/2		5

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)		8021 (BTEX)			Air Bubbles (Y or N)
												X			
												X			
												X			
												X			

Date	Time	Relinquished by:	Received by:	Date	Time
22Jan09	0700	Alex Hutt			
Date:	Time:	Relinquished by:	Received by:	1/22/09	1410

Remarks: please email results to ala@rodestarservices.com aidh@rodestarservices.com and Kim Chaplin thank you!

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory, Inc.

Date: *11-May-09*

CLIENT: XTO Energy
Project: Ground Water
Lab Order: 0904460

Lab ID: 0904460-01 **Collection Date:** 4/29/2009 1:55:00 PM
Client Sample ID: PO Pipkin MW-2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	1.2	1.0		µg/L	1	5/6/2009 12:50:59 PM
Toluene	ND	1.0		µg/L	1	5/6/2009 12:50:59 PM
Ethylbenzene	ND	1.0		µg/L	1	5/6/2009 12:50:59 PM
Xylenes, Total	ND	2.0		µg/L	1	5/6/2009 12:50:59 PM
Surr: 4-Bromofluorobenzene	99.0	65.9-130		%REC	1	5/6/2009 12:50:59 PM

Lab ID: 0904460-02 **Collection Date:**
Client Sample ID: TRIP BLANK **Matrix:** TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	1.0		µg/L	1	5/5/2009 6:17:05 PM
Toluene	ND	1.0		µg/L	1	5/5/2009 6:17:05 PM
Ethylbenzene	ND	1.0		µg/L	1	5/5/2009 6:17:05 PM
Xylenes, Total	ND	2.0		µg/L	1	5/5/2009 6:17:05 PM
Surr: 4-Bromofluorobenzene	89.5	65.9-130		%REC	1	5/5/2009 6:17:05 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
RL	Reporting Limit

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water **Work Order:** 0904460

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: b 1		*MBLK*			Batch ID:	**R33544**	Analysis Date:		5/5/2009 9:53:27 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: b 1		*MBLK*			Batch ID:	**R33566**	Analysis Date:		5/6/2009 10:17:20 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 ID:	**R33544**	Analysis Date:		5/5/2009 8:20:21 PM
Benzene	21.07	µg/L	1.0	105	85.9	113			
Toluene	21.37	µg/L	1.0	107	86.4	113			
Ethylbenzene	21.56	µg/L	1.0	108	83.5	118			
Xylenes, Total	62.35	µg/L	2.0	104	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R33566**	Analysis Date:		5/6/2009 4:25:37 PM
Benzene	20.92	µg/L	1.0	105	85.9	113			
Toluene	21.43	µg/L	1.0	107	86.4	113			
Ethylbenzene	21.80	µg/L	1.0	109	83.5	118			
Xylenes, Total	63.60	µg/L	2.0	106	83.4	122			
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID:	**R33566**	Analysis Date:		5/6/2009 4:56:17 PM
Benzene	20.80	µg/L	1.0	104	85.9	113	0.556	27	
Toluene	21.35	µg/L	1.0	107	86.4	113	0.355	19	
Ethylbenzene	21.83	µg/L	1.0	109	83.5	118	0.147	10	
Xylenes, Total	63.02	µg/L	2.0	105	83.4	122	0.907	13	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name XTO ENERGY | Date Received: 4/30/2009

Work Order Number 0904460 | Received by: ARS

Checklist completed by: _____ (Signature) 4/30/09 (Date) | Sample ID labels checked by: al (Initials)

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☑	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	6°	<6° C *Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: XTO Energy
Kim Champlin
Mailing Address: 382 CR 3100
Aztec, NM 87410
Phone #: 505-333-3207
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: PO Pipkin Groundwater
Project #:
Project Manager: Ashley Ager
Sampler: Ashley Ager
On Ice: ☐ Yes ☐ No
Sample Temperature:

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www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	Lab No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
4-29-09	1355	GW	PO Pipkin MW-2	40ml/3	HCl	1	✓											
			TRIP BLANK	40ml/1	HCl	2	✓											

