

3R - 106

**ANNUAL
MONITORING
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 3R 409
- 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:

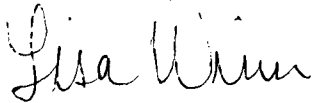
- Baca Gas Com A #1A- 3RP104
- Garcia Gas Com B #1- 3RP111
- Haney Gas Com B #1E- 3RP113
- Hare Gas Com B #1
- Hare Gas Com B #1E- 3RP384
- Hare Gas Com I #1
- Masden Gas Com #1E- 3RP120
- McDaniel Gas Com B #1E- 3RP121
- Stedje Gas Com #1- 3RP128
- Sullivan Frame A #1E- 3RP130

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

3R 106

XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2007

***BRUINGTON GC #1
(E) SECTION 14 – T29N – R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO***

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

January 2008

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Appendices

Table 1:	Summary Groundwater Laboratory Results
Table 2:	General Water Chemistry Laboratory Results
Figure 1:	Site Map
Figures 2 – 12:	Potentiometric Surface Diagrams
Figures 13 – 18:	Geologic Logs and Well Completion Diagrams
Attachment 1:	2006 & 2007 Laboratory Reports
Attachment 2:	Historical Pit Closures (1993)
Attachment 3:	Risk Based Closure Request (04/94)
Attachment 4:	Test Holes and Cross Sections (03/06)

2007 XTO GROUNDWATER REPORT

BRUINGTON GAS COM #1

SITE DETAILS

LEGALS - TWN: 29N

RNG: 11W

SEC: 14

UNIT: E

NMOCD HAZARD RANKING: 20

LAND TYPE: FEE

PREVIOUS ACTIVITIES

Excavation: Nov-93 (4000 cy)

Monitoring Wells: Jun-96

Quarterly Sampling Initiated: Jul-96

Additional Monitoring Wells: Feb-01/Jul-03/May-07

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. A summary of general water quality data from 2000 is presented as Table 2. Copies of the laboratory reports and associated quality assurance/quality control data for 2007 are presented as Attachment 1.

POTENTIOMETRIC SURFACE DIAGRAMS

Field data collected during site monitoring activities in 2007 indicate a groundwater flow that is primarily affected by the adjacent unlined irrigation ditch. When the ditch is dry during the winter months the groundwater gradient near the center and eastern portion of the site appears to flow towards a small depression in the water table near MW-5. Water directly adjacent to the ditch flows steeply towards the ditch. During the spring and summer months, when flow within the irrigation ditch is high, the small depression appears to be absent and groundwater at the site is essentially level, but flows slightly away from the ditch. Figures 2 - 12 illustrate the estimated groundwater gradients during 2006 and 2007.

ANNUAL GROUNDWATER REMEDIATION REPORTS

The 2005 annual groundwater report was submitted to New Mexico Oil Conservation Division (NMOCD) in January 2006 proposing possible additional excavation and consideration of an situ remediation system.

The 2006 annual groundwater report was submitted to NMOCD in February 2007, proposing collection of groundwater levels during months when the unlined Citizen's Irrigation Ditch is not flowing to confirm the groundwater gradients and better understand the influence of the ditch within the project area; and continue to evaluate appropriate remediation technologies and other potential sources of groundwater impacts.

2007 ACTIVITIES

Water levels and dissolved oxygen levels were collected from monitoring wells every other month for 2007. Groundwater samples were collected quarterly from monitoring wells MW-1R, MW-2R, MW-3R, MW-4, MW-5, MW-6, and MW-7. Laboratory results from MW-1R, MW-3R, and MW-4 indicate benzene, toluene, ethyl benzene and total xylenes (BTEX) constituents are below standards or not detectable. Laboratory results

2007 XTO GROUNDWATER REPORT

from MW-2R, MW-5, MW-6, and MW-7 have indicated elevated concentrations of BTEX constituents. Monitoring well numbered MW-8 was installed in May 2007 adjacent to a former pit not owned by XTO and laboratory results indicate elevated BTEX levels.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

Bore/Test Hole Reports are presented as Figures 13-18 representing drilling that occurred on site in February 2001, July 2003, and May 2007.

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

Historical records indicate an earthen blow pit was excavated and backfilled approximately 125 feet south of the wellhead in October 1993. The pit closure report indicates the limits of excavation were approximately 40 feet by 75 feet and no more than 20 feet maximum depth (Attachment 2). In November 1993 additional excavation work was done combining the previously excavated blow pit and an earthen separator pit. Field notes state the excavation was 120 to 150 feet south-southwest of the wellhead (Figure 1) encompassing the original excavation. The second excavation was "L" shaped with the two longest sides estimated at 120 feet by 150 feet (Attachment 2). Site diagrams of both excavation events show the majority of the excavated materials were southwest of the wellhead.

An approved risk-based closure request (Attachment 3) was discovered in the NMOCD records for an earthen production pit located east of the earthen pits previously excavated by Amoco Production Company (Amoco). According to the pit closure form the dimensions of the pit were 17 feet by 16 feet and 12 feet below ground surface. The report indicates elevated field screening measurements and heavy staining on walls and floor.

In January 1998 XTO Energy Inc. (XTO) acquired the Bruington Gas Com #1 from Amoco Production Company. XTO installed additional monitoring wells and continued to monitor the groundwater for natural attenuation.

In 2005 XTO initiated further investigations of subsurface conditions. Test holes and trenches were dug to evaluate whether historically contaminated soils were fully removed and if the soil may continue to contribute hydrocarbons to the groundwater. In March 2006 limited field studies were conducted indicating vadose zone impact at depths below 15 feet (Attachment 4). This appears to be consistent with the most concentrated band of groundwater impacts around MW-2R, MW-5, MW-6 and MW-7.

Monitoring well numbered MW-8, which was installed adjacent to a former pit owned and closed by El Paso Field Services (EPFS) revealed impacted soil from 12-25 feet below ground surface. The NMOCD approved a risk based closure in 1994 based on bedrock encountered at 22 feet below ground surface and depth to groundwater (Attachment 3). The presence of impacted soil and seasonal groundwater gradients suggests the former pit could be a potential source impacting groundwater at this site.

2007 XTO GROUNDWATER REPORT

RECOMMENDATIONS

- Continued site investigation including dissolved oxygen, water levels, and gradient information every other month.
- Quarterly sampling is proposed at all monitoring wells.
- Request the NMOCD encourage EPFS to conduct an evaluation of groundwater associated with the Risk Based Closure of the production pit at this site.

XTO ENERGY INC. GROUNDWATER LAB RESULTS

[illegible]

BRUINGTON GC #1- BLOW PIT
UNIT E, SEC. 14, T29N, R11W



XTO ENERGY INC. GROUNDWATER LAB RESULTS

**BRUINGTON GC #1- BLOW PIT
UNIT E, SEC. 14, T29N, R11W**

Sample Date	Monitor Well No.	DTW (ft)	TD (ft)	Product (ft)	Dissolved Oxygen (mg/L)	BTEX EPA Method 801 (ppb)			
						Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)
17-May-01	MW #6	19.47	25.00			28,000	15,000	1,000	9,400
24-Sep-01		14.46				22,000	6,000	1,100	6,900
27-Jun-02		16.68				28,000	16,000	990	9,800
25-Jun-03		18.94				22,000	16,000	ND	6,300
18-Jun-04		18.71				23,000	19,000	1,000	8,800
27-Jun-05		17.09				28,000	20,000	1,200	9,600
25-Apr-06		19.28				26,000	25,000	1,700	8,900
27-Nov-06		17.08	25.22		0.06	22,000	23,000	990	9,700
23-Feb-07		18.92	25.22		0.28	No Samples Collected			
28-Mar-07		20.36	25.22		0.23	25,000	27,000	1,900	19,000
11-Apr-07					0.11	No Samples Collected			
13-Jun-07		16.87	25.22		0.18	21,000	19,000	780	7,900
21-Aug-07		16.04	25.22		0.33	No Samples Collected			
25-Sep-07		15.98	25.22		0.34	27,000	21,000	1,200	11,000
20-Dec-07		18.83	25.22		0.33				
25-Aug-03	MW #7	17.93	25.00			18,000	11,000	930	8,200
18-Jun-04		18.87				11,000	7,800	670	5,000
27-Jun-05		17.40				14,000	8,700	880	5,000
25-Apr-06		19.14				19,000	6,600	1,200	5,100
27-Nov-06		16.94	25.34		0.69	6,100	4,400	420	2,500
23-Feb-07		17.71	25.34		0.71	No Samples Collected			
28-Mar-07		18.62	25.34		0.70	11,000	9,500	1,100	7,500
11-Apr-07					0.06	No Samples Collected			
13-Jun-07		16.75	25.34		0.43	3,800	2,000	320	1,700
21-Aug-07		15.86	25.34		0.36	No Samples Collected			
25-Sep-07		15.65	25.34		0.34	2,900	2,400	210	1,400
20-Dec-07		17.14	25.34		0.36				
13-Jun-07	MW #8	19.19	26.37		0.40	24,000	24,000	350	10,000
21-Aug-07		18.30	26.37		0.61	No Samples Collected			
25-Sep-07		18.00	26.37		0.57	18,000	4,000	980	9,100
20-Dec-07		18.81	26.37		0.42				
NMWQCC GROUNDWATER STANDARDS						10	750	750	620

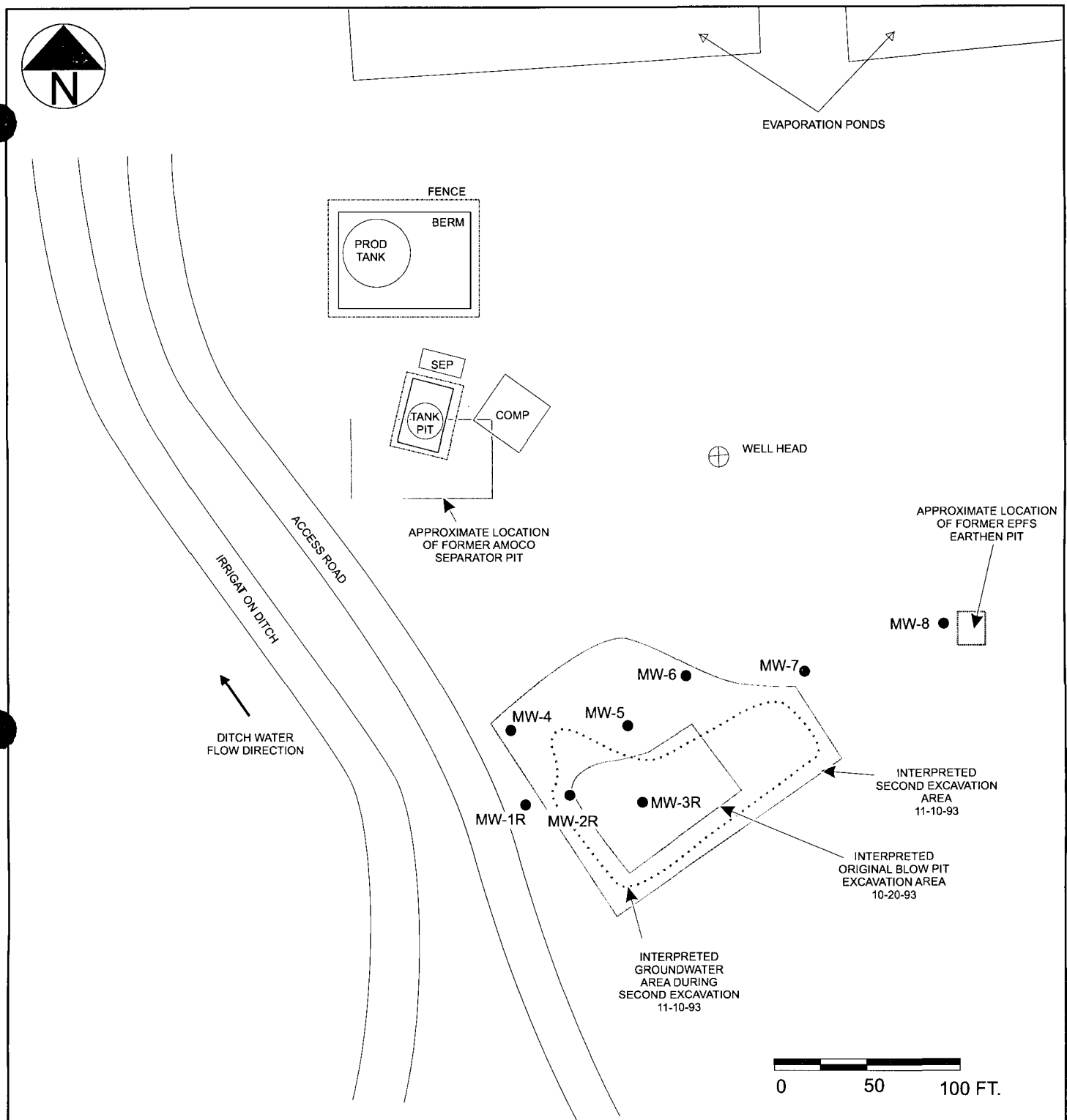
TABLE 2

XTO ENERGY INC. GROUNDWATER LAB RESULTS

BRUINGTON GC #1- BLOW PIT UNIT E, SEC. 14, T29N, R11W
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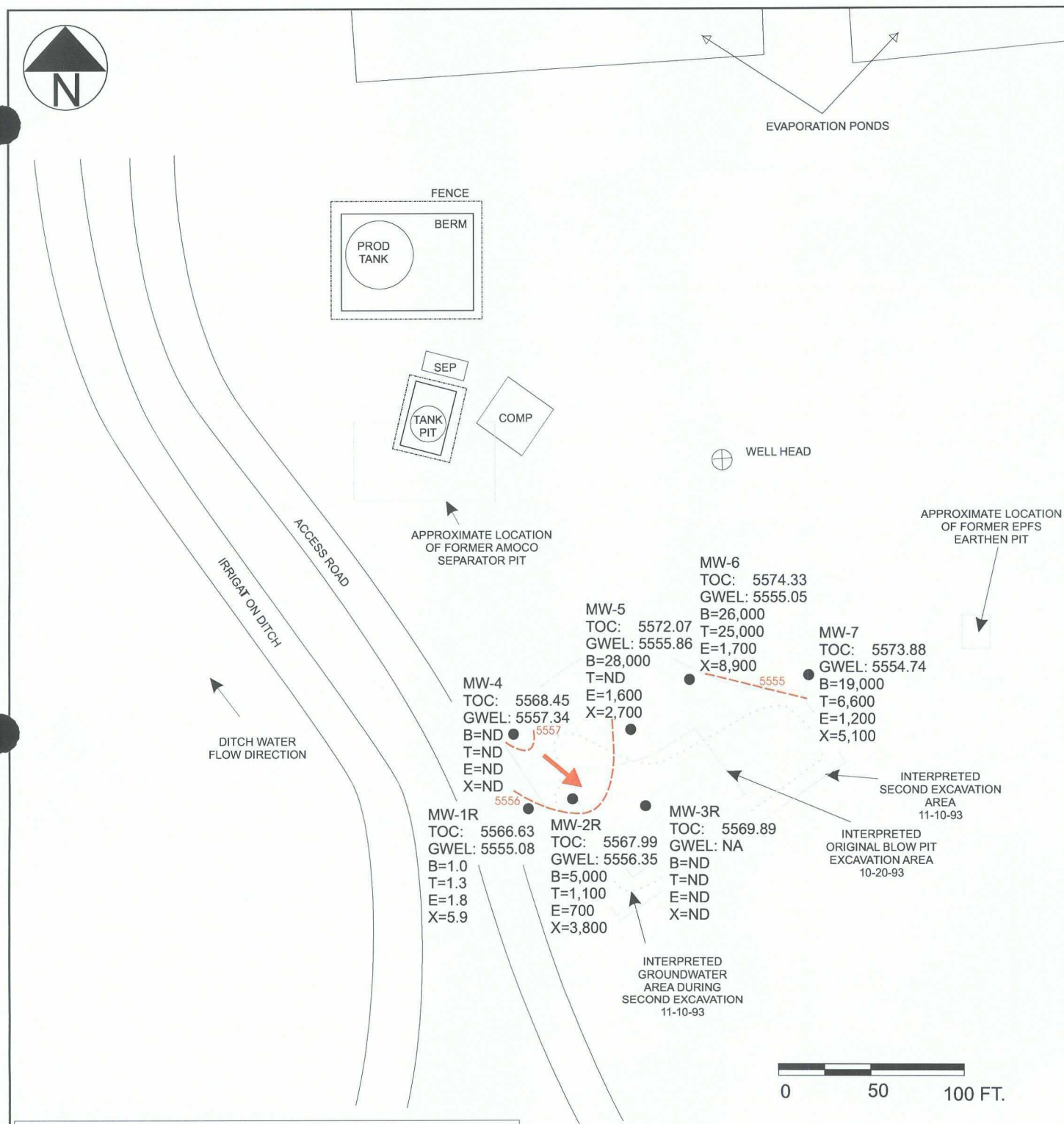
Sample Date: June 29, 2000