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
4-29-09	1700	Ashley Lager		4/30/09	8:55
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Please copy results to ALA@lodestarservices.com

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Jul-09*

CLIENT: XTO Energy
Project: Ground Water
Lab Order: 0907183

Lab ID: 0907183-05
Collection Date: 7/8/2009 11:57:00 AM
Client Sample ID: ~~OH Randel #7 MW-9~~
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	91	1.0		µg/L	1	7/14/2009 3:05:15 AM
Toluene	160	1.0	E	µg/L	1	7/14/2009 3:05:15 AM
Ethylbenzene	6.9	1.0		µg/L	1	7/14/2009 3:05:15 AM
Xylenes, Total	100	2.0		µg/L	1	7/14/2009 3:05:15 AM
Surr: 4-Bromofluorobenzene	97.9	65.9-130		%REC	1	7/14/2009 3:05:15 AM

Lab ID: 0907183-06
Collection Date: 7/8/2009 12:57:00 PM
Client Sample ID: PO Pipken 3E MW-2
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	5.2	1.0		µg/L	1	7/14/2009 2:07:00 PM
Toluene	ND	1.0		µg/L	1	7/14/2009 2:07:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/14/2009 2:07:00 PM
Xylenes, Total	ND	2.0		µg/L	1	7/14/2009 2:07:00 PM
Surr: 4-Bromofluorobenzene	92.5	65.9-130		%REC	1	7/14/2009 2:07:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

ent: XTO Energy
rroject: Ground Water **Work Order:** 0907183

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: 5ML RB		*MBLK*			**Batch ID:**	**R34504**	**Analysis Date:**	**7/13/2009 9:16:57 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 ID:**	**R34522**	**Analysis Date:**	**7/14/2009 9:32:33 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 ID:**	**R34504**	**Analysis Date:**	**7/13/2009 7:55:26 PM**	
Benzene	19.53	µg/L	1.0	97.7	85.9	113			
Toluene	19.16	µg/L	1.0	95.8	86.4	113			
Ethylbenzene	19.44	µg/L	1.0	97.2	83.5	118			
Xylenes, Total	57.95	µg/L	2.0	96.6	83.4	122			

ualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **XTO ENERGY** Date Received: **7/10/2009**

Work Order Number **0907183** Received by: **TLS**

Checklist completed by: _____ Signature _____ Date **7/16/09** Sample ID labels checked by: _____ Initials

Matrix: Carrier name: **UPS**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**2.8°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: XTO Energy
Kim Champlin
Mailing Address: 382 CR 3100
Aztec NM 87410
Phone #: 505-333-3207
email or Fax#:
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush
Project Name: Groundwater
Project #: ~~Ashley~~
Project Manager: Ashley Ager
Sampler:
On Ice: ☑ Yes ☐ No
Sample Temperature: 9.8

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www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 090193	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021 BTEX				Air Bubbles (Y or N)
8/31/09	15:20	AQ	Federal GC#1 MW-2	glass/3	HCl	1												✓				
8/31/09	1509	AQ	Federal GC#1 MW-1	glass/3	HCl	2												✓				
8/31/09	10:40	AQ	OH Randel #7 MW-8	glass/3	HCl	3												✓				
8/31/09	10:00	AQ	OH Randel #7 MW-7	glass/3	HCl	4												✓				
8/31/09	1157	AQ	OH Randel #7 MW-9	glass/1	HCl	5												✓				
8/31/09	1257	AQ	P.O. Pipkin 3E MW-2	glass/3	HCl	6												✓				

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/2/09	1700		7/10/09		930
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: OH Randel MW 9 - well went dry before more samples could be taken.
Please CC results to: ala@lodestarservices.com
adh@lodestarservices.com
Thank you!

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory, Inc.