PARAMETERS	MW #1R	MW #2R	MW #3	UNITS
LAB Ph	6.72	7.2	6.96	s.u.
LAB CONDUCTIVITY @ 25 C	8,720	15,100	17,600	umhos/cm
TOTAL DISSOLVED SOLIDS @ 180 C	4,350	7,530	8,750	mg/L
TOTAL DISSOLVED SOLIDS (Calc)	4,310	7,490	8,700	mg/L
SODIUM ABSORPTION RATIO	7.4	32.9	25.1	ratio
TOTAL ALKALINITY AS CaCO3	562	3,120	1,050	mg/L
TOTAL HARDNESS AS CaCO3	1,700	940	1,520	mg/L
BICARBONATE AS HCO3	562	3,120	1,050	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 NITROGEN	0.6	3.6	0.9	mg/L
NITRITE NITROGEN	0.028	0.284	0.048	mg/L
CHLORIDE	28.2	1040	118	mg/L
FLUORIDE	1.54	0.76	3.2	mg/L
PHOSPHATE	1.1	2.7	5.6	mg/L
SULFATE	2,610	1,880	5,150	mg/L
IRON	14.4	2.04	16.2	mg/L
CALCIUM	539	295	418	mg/L
MAGNESIUM	85.5	49.3	115	mg/L
POTASSIUM	1.0	2.1	2.9	mg/L
SODIUM	700	2,320	2,250	mg/L
CATION/ANION DIFFERENCE	0.1	0.05	0.12	%



NOTES:
 1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.

 Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	BRUINGTON GAS COM #1 SW/4 NW/4 SEC. 14, T29N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 12/06/07	SITE MAP FIGURE 1
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NOTES:

- Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.
- A groundwater elevation from MW-3 is not available.

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Farmington, NM 87499

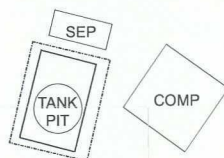
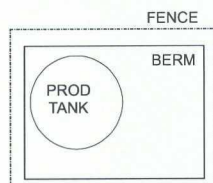
BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
FIGURE 2
04/25/2006



EVAPORATION PONDS



APPROXIMATE LOCATION
OF FORMER AMOCO
SEPARATOR PIT

WELL HEAD

APPROXIMATE LOCATION
OF FORMER EPFS
EARTHEN PIT

DITCH WATER
FLOW DIRECTION
(EMPTY)

ACCESS ROAD
IRRIGATOR DITCH

MW-4
TOC: 5568.45
GWEL: 5556.04
B=ND
T=ND
E=ND
X=ND

MW-5
TOC: 5572.07
GWEL: 5556.83
B=22,000
T=ND
E=630
X=1,700

MW-6
TOC: 5574.33
GWEL: 5557.25
B=22,000
T=23,000
E=990
X=9,700

MW-7
TOC: 5573.88
GWEL: 5556.94
B=6,100
T=4,400
E=420
X=2,500

MW-1R
TOC: 5566.63
GWEL: 5553.46
B=ND
T=ND
E=ND
X=ND

MW-2R
TOC: 5567.99
GWEL: 5556.67
B=12,000
T=1,600
E=690
X=3,900

MW-3R
TOC: 5569.89
GWEL: 5557.29
B=ND
T=ND
E=ND
X=ND

INTERPRETED
SECOND EXCAVATION
AREA
11-10-93

INTERPRETED
ORIGINAL BLOW PIT
EXCAVATION AREA
10-20-93

INTERPRETED
GROUNDWATER
AREA DURING
SECOND EXCAVATION
11-10-93

0 50 100 FT.

TOC = TOP OF CASING ELEVATION
GWEL = GROUNDWATER ELEVATION
--- = INFERRED GROUNDWATER CONTOUR LINE
B = BENZENE (ug/L)
T = TOLUENE (ug/L)
E = ETHYLBENZENE (ug/L)
X = TOTAL XYLENES (ug/L)
ND = NOT DETECTED

NOTES:

1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.

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PO Box 3861
Farmington, NM 87499

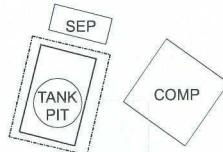
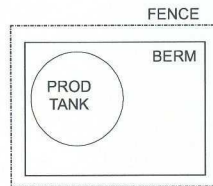
BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
11/27/2006
FIGURE 3



EVAPORATION PONDS



APPROXIMATE LOCATION
OF FORMER AMOCO
SEPARATOR PIT

APPROXIMATE LOCATION
OF FORMER EPFS
EARTHEN PIT

ACCESS ROAD
IRRIGATOR DITCH
DITCH WATER
FLOW DIRECTION
(EMPTY)

MW-4
TOC: 5568.45
GWEL: 5554.83

MW-5
TOC: 5572.07
GWEL: 5553.15

MW-6
TOC: 5574.33
GWEL: 5555.41

MW-7
TOC: 5573.88
GWEL: 5556.17

MW-1R
TOC: 5566.63
GWEL: 5552.39

MW-2R
TOC: 5567.99
GWEL: 5555.44

MW-3R
TOC: 5569.89
GWEL: 5555.56

INTERPRETED
SECOND EXCAVATION
AREA
11-10-93

INTERPRETED
ORIGINAL BLOW PIT
EXCAVATION AREA
10-20-93

INTERPRETED
GROUNDWATER
AREA DURING
SECOND EXCAVATION
11-10-93

0 50 100 FT.

TOC = TOP OF CASING ELEVATION
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B = BENZENE (ug/L)
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NOTES:

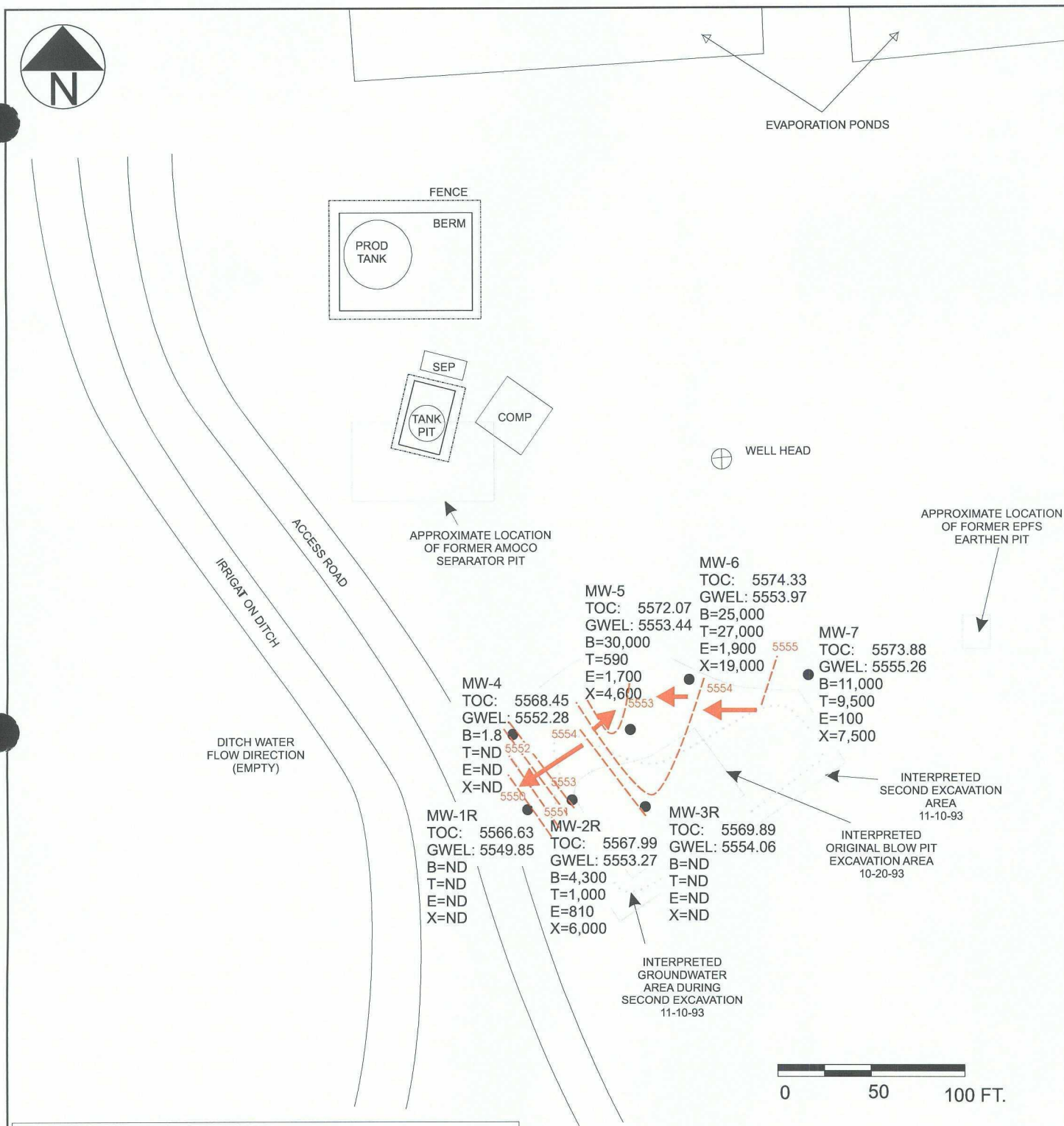
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Farmington, NM 87499

BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
FIGURE 4
02/23/2007



TOC = TOP OF CASING ELEVATION
 GWEL = GROUNDWATER ELEVATION
 - - - = INFERRED GROUNDWATER CONTOUR LINE
 B = BENZENE (ug/L)
 T = TOLUENE (ug/L)
 E = ETHYLBENZENE (ug/L)
 X = TOTAL XYLENES (ug/L)
 ND = NOT DETECTED

NOTES:

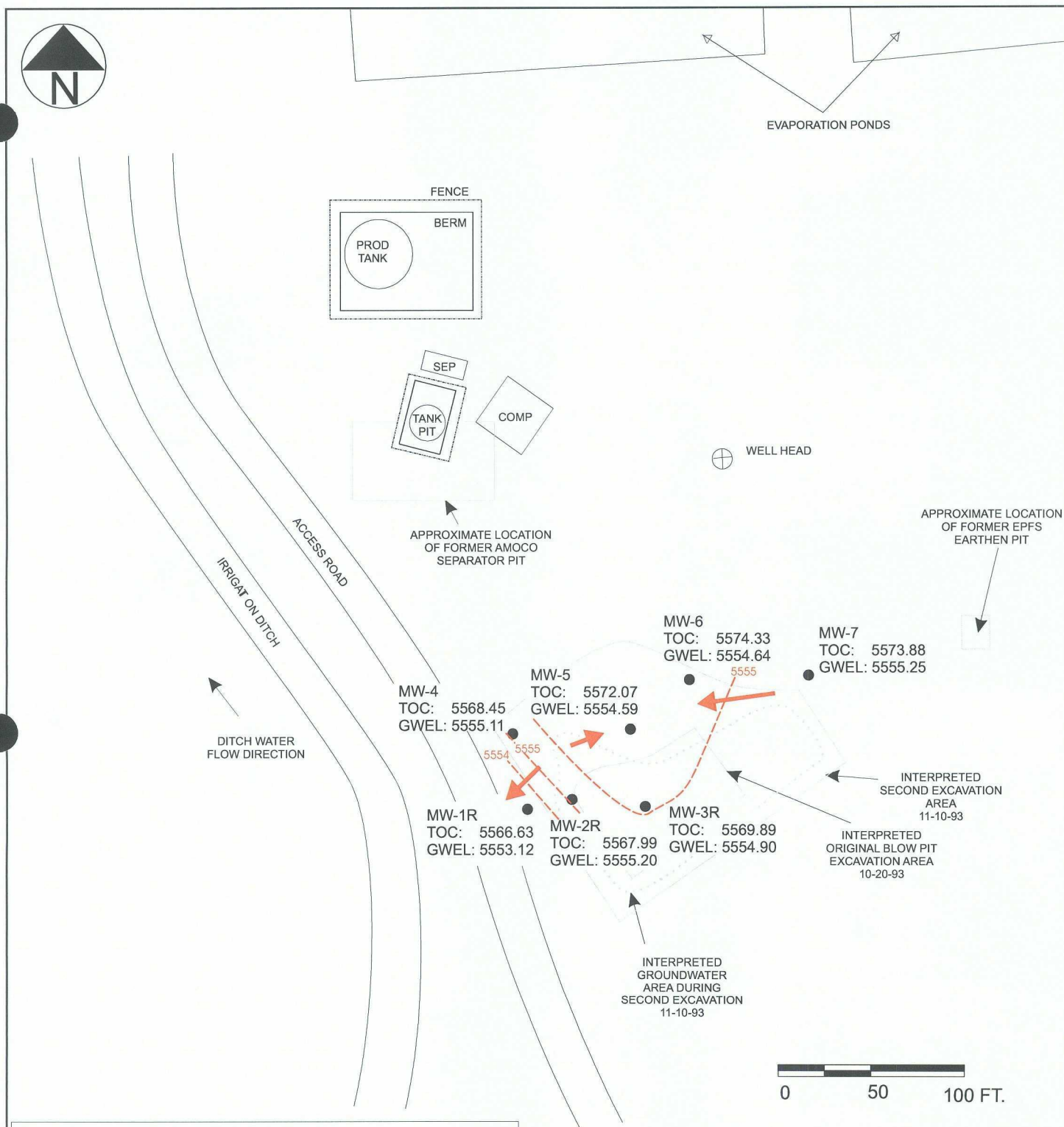
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 Farmington, NM 87499

BRUINGTON GAS COM #1
 SW/4 NW/4 SEC. 14, T29N, R11W
 SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
 DRAWN BY: ALA
 REVISED: 12/06/07

GROUNDWATER GRADIENT
 MAP
 FIGURE 5
 03/28/2007



NOTES:

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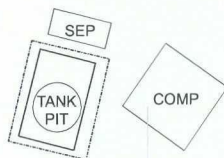
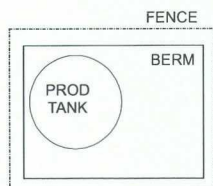
BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
FIGURE 6
04/11/2007



EVAPORATION PONDS



APPROXIMATE LOCATION
OF FORMER AMOCO
SEPARATOR PIT

APPROXIMATE LOCATION
OF FORMER EPFS
EARTHEN PIT

IRRIGATOR DITCH
ACCESS ROAD
DITCH WATER
FLOW DIRECTION

MW-4
TOC: 5568.45
GWEL: 5558.58
B=ND
T=ND
E=ND
X=ND

MW-1R
TOC: 5566.63
GWEL: 5559.12
B=ND
T=ND
E=ND
X=ND

MW-2R
TOC: 5567.99
GWEL: 5558.05
B=13,000
T=1,100
E=720
X=4,000

MW-5
TOC: 5572.07
GWEL: 5557.90
B=32,000
T=91
E=940
X=2,000

MW-6
TOC: 5574.33
GWEL: 5557.46
B=21,000
T=19,000
E=780
X=7,900

MW-7
TOC: 5573.88
GWEL: 5557.13
B=3,800
T=2,000
E=320
X=1,700

MW-8
TOC: 5576.04
GWEL: 5556.85
B=24,000
T=24,000
E=350
X=10,000

INTERPRETED
SECOND EXCAVATION
AREA
11-10-93

INTERPRETED
ORIGINAL BLOW PIT
EXCAVATION AREA
10-20-93

INTERPRETED
GROUNDWATER
AREA DURING
SECOND EXCAVATION
11-10-93

0 50 100 FT.

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NOTES:

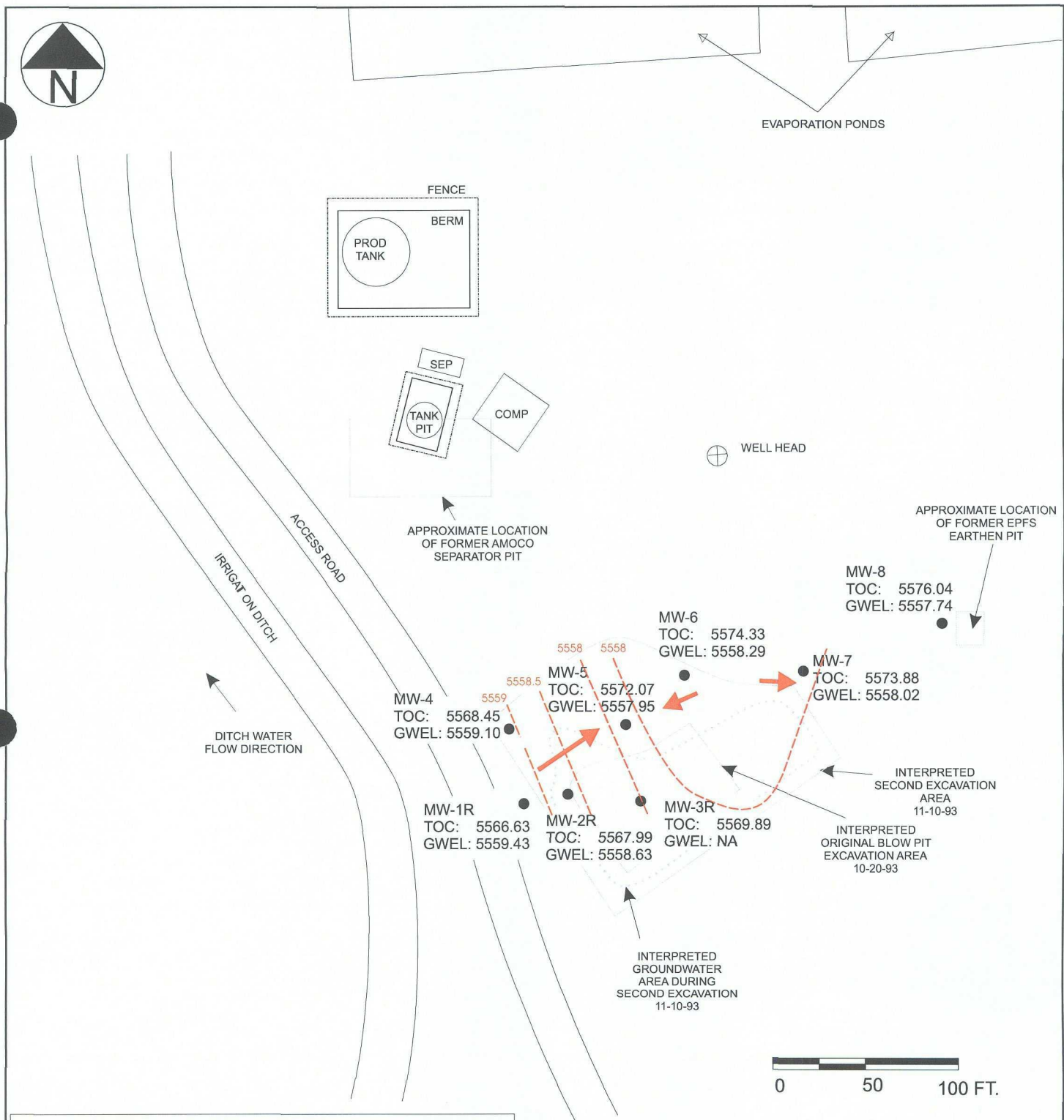
1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.
2. MW-3 was damaged and a water level could not be measured.

Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
FIGURE 7
06/13/2007



TOC = TOP OF CASING ELEVATION
 GWEL = GROUNDWATER ELEVATION
 - - - = INFERRED GROUNDWATER CONTOUR LINE
 B = BENZENE (ug/L)
 T = TOLUENE (ug/L)
 E = ETHYLBENZENE (ug/L)
 X = TOTAL XYLENES (ug/L)
 ND = NOT DETECTED

NOTES:

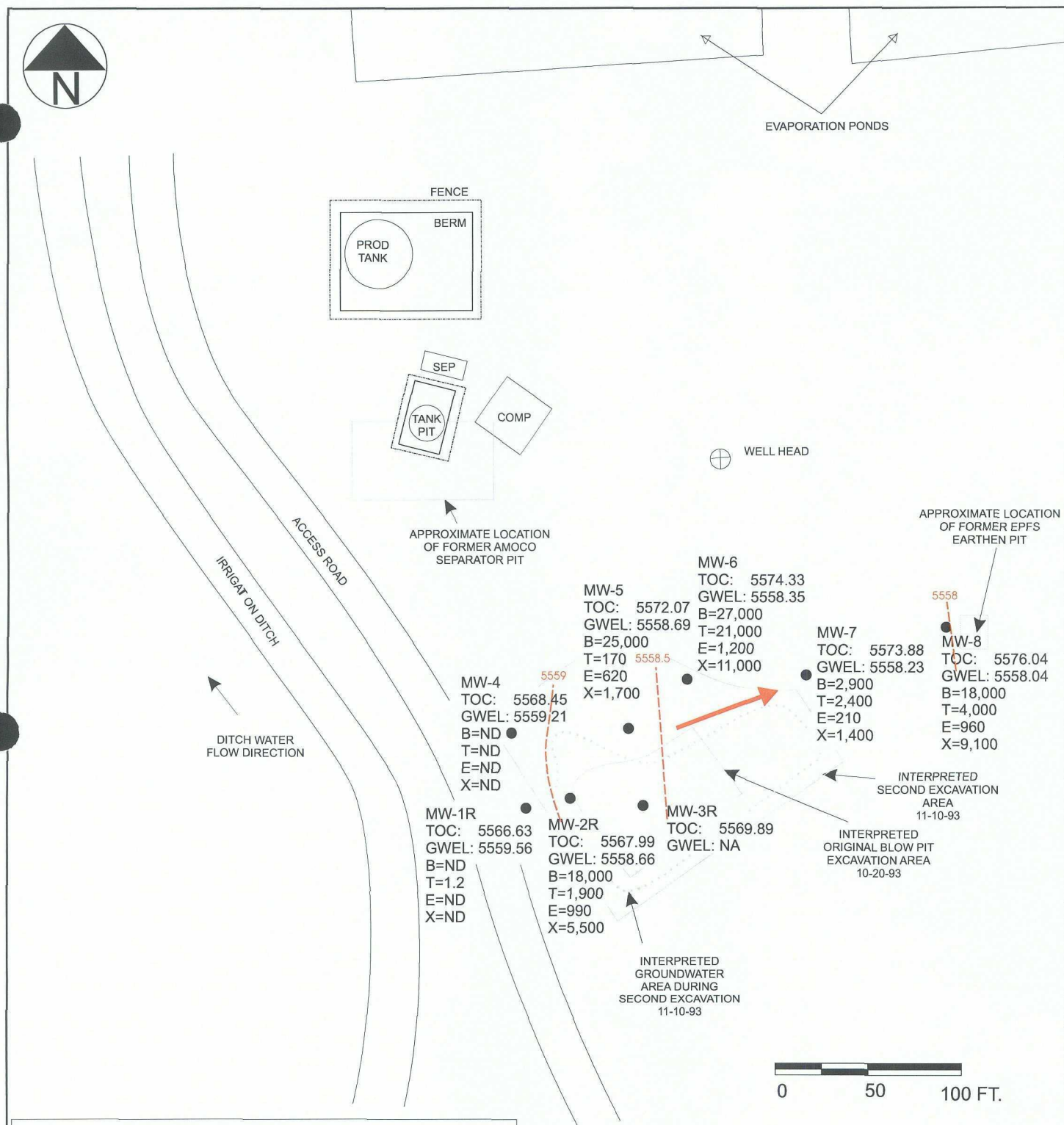
1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.
2. MW-3 was damaged and a water level could not be measured.

Lodestar Services, Inc
 PO Box 3861
 Farmington, NM 87499

BRUINGTON GAS COM #1
 SW/4 NW/4 SEC. 14, T29N, R11W
 SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
 DRAWN BY: ALA
 REVISED: 12/06/07

GROUNDWATER GRADIENT
 MAP
 FIGURE 8
 08/21/2007



NOTES:

- Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.
- MW-3 was damaged and a water level could not be measured.

Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

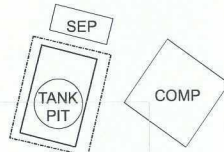
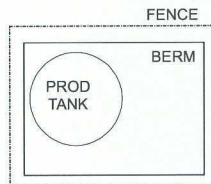
BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

**GROUNDWATER GRADIENT
MAP**
FIGURE 9
09/25/2007



EVAPORATION PONDS



APPROXIMATE LOCATION
OF FORMER AMOCO
SEPARATOR PIT



APPROXIMATE LOCATION
OF FORMER EPFS
EARTHEN PIT
5558.25

MW-8
TOC: 5576.04
GWEL: 5558.30

MW-7
TOC: 5573.88
GWEL: 5558.42

MW-6
TOC: 5574.33
GWEL: 5558.42

MW-5
TOC: 5572.07
GWEL: 5558.50

MW-4
TOC: 5568.45
GWEL: 5558.70

DITCH WATER
FLOW DIRECTION

MW-1R
TOC: 5566.63
GWEL: 5558.97

MW-2R
TOC: 5567.99
GWEL: 5558.54

MW-3R
TOC: 5569.89
GWEL: NA

INTERPRETED
SECOND EXCAVATION
AREA
11-10-93

INTERPRETED
ORIGINAL BLOW PIT
EXCAVATION AREA
10-20-93

INTERPRETED
GROUNDWATER
AREA DURING
SECOND EXCAVATION
11-10-93

0 50 100 FT.

TOC = TOP OF CASING ELEVATION
GWEL = GROUNDWATER ELEVATION
--- = INFERRED GROUNDWATER CONTOUR LINE
B = BENZENE (ug/L)
T = TOLUENE (ug/L)
E = ETHYLBENZENE (ug/L)
X = TOTAL XYLENES (ug/L)
ND = NOT DETECTED

NOTES:

1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.
2. MW-3 was damaged and a water level could not be measured.

Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

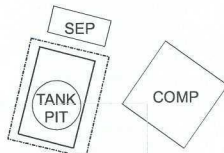
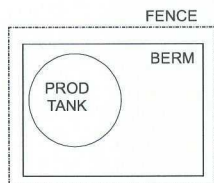
BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
FIGURE 10
10/30/2007



EVAPORATION PONDS



APPROXIMATE LOCATION
OF FORMER AMOCO
SEPARATOR PIT



APPROXIMATE LOCATION
OF FORMER EPFS
EARTHEN PIT

ACCESS ROAD
IRRIGATOR DITCH
DITCH WATER
FLOW DIRECTION
(EMPTY)

MW-4
TOC: 5568.45
GWEL: 5555.02

MW-1R
TOC: 5566.63
GWEL: 5555.13

MW-5
TOC: 5572.07
GWEL: 5555.94

MW-2R
TOC: 5567.99
GWEL: 5555.97

MW-6
TOC: 5574.33
GWEL: 5556.54

MW-3R
TOC: 5569.90
GWEL: 5556.76

MW-8
TOC: 5576.04
GWEL: 5557.74

MW-7
TOC: 5573.88
GWEL: 5557.42

INTERPRETED
SECOND EXCAVATION
AREA
11-10-93

INTERPRETED
ORIGINAL BLOW PIT
EXCAVATION AREA
10-20-93

INTERPRETED
GROUNDWATER
AREA DURING
SECOND EXCAVATION
11-10-93

0 50 100 FT.