Date: *23-Oct-09*

CLIENT: XTO Energy
Project: Ground Water
Lab Order: 0910381

Lab ID: 0910381-01 **Collection Date:** 10/20/2009 4:10:00 PM
Client Sample ID: ~~Federal GC H1-MW-1~~ **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	33	5.0		µg/L	5	10/23/2009 3:31:43 AM
Toluene	9.7	5.0		µg/L	5	10/23/2009 3:31:43 AM
Ethylbenzene	310	5.0		µg/L	5	10/23/2009 3:31:43 AM
Xylenes, Total	630	10		µg/L	5	10/23/2009 3:31:43 AM
Surr: 4-Bromofluorobenzene	99.0	65.9-130		%REC	5	10/23/2009 3:31:43 AM

Lab ID: 0910381-02 **Collection Date:** 10/20/2009 3:40:00 PM
Client Sample ID: ~~Federal GC H1-MW2~~ **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	20	1.0		µg/L	1	10/23/2009 4:32:21 AM
Toluene	ND	1.0		µg/L	1	10/23/2009 4:32:21 AM
Ethylbenzene	31	1.0		µg/L	1	10/23/2009 4:32:21 AM
Xylenes, Total	29	2.0		µg/L	1	10/23/2009 4:32:21 AM
Surr: 4-Bromofluorobenzene	90.7	65.9-130		%REC	1	10/23/2009 4:32:21 AM

Lab ID: 0910381-03 **Collection Date:** 10/20/2009 12:52:00 PM
Client Sample ID: PO Pipkin 3E MW2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/22/2009 3:29:39 AM
Toluene	ND	1.0		µg/L	1	10/22/2009 3:29:39 AM
Ethylbenzene	ND	1.0		µg/L	1	10/22/2009 3:29:39 AM
Xylenes, Total	ND	2.0		µg/L	1	10/22/2009 3:29:39 AM
Surr: 4-Bromofluorobenzene	85.2	65.9-130		%REC	1	10/22/2009 3:29:39 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
RL	Reporting Limit

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water **Work Order:** 0910381

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles											
Sample ID: 5ML RB		*MBLK*				Batch ID:	**R35834**	Analysis Date:	10/21/2009 9:47:21 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 ID:	**R35851**	Analysis Date:	10/22/2009 9:39:24 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 ID:	**R35834**	Analysis Date:	10/21/2009 8:55:24 PM		
Benzene	19.31	µg/L	1.0	20	0	96.6	85.9	113			
Toluene	19.64	µg/L	1.0	20	0	98.2	86.4	113			
Ethylbenzene	19.35	µg/L	1.0	20	0	96.8	83.5	118			
Xylenes, Total	56.92	µg/L	2.0	60	0	94.9	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*				Batch ID:	**R35851**	Analysis Date:	10/22/2009 8:57:15 PM		
Benzene	18.14	µg/L	1.0	20	0	90.7	85.9	113			
Toluene	18.42	µg/L	1.0	20	0	92.1	86.4	113			
Ethylbenzene	18.04	µg/L	1.0	20	0	90.2	83.5	118			
Xylenes, Total	54.09	µg/L	2.0	60	0	90.2	83.4	122			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **XTO ENERGY** Date Received: **10/21/2009**

Work Order Number **0910381** Received by: **ARS**

Checklist completed by: _____ 10/21/09 Sample ID labels checked by: _____
Signature Date Initials

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**6.8°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: XTO Energy
Kim Champlin
Mailing Address: 382 CR 3100
Aztec NM
Phone #: 505-333-3207
email or Fax#:
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name:
Ground water
Project #:
Project Manager:
Ashley Ager
Sampler: Devin Hanemann
On Ice: ☒ Yes ☐ No
Sample Temperature: 6.8

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Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0910381	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8021 BTEX				Air Bubbles (Y or N)
10-20-09	16:10	aq	Federal GC H1-MW-1	glass/3	$HgCl_2$	1												X				N
10-20-09	15:40	aq	Federal GC H1-MW2	glass/3	$HgCl_2$	2												X				N
10-20-09	12:52	aq	Popipkin 3E MW2	glass/3	HCl	3												X				N

Date	Time	Relinquished by:	Received by:	Date	Time
10-20-09	19:42			10/21/09	9:45
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Please forward results to: ala@lodestarservices.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.