TOC = TOP OF CASING ELEVATION
GWEL = GROUNDWATER ELEVATION
--- = INFERRED GROUNDWATER CONTOUR LINE
B = BENZENE (ug/L)
T = TOLUENE (ug/L)
E = ETHYLBENZENE (ug/L)
X = TOTAL XYLENES (ug/L)
ND = NOT DETECTED

NOTES:

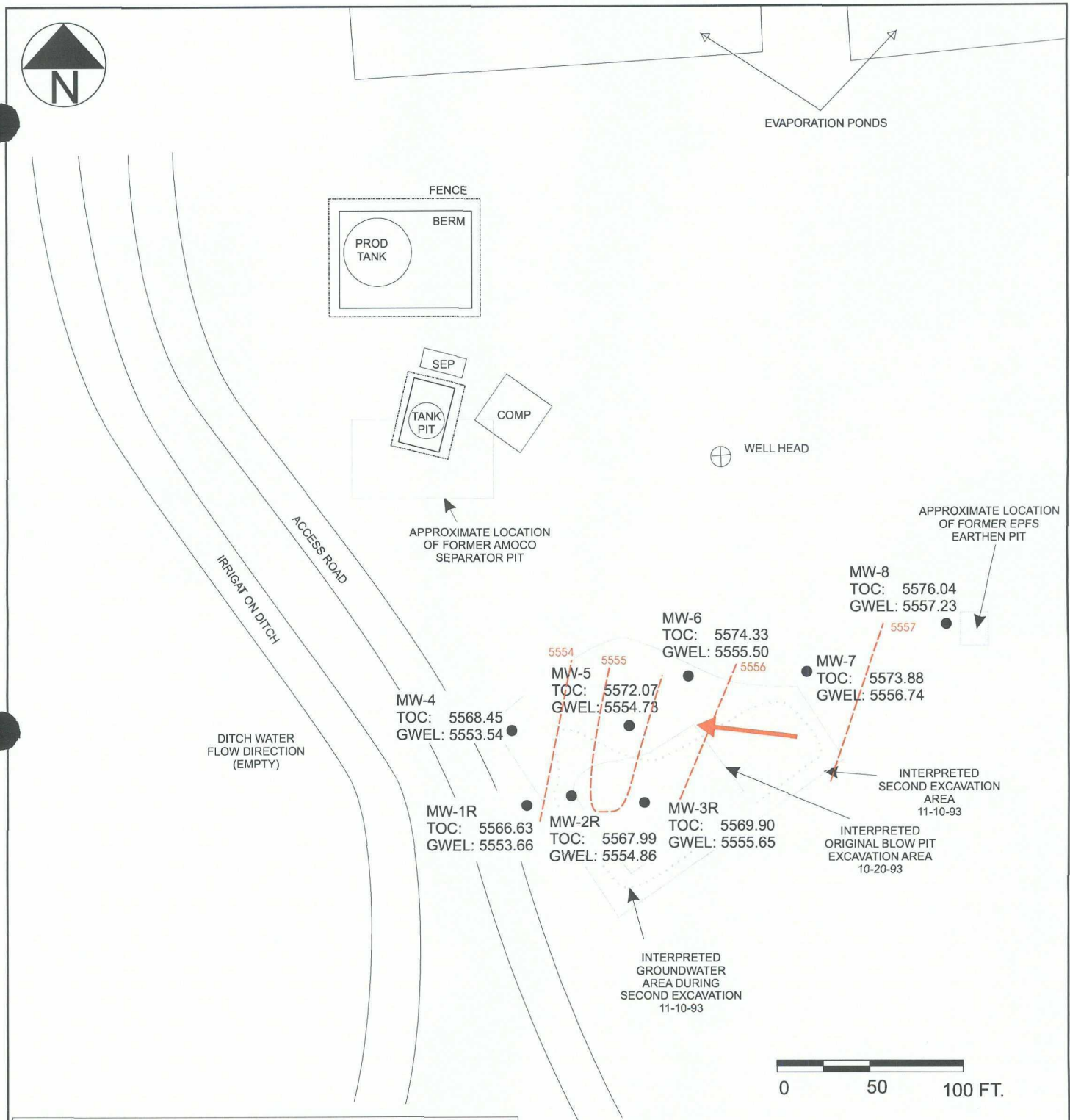
1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.

Lodestar Services, Inc
PO Box 3861
Farmington, NM 87499

BRUINGTON GAS COM #1
SW/4 NW/4 SEC. 14, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
DRAWN BY: ALA
REVISED: 12/06/07

GROUNDWATER GRADIENT
MAP
FIGURE 11
11/27/2007



TOC = TOP OF CASING ELEVATION
 GWEL = GROUNDWATER ELEVATION
 - - - = INFERRED GROUNDWATER CONTOUR LINE
 B = BENZENE (ug/L)
 T = TOLUENE (ug/L)
 E = ETHYLBENZENE (ug/L)
 X = TOTAL XYLENES (ug/L)
 ND = NOT DETECTED

NOTES:

1. Monitoring well locations are only as accurate as the GPS instruments and software used to plot their positions. All other structures displayed on the site map are solely for reference and may not be to scale.

Lodestar Services, Inc
 PO Box 3861
 Farmington, NM 87499

BRUINGTON GAS COM #1
 SW/4 NW/4 SEC. 14, T29N, R11W
 SAN JUAN COUNTY, NEW MEXICO

PROJECT: XTO GROUND WATER
 DRAWN BY: ALA
 REVISED: 12/23/07

GROUNDWATER GRADIENT
 MAP
 FIGURE 12
 12/20/2007

FIGURE 13

BLAGG ENGINEERING, INC.

P.O. BOX 87

BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

LOCATION NAME: **BRUINGTON GC # 1**
 CLIENT: **XTO ENERGY INC.**
 CONTRACTOR: **BLAGG ENGINEERING, INC.**
 EQUIPMENT USED: **MOBILE DRILL RIG (EARTH PROBE)**
 BORING LOCATION: **N30W, 39.5 FEET FROM MW # 2R.**

BORING #..... **BH - 4**
 MW #..... **4**
 PAGE #..... **4**
 DATE STARTED **2/20/01**
 DATE FINISHED **2/20/01**
 OPERATOR..... **JCB**
 PREPARED BY **NJV**

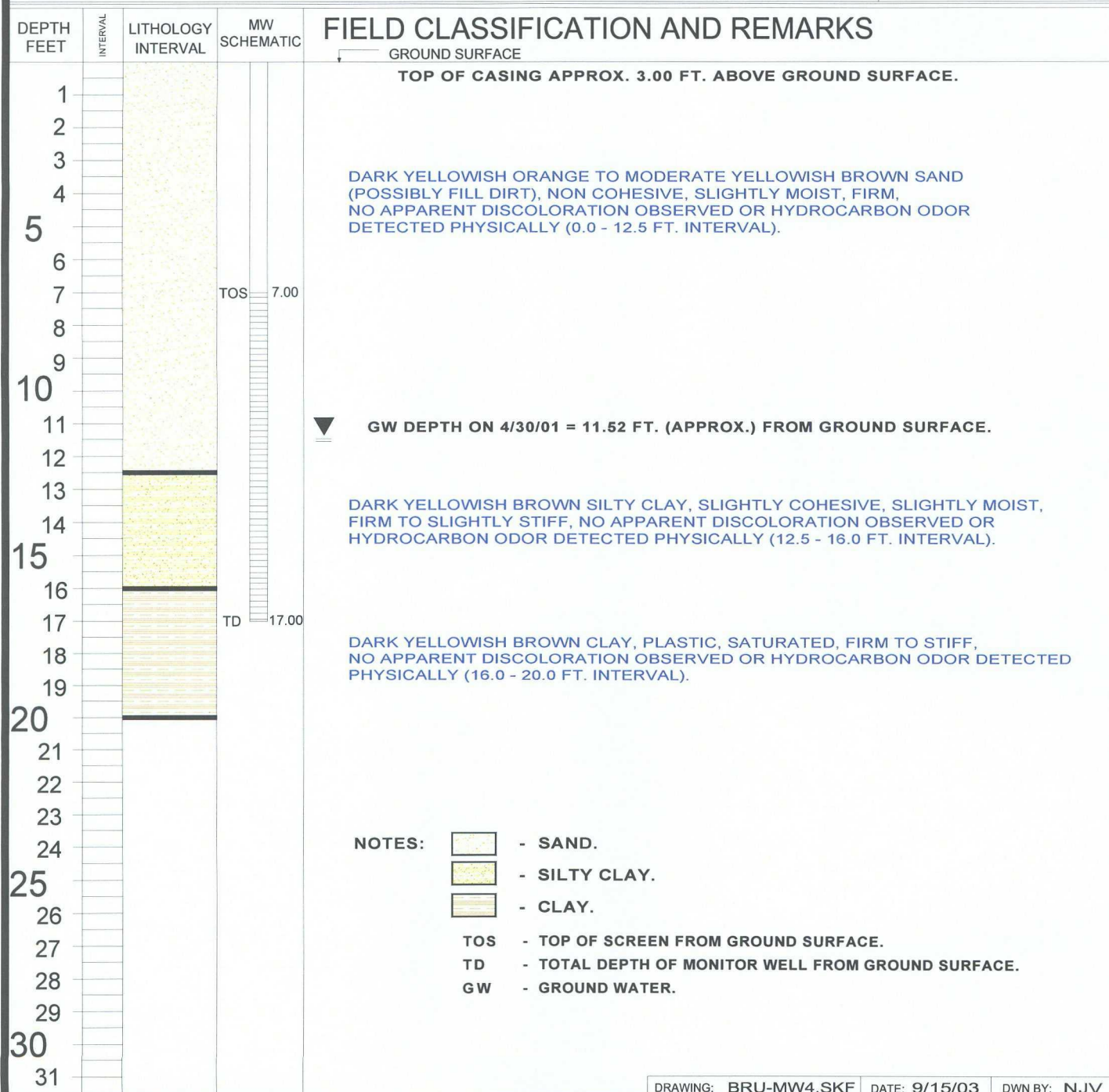


FIGURE 14

BLAGG ENGINEERING, INC.

P.O. BOX 87

BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

BORING #.....	BH - 5
MW #.....	5
PAGE #.....	5
DATE STARTED	2/20/01
DATE FINISHED	2/20/01
OPERATOR.....	JCB
PREPARED BY	NJV

LOCATION NAME: **BRUINGTON GC # 1**
 CLIENT: **XTO ENERGY INC.**
 CONTRACTOR: **BLAGG ENGINEERING, INC.**
 EQUIPMENT USED: **MOBILE DRILL RIG (EARTHPROBE)**
 BORING LOCATION: **N42E, 64.2 FEET FROM MW # 2R.**

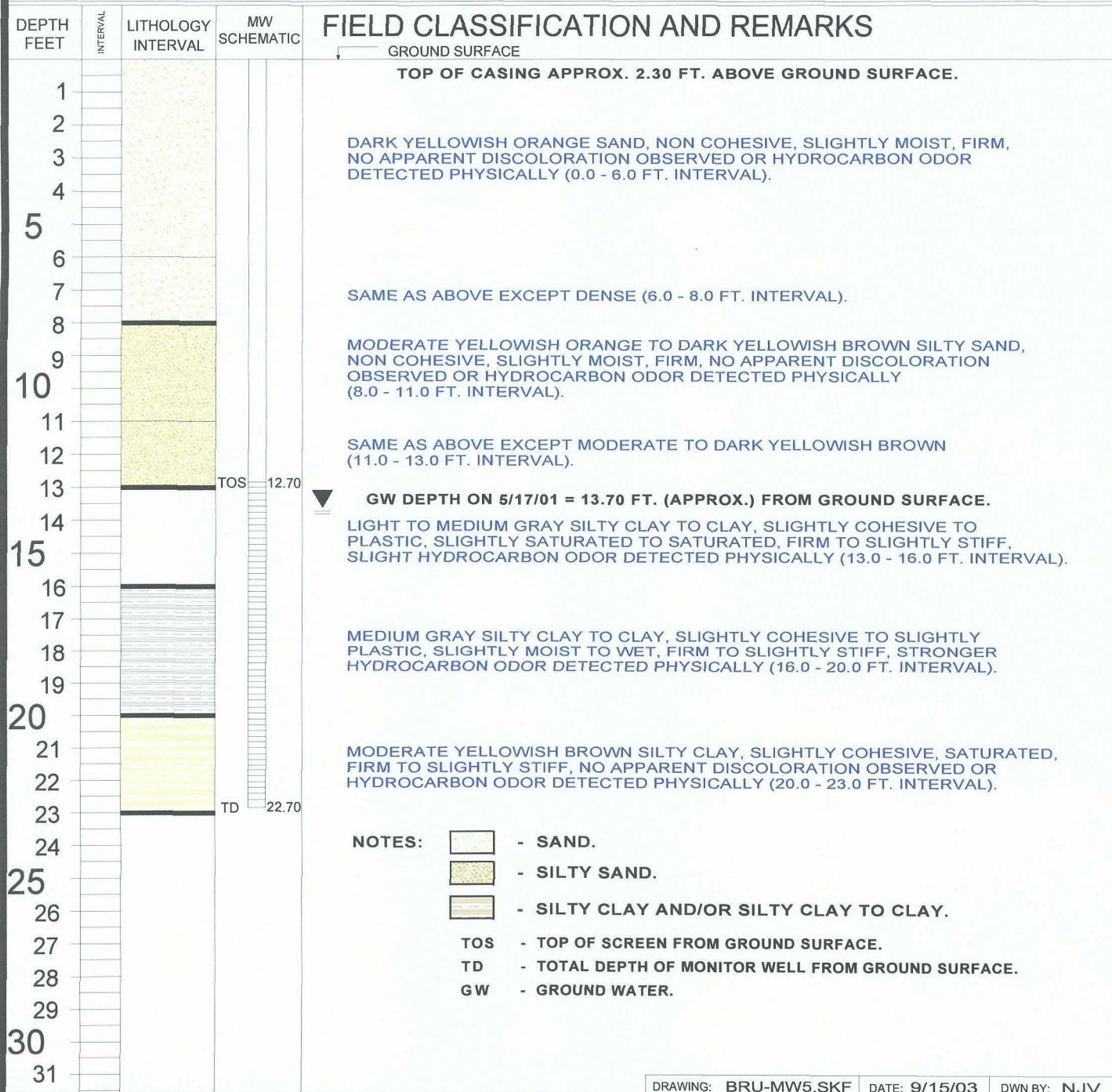


FIGURE 15

BLAGG ENGINEERING, INC.

P.O. BOX 87

BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

LOCATION NAME: **BRUINGTON GC # 1**
 CLIENT: **XTO ENERGY INC.**
 CONTRACTOR: **BLAGG ENGINEERING, INC.**
 EQUIPMENT USED: **MOBILE DRILL RIG (EARTHPROBE)**
 BORING LOCATION: **N47E, 106.8 FEET FROM MW # 2R.**

BORING #..... BH - 6
 MW #..... 6
 PAGE #..... 6
 DATE STARTED 2/20/01
 DATE FINISHED 2/20/01
 OPERATOR..... JCB
 PREPARED BY NJV

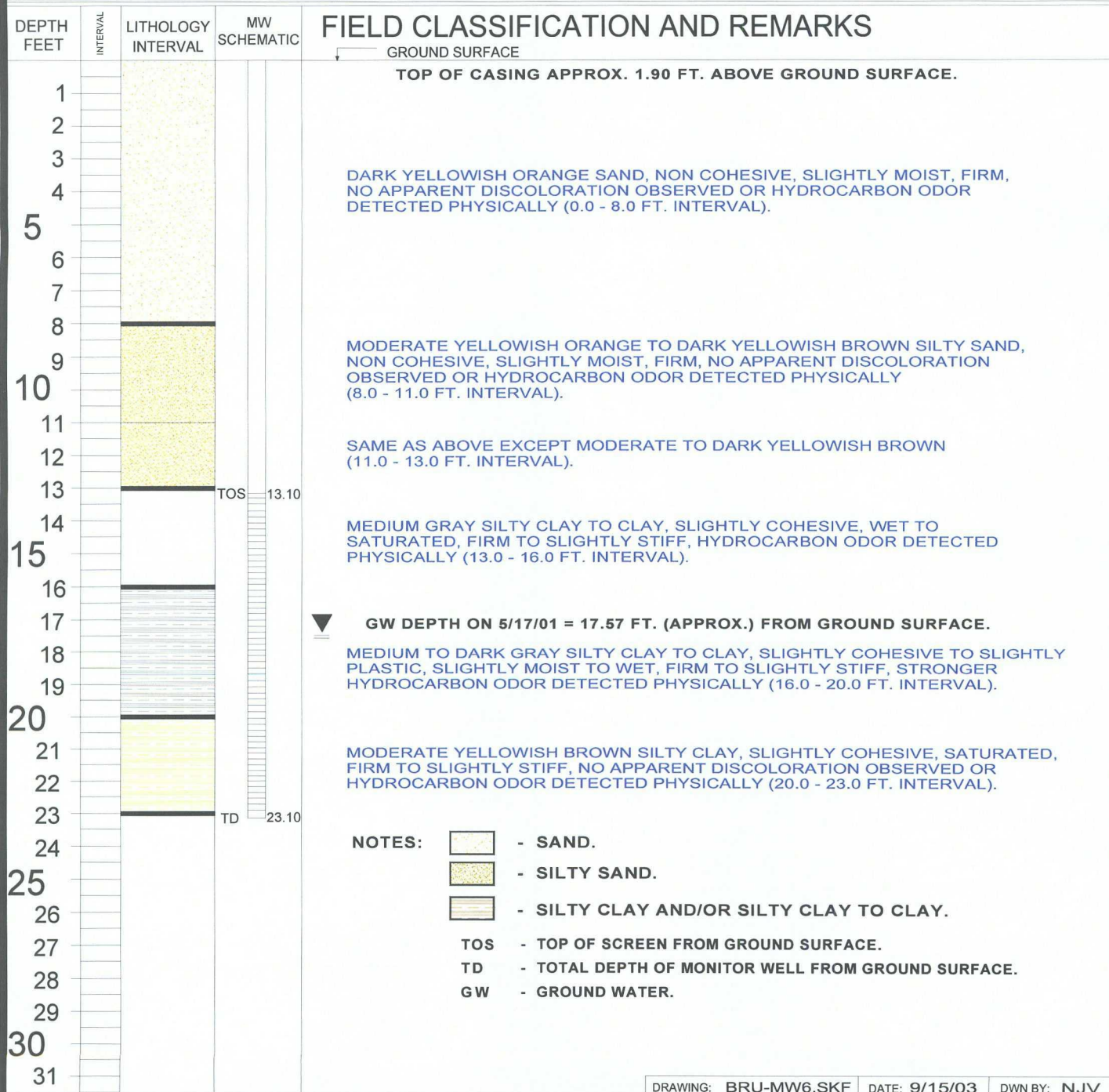


FIGURE 16

BLAGG ENGINEERING, INC.

P.O. BOX 87

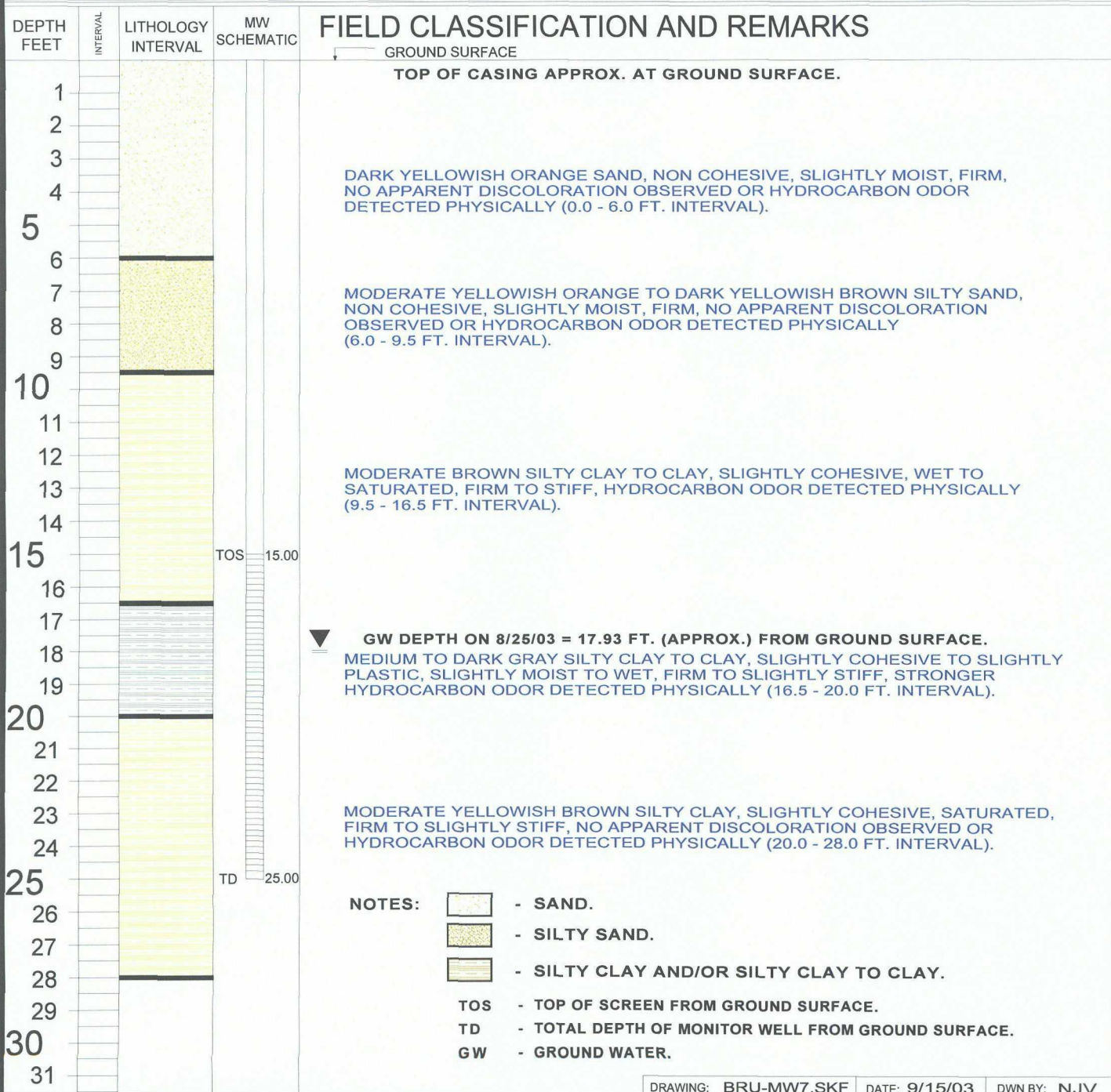
BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

LOCATION NAME: **BRUINGTON GC # 1**
 CLIENT: **XTO ENERGY INC.**
 CONTRACTOR: **BLAGG ENGINEERING, INC.**
 EQUIPMENT USED: **MOBILE DRILL RIG (EARTH PROBE)**
 BORING LOCATION: **S34.5E, 93 FEET FROM WELL HEAD.**

BORING #..... **BH - 7**
 MW #..... **7**
 PAGE #..... **7**
 DATE STARTED **7/10/03**
 DATE FINISHED **7/10/03**
 OPERATOR..... **JCB**
 PREPARED BY **NJV**



DRAWING: BRU-MW7.SKF DATE: 9/15/03 DWN BY: NJV

FIGURE 17

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: 1
Well #: MW-8
Page: 1 of 2

Project Number: _____
Project Name: XTO Ground Water
Project Location: Bruington Gas Com #1

Borehole Location: 36° 43.718' N, 107° 57.991' W
GWL Depth: 20
Drilled By: Enviro-Drill
Well Logged By: Ashley Ager
Date Started: 05/04/07
Date Completed: 05/04/07

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
0	1	0-5'	cuttings	reddish brown, poorly sorted sand and gravel, damp, unconsolidated	0	Easy
5	2	5-6.5	split spoon	reddish brown, poorly sorted sand and gravel, damp, unconsolidated	0	Easy
10	3	10-11.3	split spoon	brown, sandy silt, coarse sand content, damp, sub-angular	0	Easy
15	4	15-17	split spoon	15-15.8: brown, sandy silt, damp, unconsolidated 15.8-17: black clay, HC odor	52.8 529	Easy
20						

Comments: _____

Geologist Signature: Ashley L. Ager

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: 1
Well #: MW-8
Page: 2 of 2

Project Number: _____
Project Name: XTO Ground Water
Project Location: Bruington Gas Com #1

Borehole Location: 36° 43.718' N, 107° 57.991' W
GWL Depth: 20
Drilled By: Enviro-Drill
Well Logged By: Ashley Ager
Date Started: 05/04/07
Date Completed: 05/04/07

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
20	5	20-22	split spoon	20-21.5: bluish gray, sandy clay, very strong odor, coarse sand content, damp 21.5-22: grayish black coarse sand, saturated, unconsolidated	710 1580	Easy
25	6	25-26.3	split spoon	blackish gray sandy clay containing brown sandstone fragments	1120	Easy
30	7	26.5-27'	cuttings	brown sandstone		Hard
35						
40						

Comments: Reached sandstone bedrock at 26.5'
Called Kim at XTO to arrange for affected soil in cuttings to be collected and removed
from site.

Geologist Signature: Ashley L. Ager

FIGURE 18
MONITORING WELL INSTALLATION RECORD

Lodestar Services, Inc

PO Box 3861

Farmington, New Mexico 87499

(505) 334-2791

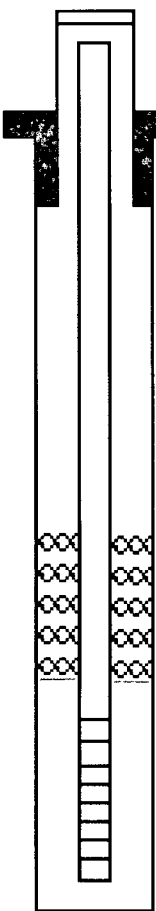
Borehole # 1
 Well # MW-8
 Page 1 of 1

Project Name XTO Ground Water
 Project Number Cost Code
 Project Location Bruington Gas Com #1

Elevation 5575
 Well Location 36° 43.718' N, 107° 57.991' W
 GWL Depth 20'
 Installed By Enviro-Drill

On-Site Geologist Ashley Ager
 Personnel On-Site
 Contractors On-Site Jeff Cathron and assistant
 Client Personnel On-Site

Date/Time Started 05/04/07, 1148
 Date/Time Completed 05/04/07, 1250

Depths in Reference to Ground Surface				
Item	Material	Depth (feet)		
Top of Protective Casing		NA		Top of Protective Casing <u>NA</u>
Bottom of Protective Casing		NA		Top of Riser <u>2.3</u>
Top of Permanent Borehole Casing		NA		Ground Surface <u>0</u>
Bottom of Permanent Borehole Casing		NA		
Top of Concrete		NA		
Bottom of Concrete		NA		
Top of Grout		-0.4		
Bottom of Grout		-12.5		
Top of Well Riser	Sch. 40 PVC	2.3		
Bottom of Well Riser		-26.7		
Top of Well Screen	Sch. 40 PVC	-16.5		Top of Seal <u>-12.5</u>
Bottom of Well Screen		-26.5		
Top of Peltonite Seal	3/8" Bentonite hole plug	-12.5		Top of Gravel Pack <u>-14.5</u>
Bottom of Peltonite Seal		-14.5		Top of Screen <u>-16.5</u>
Top of Gravel Pack	10-20 grade silica sand	-14.5		
Bottom of Gravel Pack		-26.7		
Top of Natural Cave-In	sand	-26.7		
Bottom of Natural Cave-In		-27		
Top of Groundwater		-20		Bottom of Screen <u>-26.5</u>
Total Depth of Borehole		-27		Bottom of Borehole <u>-27</u>

Comments: 50 lb bags of sand used: 6 ea., 50 lb bags of bentonite used: 1 ea.; grout: 1 bag of quikcrete used and 1.5 bags of quikgrout. No permanent well materials used in consideration of landowner.

Geologist Signature Ashley L. Ager

Hall Environmental Analysis Laboratory, Inc.

Date: 11-Dec-06

CLIENT: XTO Energy
Project: Bruington Gas Com #1 Ground water

Lab Order: 0611365

Lab ID: 0611365-01
Client Sample ID: Bruington Gas Com 1 MW-1R

Collection Date: 11/27/2006 9:04:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 8021B: VOLATILES

Analyst: NSB

Benzene	ND	1.0		µg/L	1	12/1/2006 10:00:39 AM
Toluene	ND	1.0		µg/L	1	12/1/2006 10:00:39 AM
Ethylbenzene	ND	1.0		µg/L	1	12/1/2006 10:00:39 AM
Xylenes, Total	ND	3.0		µg/L	1	12/1/2006 10:00:39 AM
Surr: 4-Bromofluorobenzene	82.6	70.2-105		%REC	1	12/1/2006 10:00:39 AM

Lab ID: 0611365-02
Client Sample ID: Bruington Gas Com 1 MW-3

Collection Date: 11/27/2006 10:21:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 8021B: VOLATILES

Analyst: NSB

Benzene	ND	1.0		µg/L	1	12/1/2006 10:30:43 AM
Toluene	ND	1.0		µg/L	1	12/1/2006 10:30:43 AM
Ethylbenzene	ND	1.0		µg/L	1	12/1/2006 10:30:43 AM
Xylenes, Total	ND	3.0		µg/L	1	12/1/2006 10:30:43 AM
Surr: 4-Bromofluorobenzene	84.3	70.2-105		%REC	1	12/1/2006 10:30:43 AM

Lab ID: 0611365-03
Client Sample ID: Bruington Gas Com 1 MW-2R

Collection Date: 11/27/2006 10:57:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 8021B: VOLATILES

Analyst: NSB

Benzene	12000	250		µg/L	250	12/6/2006 2:02:57 AM
Toluene	1600	250		µg/L	250	12/6/2006 2:02:57 AM
Ethylbenzene	690	250		µg/L	250	12/6/2006 2:02:57 AM
Xylenes, Total	3900	750		µg/L	250	12/6/2006 2:02:57 AM
Surr: 4-Bromofluorobenzene	84.5	70.2-105		%REC	250	12/6/2006 2:02:57 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
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: 11-Dec-06

CLIENT: XTO Energy
Project: Bruington Gas Com #1 Ground water

Lab Order: 0611365

Lab ID: 0611365-04
Client Sample ID: Bruington Gas Com 1 MW-4

Collection Date: 11/27/2006 11:01:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/4/2006 2:40:22 PM
Toluene	ND	1.0		µg/L	1	12/4/2006 2:40:22 PM
Ethylbenzene	ND	1.0		µg/L	1	12/4/2006 2:40:22 PM
Xylenes, Total	ND	3.0		µg/L	1	12/4/2006 2:40:22 PM
Surr: 4-Bromofluorobenzene	83.6	70.2-105		%REC	1	12/4/2006 2:40:22 PM

Lab ID: 0611365-05
Client Sample ID: Bruington Gas Com 1 MW-5

Collection Date: 11/27/2006 11:42:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	22000	250		µg/L	250	12/6/2006 2:33:00 AM
Toluene	ND	250		µg/L	250	12/6/2006 2:33:00 AM
Ethylbenzene	630	250		µg/L	250	12/6/2006 2:33:00 AM
Xylenes, Total	1700	750		µg/L	250	12/6/2006 2:33:00 AM
Surr: 4-Bromofluorobenzene	83.7	70.2-105		%REC	250	12/6/2006 2:33:00 AM

Lab ID: 0611365-06
Client Sample ID: Bruington Gas Com 1 MW-6

Collection Date: 11/27/2006 11:45:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	22000	250		µg/L	250	12/6/2006 3:03:04 AM
Toluene	23000	250		µg/L	250	12/6/2006 3:03:04 AM
Ethylbenzene	990	250		µg/L	250	12/6/2006 3:03:04 AM
Xylenes, Total	9700	750		µg/L	250	12/6/2006 3:03:04 AM
Surr: 4-Bromofluorobenzene	85.1	70.2-105		%REC	250	12/6/2006 3:03:04 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
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: 11-Dec-06

CLIENT: XTO Energy
Project: Bruington Gas Com #1 Ground water**Lab Order:** 0611365**Lab ID:** 0611365-07**Collection Date:** 11/27/2006 12:14:00 PM**Client Sample ID:** Bruington Gas Com 1 MW-7**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 8021B: VOLATILES

Analyst: NSB

Benzene	6100	250		µg/L	250	12/6/2006 3:33:10 AM
Toluene	4400	250		µg/L	250	12/6/2006 3:33:10 AM
Ethylbenzene	420	250		µg/L	250	12/6/2006 3:33:10 AM
Xylenes, Total	2500	750		µg/L	250	12/6/2006 3:33:10 AM
Surr: 4-Bromofluorobenzene	83.7	70.2-105		%REC	250	12/6/2006 3:33:10 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: Bruington Gas Com #1 Ground water

Work Order: 0611365

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML RB									
		MBLK							
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 5ML RB-II									
		MBLK							
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: B									
		MBLK							
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 5ML RB									
		MBLK							
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 125NG BTEX CCV-B									
		LCS							
Benzene	24.67	µg/L	1.0	98.7	85.9	113			
Toluene	24.24	µg/L	1.0	97.0	86.4	113			
Ethylbenzene	23.65	µg/L	1.0	94.6	83.5	118			
Xylenes, Total	71.15	µg/L	3.0	94.9	83.4	122			
Sample ID: 100NG BTEX LCS-II									
		LCS							
Benzene	20.09	µg/L	1.0	100	85.9	113			
Toluene	20.06	µg/L	1.0	100	86.4	113			
Ethylbenzene	18.80	µg/L	1.0	94.0	83.5	118			
Xylenes, Total	57.06	µg/L	3.0	95.1	83.4	122			
Sample ID: 100NG BTEX LCS									
		LCS							
Benzene	18.14	µg/L	1.0	90.7	85.9	113			
Toluene	17.86	µg/L	1.0	89.3	86.4	113			
Ethylbenzene	17.30	µg/L	1.0	86.5	83.5	118			
Xylenes, Total	52.11	µg/L	3.0	86.8	83.4	122			
Sample ID: 100NG BTEX LCS									
		LCS							
Benzene	17.22	µg/L	1.0	86.1	85.9	113			
Toluene	17.12	µg/L	1.0	85.6	85.4	113			
Ethylbenzene	16.51	µg/L	1.0	82.5	82.5	118			
Xylenes, Total	49.97	µg/L	3.0	83.3	82.4	122			
Sample ID: 100NG BTEX LCSD									
		LCSD							
Benzene	18.02	µg/L	1.0	90.1	85.9	113	0.686	27	
Toluene	17.73	µg/L	1.0	88.7	86.4	113	0.719	19	

Qualifiers:

E	Value above quantitation range	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

QA/QC SUMMARY REPORT

Client: XTO Energy

Project: Bruington Gas Com #1 Ground water

Work Order: 0611365

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW8021

Sample ID: 100NG BTEX LCSD

LCSD

Batch ID: R21651

Analysis Date: 12/4/2006 10:54:40 PM

Ethylbenzene

17.17

µg/L

1.0

85.9

83.5

118

0.766

10

Xylenes, Total

51.71

µg/L

3.0

86.2

83.4

122

0.774

13

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

5 / 6

Hall Environmental Analysis Laboratory, Inc.

Date: 05-Apr-07

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0703474

Lab ID: 0703474-04

Collection Date: 3/28/2007 1:58:00 PM

Client Sample ID: ~~EJ Johnson CHE MW-5~~

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	8.2	1.0		µg/L	1	4/3/2007 11:07:21 AM
Toluene	ND	1.0		µg/L	1	4/3/2007 11:07:21 AM
Ethylbenzene	ND	1.0		µg/L	1	4/3/2007 11:07:21 AM
Xylenes, Total	ND	2.0		µg/L	1	4/3/2007 11:07:21 AM
Surr: 4-Bromofluorobenzene	94.1	70.2-105		%REC	1	4/3/2007 11:07:21 AM

Lab ID: 0703474-05

Collection Date: 3/28/2007 3:18:00 PM

Client Sample ID: Bruington GCI MW-1R

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/2/2007 1:03:56 PM
Toluene	ND	1.0		µg/L	1	4/2/2007 1:03:56 PM
Ethylbenzene	ND	1.0		µg/L	1	4/2/2007 1:03:56 PM
Xylenes, Total	ND	2.0		µg/L	1	4/2/2007 1:03:56 PM
Surr: 4-Bromofluorobenzene	90.4	70.2-105		%REC	1	4/2/2007 1:03:56 PM

Lab ID: 0703474-06

Collection Date: 3/28/2007 3:42:00 PM

Client Sample ID: Bruington GCI MW-2R

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	4300	250		µg/L	250	4/2/2007 1:33:57 PM
Toluene	1000	250		µg/L	250	4/2/2007 1:33:57 PM
Ethylbenzene	810	250		µg/L	250	4/2/2007 1:33:57 PM
Xylenes, Total	6000	500		µg/L	250	4/2/2007 1:33:57 PM
Surr: 4-Bromofluorobenzene	91.6	70.2-105		%REC	250	4/2/2007 1:33:57 PM

Qualifiers: *

Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits 2 / 10

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: 05-Apr-07

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0703474

Lab ID: 0703474-07

Collection Date: 3/28/2007 3:58:00 PM

Client Sample ID: Bruington GCI MW-3R

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/2/2007 2:04:03 PM
Toluene	ND	1.0		µg/L	1	4/2/2007 2:04:03 PM
Ethylbenzene	ND	1.0		µg/L	1	4/2/2007 2:04:03 PM
Xylenes, Total	ND	2.0		µg/L	1	4/2/2007 2:04:03 PM
Surr: 4-Bromofluorobenzene	91.4	70.2-105		%REC	1	4/2/2007 2:04:03 PM

Lab ID: 0703474-08

Collection Date: 3/28/2007 4:08:00 PM

Client Sample ID: Bruington GCI MW-4

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	1.8	1.0		µg/L	1	4/2/2007 2:34:09 PM
Toluene	ND	1.0		µg/L	1	4/2/2007 2:34:09 PM
Ethylbenzene	ND	1.0		µg/L	1	4/2/2007 2:34:09 PM
Xylenes, Total	ND	2.0		µg/L	1	4/2/2007 2:34:09 PM
Surr: 4-Bromofluorobenzene	91.2	70.2-105		%REC	1	4/2/2007 2:34:09 PM

Lab ID: 0703474-09

Collection Date: 3/28/2007 4:19:00 PM

Client Sample ID: Bruington GCI MW-5

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	30000	1000		µg/L	1000	4/4/2007 10:00:24 AM
Toluene	590	50		µg/L	50	4/3/2007 11:40:03 AM
Ethylbenzene	1700	50		µg/L	50	4/3/2007 11:40:03 AM
Xylenes, Total	4600	100		µg/L	50	4/3/2007 11:40:03 AM
Surr: 4-Bromofluorobenzene	96.1	70.2-105		%REC	50	4/3/2007 11:40:03 AM

Qualifiers: * Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits 3 / 10

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: 05-Apr-07

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0703474

Lab ID: 0703474-10

Collection Date: 3/28/2007 4:27:00 PM

Client Sample ID: Bruington GCI MW-6

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	25000	1000		µg/L	1000	4/4/2007 10:30:34 AM
Toluene	27000	1000		µg/L	1000	4/4/2007 10:30:34 AM
Ethylbenzene	1900	100		µg/L	100	4/3/2007 12:12:45 PM
Xylenes, Total	19000	200		µg/L	100	4/3/2007 12:12:45 PM
Surr: 4-Bromofluorobenzene	91.7	70.2-105		%REC	100	4/3/2007 12:12:45 PM

Lab ID: 0703474-11

Collection Date: 3/28/2007 4:43:00 PM

Client Sample ID: Bruington GCI MW-7

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	11000	250		µg/L	250	4/3/2007 12:42:51 PM
Toluene	9500	100		µg/L	100	4/2/2007 6:40:02 PM
Ethylbenzene	1100	100		µg/L	100	4/2/2007 6:40:02 PM
Xylenes, Total	7500	200		µg/L	100	4/2/2007 6:40:02 PM
Surr: 4-Bromofluorobenzene	90.8	70.2-105		%REC	100	4/2/2007 6:40:02 PM

Lab ID: 0703474-12

Collection Date:

Client Sample ID: Trip Blank

Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/3/2007 1:43:03 PM
Toluene	ND	1.0		µg/L	1	4/3/2007 1:43:03 PM
Ethylbenzene	ND	1.0		µg/L	1	4/3/2007 1:43:03 PM
Xylenes, Total	ND	2.0		µg/L	1	4/3/2007 1:43:03 PM
Surr: 4-Bromofluorobenzene	92.9	70.2-105		%REC	1	4/3/2007 1:43:03 PM

Qualifiers: * Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits 4 / 10

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: 21-Jun-07

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0706237

Lab ID: 0706237-10

Collection Date: 6/13/2007 10:35:00 AM

Client Sample ID: Sullivan GCDI MW-1R

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	2.0	1.0		µg/L	1	6/19/2007 7:43:22 PM
Toluene	ND	1.0		µg/L	1	6/19/2007 7:43:22 PM
Ethylbenzene	ND	1.0		µg/L	1	6/19/2007 7:43:22 PM
Xylenes, Total	ND	2.0		µg/L	1	6/19/2007 7:43:22 PM
Surr: 4-Bromofluorobenzene	85.4	70.2-105		%REC	1	6/19/2007 7:43:22 PM

Lab ID: 0706237-11

Collection Date:

Client Sample ID: Trip Blank

Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/19/2007 8:13:27 PM
Toluene	ND	1.0		µg/L	1	6/19/2007 8:13:27 PM
Ethylbenzene	ND	1.0		µg/L	1	6/19/2007 8:13:27 PM
Xylenes, Total	ND	2.0		µg/L	1	6/19/2007 8:13:27 PM
Surr: 4-Bromofluorobenzene	83.8	70.2-105		%REC	1	6/19/2007 8:13:27 PM

Lab ID: 0706237-12

Collection Date: 6/13/2007 11:53:00 AM

Client Sample ID: Brington GCDI MW-1R

Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/15/2007 9:12:53 PM
Toluene	ND	1.0		µg/L	1	6/15/2007 9:12:53 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2007 9:12:53 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2007 9:12:53 PM
Surr: 4-Bromofluorobenzene	94.3	70.2-105		%REC	1	6/15/2007 9:12:53 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: 21-Jun-07

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0706237

Lab ID: 0706237-13

Collection Date: 6/13/2007 12:10:00 PM

Client Sample ID: Bruington GCDI MW-4

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/15/2007 10:42:56 PM
Toluene	ND	1.0		µg/L	1	6/15/2007 10:42:56 PM
Ethylbenzene	ND	1.0		µg/L	1	6/15/2007 10:42:56 PM
Xylenes, Total	ND	2.0		µg/L	1	6/15/2007 10:42:56 PM
Surr: 4-Bromofluorobenzene	96.4	70.2-105		%REC	1	6/15/2007 10:42:56 PM

Lab ID: 0706237-14

Collection Date: 6/13/2007 12:23:00 PM

Client Sample ID: Bruington GCDI MW-2R

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	13000	500		µg/L	500	6/19/2007 2:24:03 AM
Toluene	1100	100		µg/L	100	6/15/2007 11:12:56 PM
Ethylbenzene	720	100		µg/L	100	6/15/2007 11:12:56 PM
Xylenes, Total	4000	200		µg/L	100	6/15/2007 11:12:56 PM
Surr: 4-Bromofluorobenzene	93.3	70.2-105		%REC	100	6/15/2007 11:12:56 PM

Lab ID: 0706237-15

Collection Date: 6/13/2007 12:34:00 PM

Client Sample ID: Bruington GCDI MW-5

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	32000	1000		µg/L	1000	6/19/2007 2:54:08 AM
Toluene	91	50		µg/L	50	6/16/2007 1:15:24 AM
Ethylbenzene	940	50		µg/L	50	6/16/2007 1:15:24 AM
Xylenes, Total	2000	100		µg/L	50	6/16/2007 1:15:24 AM
Surr: 4-Bromofluorobenzene	97.9	70.2-105		%REC	50	6/16/2007 1:15:24 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: 21-Jun-07

CLIENT: XTO Energy
Project: Ground Water**Lab Order:** 0706237**Lab ID:** 0706237-16**Collection Date:** 6/13/2007 12:45:00 PM**Client Sample ID:** Bruington GCDI MW-6**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	21000	500		µg/L	500	6/16/2007 2:48:59 AM
Toluene	19000	500		µg/L	500	6/16/2007 2:48:59 AM
Ethylbenzene	780	50		µg/L	50	6/16/2007 2:18:59 AM
Xylenes, Total	7900	1000		µg/L	500	6/16/2007 2:48:59 AM
Surr: 4-Bromofluorobenzene	95.3	70.2-105		%REC	50	6/16/2007 2:18:59 AM

Lab ID: 0706237-17**Collection Date:** 6/13/2007 12:59:00 PM**Client Sample ID:** Bruington GCDI MW-7**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	3800	250		µg/L	250	6/16/2007 3:48:59 AM
Toluene	2000	50		µg/L	50	6/16/2007 4:19:05 AM
Ethylbenzene	320	50		µg/L	50	6/16/2007 4:19:05 AM
Xylenes, Total	1700	100		µg/L	50	6/16/2007 4:19:05 AM
Surr: 4-Bromofluorobenzene	95.9	70.2-105		%REC	50	6/16/2007 4:19:05 AM

Lab ID: 0706237-18**Collection Date:** 6/13/2007 1:25:00 PM**Client Sample ID:** Bruington GCDI MW-8**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	24000	500		µg/L	500	6/16/2007 5:19:15 AM
Toluene	24000	500		µg/L	500	6/16/2007 5:19:15 AM
Ethylbenzene	350	50		µg/L	50	6/16/2007 5:49:19 AM
Xylenes, Total	10000	1000		µg/L	500	6/16/2007 5:19:15 AM
Surr: 4-Bromofluorobenzene	96.5	70.2-105		%REC	500	6/16/2007 5:19:15 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-11

Client Sample ID: Bruington GC1 MW-1R
Collection Date: 9/25/2007 3:30:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/3/2007 12:15:24 AM
Toluene	1.2	1.0		µg/L	1	10/3/2007 12:15:24 AM
Ethylbenzene	ND	1.0		µg/L	1	10/3/2007 12:15:24 AM
Xylenes, Total	ND	2.0		µg/L	1	10/3/2007 12:15:24 AM
Surr: 4-Bromofluorobenzene	85.0	70.2-105		%REC	1	10/3/2007 12:15:24 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-12

Client Sample ID: Bruington GC1 MW-4
Collection Date: 9/25/2007 3:40:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	10/3/2007 12:45:19 AM
Toluene	ND	1.0		µg/L	1	10/3/2007 12:45:19 AM
Ethylbenzene	ND	1.0		µg/L	1	10/3/2007 12:45:19 AM
Xylenes, Total	ND	2.0		µg/L	1	10/3/2007 12:45:19 AM
Surr: 4-Bromofluorobenzene	84.4	70.2-105		%REC	1	10/3/2007 12:45:19 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
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

Page 12 of 28

Hall Environmental Analysis Laboratory, Inc.

Date: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-13

Client Sample ID: Bruington GC1 MW-2R
Collection Date: 9/25/2007 3:51:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	18000	500		µg/L	500	10/3/2007 1:15:17 AM
Toluene	1900	50		µg/L	50	10/3/2007 1:45:12 AM
Ethylbenzene	990	50		µg/L	50	10/3/2007 1:45:12 AM
Xylenes, Total	5500	100		µg/L	50	10/3/2007 1:45:12 AM
Surr: 4-Bromofluorobenzene	96.2	70.2-105		%REC	50	10/3/2007 1:45:12 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
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: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-14

Client Sample ID: Bruington GC1 MW-5
Collection Date: 9/25/2007 4:02:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	25000	500		µg/L	500	10/3/2007 4:45:04 AM
Toluene	170	50		µg/L	50	10/3/2007 5:14:57 AM
Ethylbenzene	620	50		µg/L	50	10/3/2007 5:14:57 AM
Xylenes, Total	1700	100		µg/L	50	10/3/2007 5:14:57 AM
Surr: 4-Bromofluorobenzene	89.5	70.2-105		%REC	50	10/3/2007 5:14:57 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-15

Client Sample ID: Bruington GC1 MW-6
Collection Date: 9/25/2007 4:10:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	27000	500		µg/L	500	10/3/2007 1:01:13 PM
Toluene	21000	500		µg/L	500	10/3/2007 1:01:13 PM
Ethylbenzene	1200	50		µg/L	50	10/3/2007 1:31:06 PM
Xylenes, Total	11000	100		µg/L	50	10/3/2007 1:31:06 PM
Surr: 4-Bromofluorobenzene	100	70.2-105		%REC	50	10/3/2007 1:31:06 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- 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: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-16

Client Sample ID: Bruington GC1 MW-7
Collection Date: 9/25/2007 5:23:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	2900	50		µg/L	50	10/3/2007 2:33:56 PM
Toluene	2400	50		µg/L	50	10/3/2007 2:33:56 PM
Ethylbenzene	210	50		µg/L	50	10/3/2007 2:33:56 PM
Xylenes, Total	1400	100		µg/L	50	10/3/2007 2:33:56 PM
Surr: 4-Bromofluorobenzene	90.0	70.2-105		%REC	50	10/3/2007 2:33:56 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
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: 08-Oct-07

CLIENT: XTO Energy
Lab Order: 0709406
Project: Ground Water
Lab ID: 0709406-17

Client Sample ID: Bruington GC1 MW-8
Collection Date: 9/25/2007 5:48:00 PM
Date Received: 9/28/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	18000	500		µg/L	500	10/3/2007 3:33:54 PM
Toluene	4000	50		µg/L	50	10/3/2007 4:03:56 PM
Ethylbenzene	980	50		µg/L	50	10/3/2007 4:03:56 PM
Xylenes, Total	9100	1000		µg/L	500	10/3/2007 3:33:54 PM
Surr: 4-Bromofluorobenzene	101	70.2-105		%REC	50	10/3/2007 4:03:56 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
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

Page 17 of 28

LAB RESULTS TO PAUL V. ON 11-3-93. SOIL OK, WATER CONTAMINATED.

OVUM RESULTS TO PAUL V. ON 10-20-93

(VERY CONTAMINATED)

ENVIROTECH Inc.

5706 US HWY 64, FARMINGTON, NM 87401
(505) 632 0615

PIT NO: C4948

C.O.C. NO. 3141

FIELD REPORT CLOSURE VERIFICATION

JOB NO. 92140
PAGE NO. 1 of 1

LOCATION: LEASE: BRUNTON GAS WELL #1 QD SW/4, NW/4 (E)
SEC 14 TWP: 29N RRG: 11W BM NM CNTY SJ ST NM PIT BLW
CONTRACTOR: PAUL VELASQUEZ
EQUIPMENT USED: EXCAVATOR

DATE STARTED: 10-20-93
DATE FINISHED: 10-27-93

ENVIRONMENTAL
SPECIALIST: REO

SOIL REMEDIATION: QUANTITY: EXCAVATION APPROX. 40' x 75' x 20' MAX. DEEP.

DISPOSAL FACILITY: CROUCH MESA

LAND USE: RESIDENTIAL/INDUSTRIAL

SURFACE CONDITIONS: EXCAVATED PRIOR TO ARRIVAL

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 125 FEET SOUTH FROM WELLHEAD.
EXCAVATION 18-20' DEEP - TOP 8-10' APPEARS UNCONTAMINATED. FROM 8'-10' DOWN,
HEAVY CONTAMINATION EVIDENCED BY DARK GRAY TO BLACK, WITH HEAVY PETROLEUM OIL.
SOIL IS SILTY SAND, BOTTOM @ 18-20' IS SANDSTONE BEDROCK. WATER SLOWLY
SEEPING INTO EXCAVATION.

IRRIGATION CANAL ~ 100 DOWNGRADIENT TO THE SOUTHWEST.

EXCAVATION CONTINUING ON WEST END OF PIT AT THIS TIME.

10/27: LEDGE ROCK ON SOUTH EDGE OF EXCAVATION @ ~ 12' DEEP. COARSE SANDY SOIL.

FIELD DATA CALCULATIONS

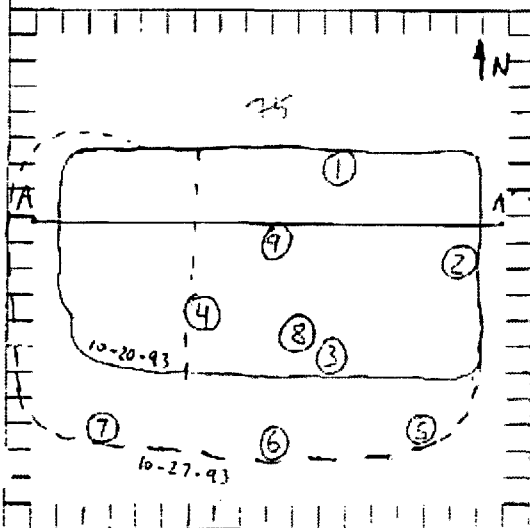
SAMPLE I.D.	LAB NO.	WEIGHT (g)	ML FREON	DILUTION	READING	CALC. ppm

DEPTH TO GROUNDWATER:
NEAREST WATER SOURCE CANAL ~ 100'
NEAREST SURFACE WATER:
HIGHEST FLOODING ELEVATION:
HIGHEST FLOODING ELEVATION: 100 PPM TPH

SCALE

0 10 20 FEET

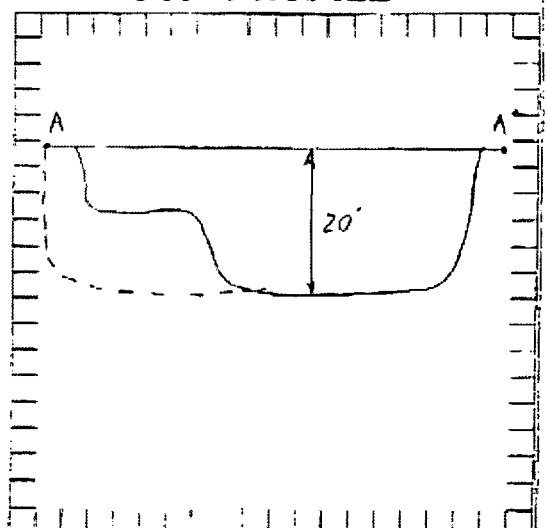
PIT PERIMETER



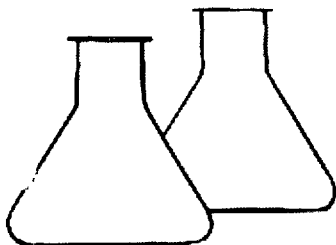
OVUM RESULTS

SAMPLE ID	FIELD HEADSPACE	DO (ppm)
① NS@15'	625	
② ES@14'	598	
③ SS@15'	710	
④ WSS@15'	736	
⑤ SES@12'	6.0	
⑥ SCSE@12'	ND	
⑦ SWS@12'	ND	
⑧ SB@17'	3.6	
⑨ CB@18'	WATER	
	LAB	
⑧	718.1	SOIL
⑨	872	WATER

PIT PROFILE



TRAVEL NOTES: CAL. CIV. 10-20-93 10-27-93 ONSITE: 10-20-93 10-27-93 1500 HPS. 1-4
1030 HPS. 5-9



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	8 SB @ 17'	Date Sampled:	10-27-93
Laboratory Number:	6409	Date Received:	10-27-93
Sample Matrix:	Soil	Date Analyzed:	11-02-93
Preservative:	Cool	Date Reported:	11-02-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----	-----	-----
Total Petroleum Hydrocarbons	ND	10.0

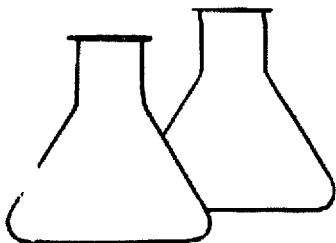
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total
Recoverable, Chemical Analysis of Water and
Waste, USEPA Storet No.4551, 1978

Comments: Bruington GC #1, Blow Pit, C4948.

Tony Titano
Analyst

Marion Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	9 CB @ 18'	Date Reported:	10-28-93
Laboratory Number:	6410	Date Sampled:	10-27-93
Sample Matrix:	Water	Date Received:	10-27-93
Preservative:	HgCl and Cool	Date Analyzed:	10-28-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	3,320	1.0
Toluene	3,500	2.0
Ethylbenzene	87	1.0
p,m-Xylene	2,010	1.5
o-Xylene	448	1.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	102 %

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Bruington GC #1 Blow Pit C4948

Dennis L. O'Brien
Analyst

Tony Tristano
Review

Lab Results Reported to P. Velasquez on 12/24/93 by Rmy. Recommended additional Soil/Groundwater Remediation.

ENVIROTECH Inc

5796 US HWY 64 FARMINGTON NM 87401
(505) 632-0615

C4948

COC 3179

FIELD REPORT CLOSURE VERIFICATION

DATE 9/21/90
PAGE 1 of 1

LOCATION: LEASE BRUINGTON GAS COM WELL #1 ON SW 1/4 NW 1/4 (E)
SEC. 14 TWP. 29N. RNG. 11W. BM. NMPM CNTY. SS ST. NM PIT BLOW
CONTRACTOR: PAUL VELASQUEZ
EQUIPMENT USED: TRACK HOE

DATE OF TEST 11/20/93
DATE FILLED 11/20/93
ENVIRONMENTALIST Rmy

SOIL REMOVAL QUANTITY
DISPOSAL FACILITY CROUCH MESA
LAND USE RESIDENTIAL/INDUSTRIAL
SURFACE EXCAVATED PRIOR TO ARRIVAL

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 405± YARDS S40°W FROM WELLHEAD

DEPTH TO GROUNDWATER 12'-15'
NEAREST WATER SOURCE UNKNOWN
NEAREST SURFACE WATER 100' CANAL

ACCORDING TO MR. VELASQUEZ, ALL AREAS OF PIT HAVE BEEN PREVIOUSLY CLOSED WITH THE EXCEPTION OF THE 2 SANDSTONE benches and the bottom (below GROUNDWATER)

THIS PIT IS A COMBINED EXCAVATION OF BOTH THE BLOW PIT AND THE Separator Pit.

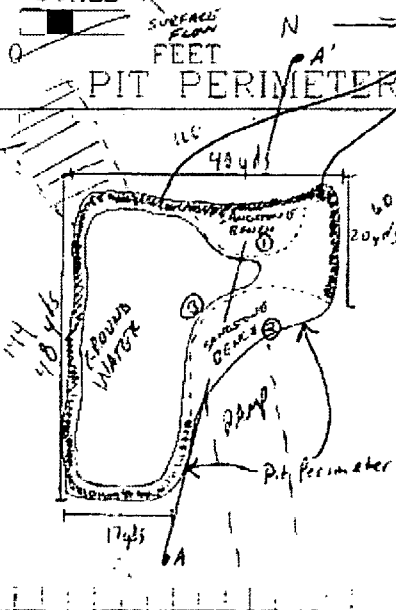
- ① SAMPLE OF TOP 1' SANDSTONE (GRAY DISCOLORATION) (BTEX/TPH LAB)
- ② SAMPLE OF SM/L 1 FOOT ABOVE SANDSTONE (GRAY DISCOLORATION) (BTEX/TPH LAB)
- ③ SAMPLE OF GROUNDWATER FOR LABORATORY ANALYSES

* Sample locations per MR. VELASQUEZ.

Recommend Conditional Closure Pending Removal of 2'-3' Contaminated Sand layer directly above sandstone @ Sample Point ②, covering entire bench area on north side.

Recommend Monitor Wells for Groundwater Verification.

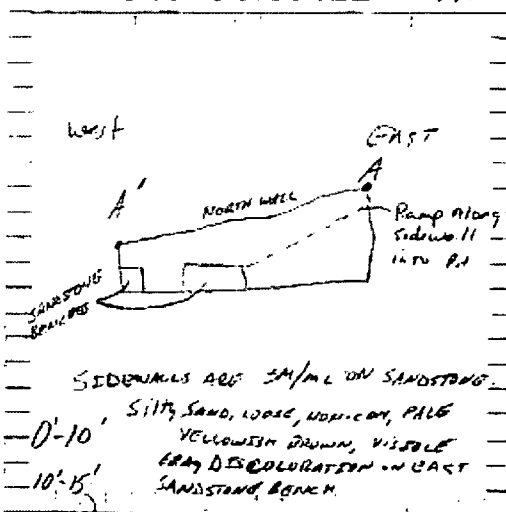
SCALE



OVM RESULTS

SAMPLE FIELD MEASUREMENTS
0010' 1677 ppm
0009' 1604 ppm

PIT PROFILE



SIDEWALLS ARE SM/L ON SANDSTONE
0'-10' Silty Sand, loose, non-cohesive, pale yellowish brown, visible gray discoloration in east sandstone bench.
10'-15'

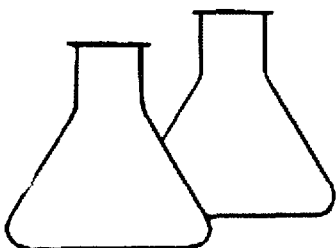
TRAVEL NOTES

CALLOUT:

ON SITE

SANDSTONE: Pale Yellow Brown, GRAY on top 1'-2'

1.0 m (approx) by Mr. Velasquez
As Suspected Remaining Contamination
extending under a Roadway to be Remediated Later.



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	#1 @ 10' bgs	Date Sampled:	11-10-93
Laboratory Number:	6476	Date Received:	11-10-93
Sample Matrix:	Soil	Date Analyzed:	11-12-93
Preservative:	Cool	Date Reported:	11-12-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	310	10.0

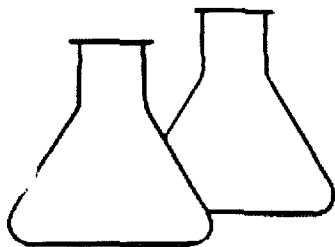
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total
Recoverable, Chemical Analysis of Water and
Waste, USEPA Storet No.4551, 1978

Comments: Bruington GC #1, Blow Pit, C4948

Tony Titano
Analyst

Marion D. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	#1 @ 10' bgs	Date Reported:	11-11-93
Laboratory Number:	6476	Date Sampled:	11-10-93
Sample Matrix:	Soil	Date Received:	11-10-93
Preservative:	Cool	Date Extracted:	11-11-93
Condition:	Cool & Intact	Date Analyzed:	11-11-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	192	13.2
Toluene	2,180	19.8
Ethylbenzene	2,360	13.2
p,m-Xylene	29,700	19.8
o-Xylene	14,100	19.8

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	102 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992

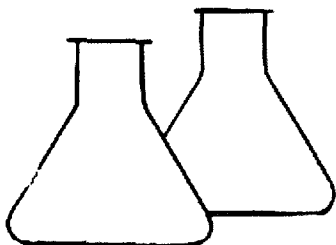
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Bruington GC #1 Blow Pit C4948


Analyst


Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	#2 @ 9' bgs	Date Sampled:	11-10-93
Laboratory Number:	6477	Date Received:	11-10-93
Sample Matrix:	Soil	Date Analyzed:	11-12-93
Preservative:	Cool	Date Reported:	11-12-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	358	10.0

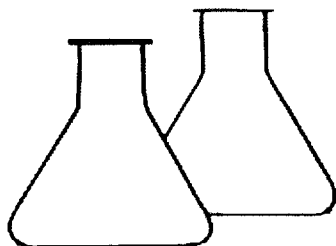
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Bruington GC #1, Blow Pit, C4948

Tony Tristano
Analyst

Maria D. Young
Review



ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	#2 @ 9' bgs	Date Reported:	11-11-93
Laboratory Number:	6477	Date Sampled:	11-10-93
Sample Matrix:	Soil	Date Received:	11-10-93
Preservative:	Cool	Date Extracted:	11-11-93
Condition:	Cool & Intact	Date Analyzed:	11-11-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	61	13.1
Toluene	940	19.6
Ethylbenzene	890	13.1
p,m-Xylene	5,000	19.6
o-Xylene	1,530	19.6

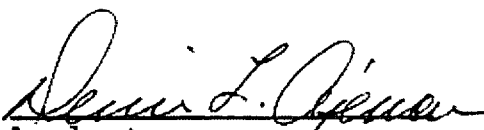
SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	101 %

Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992

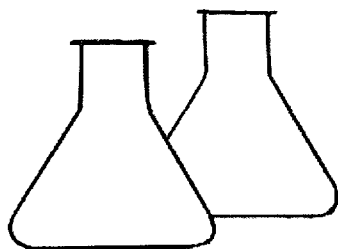
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Bruington GC #1 Blow Pit C4948


Analyst


Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	Pit Water	Date Reported:	11-11-93
Laboratory Number:	6478	Date Sampled:	11-10-93
Sample Matrix:	Water	Date Received:	11-10-93
Preservative:	HgCl and Cool	Date Analyzed:	11-11-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	5,500	1.0
Toluene	4,380	1.5
Ethylbenzene	438	1.0
p,m-Xylene	2,660	1.5
o-Xylene	790	1.5

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	102 %

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Bruington GC #1 Blow Pit C4948

Dennis L. Givner
Analyst

Margaret D. Young
Review

LAB RESULTS TO PAUL U. ON 11-3-93: MPH U.H., OUM HIGH. - CONTINUE EXCAVATION.

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT NO: C4950

S.O.C. NO: 3146

FIELD REPORT CLOSURE VERIFICATION

JOB NO: 92140

PAGE NO: 1 of 1

LOCATION: LEASE BRUINGTON G.C. WELL #1 OD SW/4, NW/4 (E)
SEC 14 TWP: 29 N RRG: 11 W BM. NM CNTY ST ST NM PIT SEP
CONTRACTOR: PAUL VELASQUEZ
EQUIPMENT USED: EXCAVATOR

DATE STARTED: 10-29-93

DATE FINISHED: 10-29-93

ENVIRONMENTAL SPECIALIST: RED

SOIL REMEDIATION: QUANTITY: EXCAVATION APPROX: 65' x 75' x 8' MAX. DEPTH

DISPOSAL FACILITY: CROUCH MESA ?

LAND USE: RESIDENTIAL SOUTH / INDUSTRIAL NORTH

SURFACE CONDITIONS: EXCAVATED PRIOR TO ARRIVAL

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 160 FEET WEST FROM WELLHEAD.

PIT IS EXCAVATED TO BEDROCK SANDSTONE. APPROX. 8' DEEP ON NORTH END TO APPROX. 2' DEEP ON SOUTH END. - MINOR TRACES OF CONTAMINATION IN SANDSTONE SURFACE IRRIGATION CANAL APPROX. 40' WEST OF PIT.

PIT SOILS CONSIST OF A SILTY SAND OVER SANDSTONE BEDROCK - GRAY CONTAMINATION STAIN APPARENT IN SURFACE OF SANDSTONE - DISAPPEARS SEVERAL INCHES INTO THE ROCK.

FIELD #181 CALCULATIONS

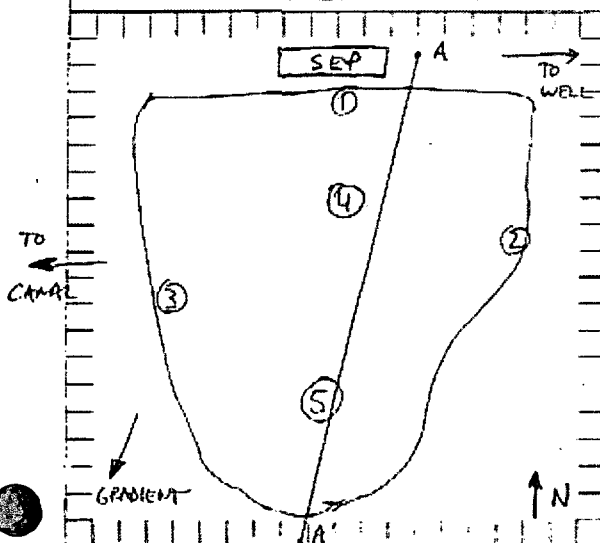
SAMPLE I.D.	LAB No.	WEIGHT (g)	ML. FREON	DILUTION	READING	CALC. ppm

DEPTH TO GROUNDWATER: ~ 20'
NEAREST WATER SOURCE: CANAL - 40'
NEAREST SURFACE WATER: CANAL -
INCHES FILLING SCORE > 20
INCHES FILLING SCORE 100 PPM TOL.

SCALE

0 10 20 FEET

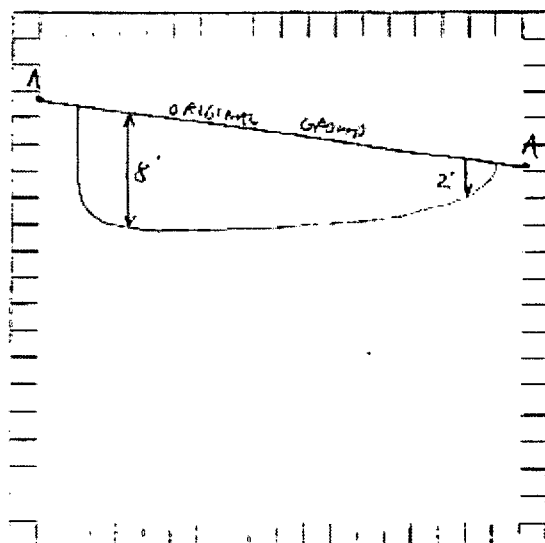
PIT PERIMETER



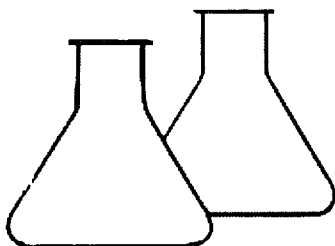
OVM RESULTS

SAMPLE ID	FIELD - EVIDENCE
1	N3 @ 6' 978
2	ES @ 4' 1717
3	WS @ 3' 84
4	NB @ 8' 555
5	SB @ 4' 605
	LAB
④	412.1

PIT PROFILE



TRAVEL NOTES: PAUL U. 10-29-93 ORRO CRITE. 10-29-93 ORRO



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	4 NB @ 8'	Date Sampled:	10-29-93
Laboratory Number:	6417	Date Received:	10-29-93
Sample Matrix:	Soil	Date Analyzed:	11-02-93
Preservative:	Cool	Date Reported:	11-02-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	ND	10.0

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Bruington GC #1, Sep. Pit, C4950

Tony Tistano
Analyst

Maris D. Young
Review

Denny **EL PASO FIELD SERVICES**
PRODUCTION PIT CLOSURE
DEPUTY OIL & GAS INSPECTOR

DEC 21 1993

BRUINGTON GAS COM #1
Meter/Line ID - 73746

RECEIVED
JUL 2 1993

SITE DETAILS

Legals - Twn: 29

Rng: 11

Sec: 14

Unit: E

NMOCD Hazard Ranking: 20

Land Type: 4 - Fee

Operator: AMOCO PRODUCTION COMPANY

Pit Closure Date: 04/28/94

RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 73746 Location: BRUINGTON GAS COM #1
 Operator #: 0203 Operator Name: Amoco P/L District: BLOOMFIELD
 Coordinates: Letter: E Section 14 Township: 29 Range: 11
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Visit Date: 4.14.94 Run: 10 81

SITE ASSESSMENT

NMOCD Zone: Inside Land Type: BLM ☐
 (From NMOCD Vulnerable State ☐
 Maps) Zone ☒ Fee ☒
 Outside ☐ Indian _____

Depth to Groundwater

Less Than 50 Feet (20 points) ☐
 50 Ft to 99 Ft (10 points) ☒
 Greater Than 100 Ft (0 points) ☐

Wellhead Protection Area :

Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ YES (20 points) ☒ NO (0 points)

Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points) ☐
 200 Ft to 1000 Ft (10 points) ☒
 Greater Than 1000 Ft (0 points) ☐

Name of Surface Water Body ^{CITIZENS} ~~IRRIGATION DITCH~~

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

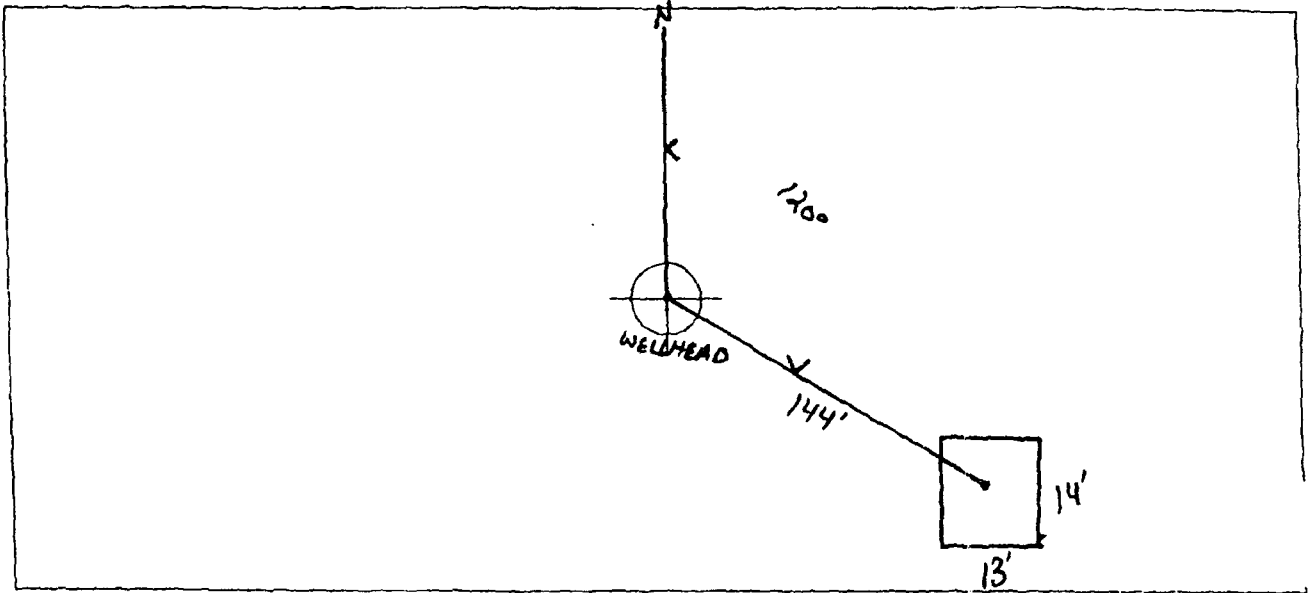
TOTAL HAZARD RANKING SCORE: 20 POINTS

REMARKS

Remarks : TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS UP ON A HILL. LOCATED RIGHT BEHIND CANOC PLANT IN BLOOMFIELD.

ORIGINAL PIT LOCATION

REMARKS



STARTED TAKING PICTURES AT 10:06 A.M.
END DUMP

Completed By:

Ed Thompson

Signature

4.14.04

Date

FIELD REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>73746</u> Location: <u>Brownington Gas Com #1</u> Coordinates: Letter: <u>E</u> Section <u>14</u> Township: <u>29</u> Range: <u>11</u> Or Latitude _____ Longitude _____ Date Started : <u>4-28-94</u> Area: <u>10</u> Run: <u>81</u>
FIELD OBSERVATIONS	Sample Number(s): <u>945036</u> <u>JP5</u> Sample Depth: <u>12</u> Feet Final PID Reading <u>0410 ppm</u> PID Reading Depth <u>12</u> Feet Yes No Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ (1) Approx. Cubic Yards <u>75</u> Onsite Bioremediation ☐ (2) Backfill Pit Without Excavation ☐ (3) Soil Disposition: Envirotech ☐ (1) ☒ (3) Tierra Other Facility ☐ (2) Name: _____ Pit Closure Date: <u>4-28-94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Dug test hole to 10' took Initial Ptd reading was 210 ppm at 75'. Remediated pit to 12' took VC sample PFD reading was 410 ppm at 75' pit size is 12x16x12 closed pit side walls & Floor still read Black.</u> Signature of Specialist: <u>James J. Pennoe</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP5	945036
MTR CODE SITE NAME:	73746	N/A
SAMPLE DATE TIME (Hrs):	4/28/94	1315
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-2-94	5-2-94
DATE OF BTEX EXT. ANAL.:	5/5/94	5/6/94
TYPE DESCRIPTION:	VC	Brown/Grey Clay/Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.6	MG/KG				
TOLUENE	59	MG/KG				
ETHYL BENZENE	8.8	MG/KG				
TOTAL XYLENES	110	MG/KG				
TOTAL BTEX	180	MG/KG				
TPH (418.1)	432	MG/KG			2.63	28
HEADSPACE PID	410	PPM				
PERCENT SOLIDS	85.5	%				

- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 -

The Surrogate Recovery was at 81 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached.

DF = Dilution Factor Used

Approved By:

Date:

5/21/94

```

*****
*                               *
*      Test Method for          *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                    *
*      Analysis Report    *
*****

```

74/03/02 11:25

% Sample identification

945032

% Initial mass of sample, g

2.030

% Volume of sample after extraction, ml

25.000

% Petroleum hydrocarbons, ppm

432.945

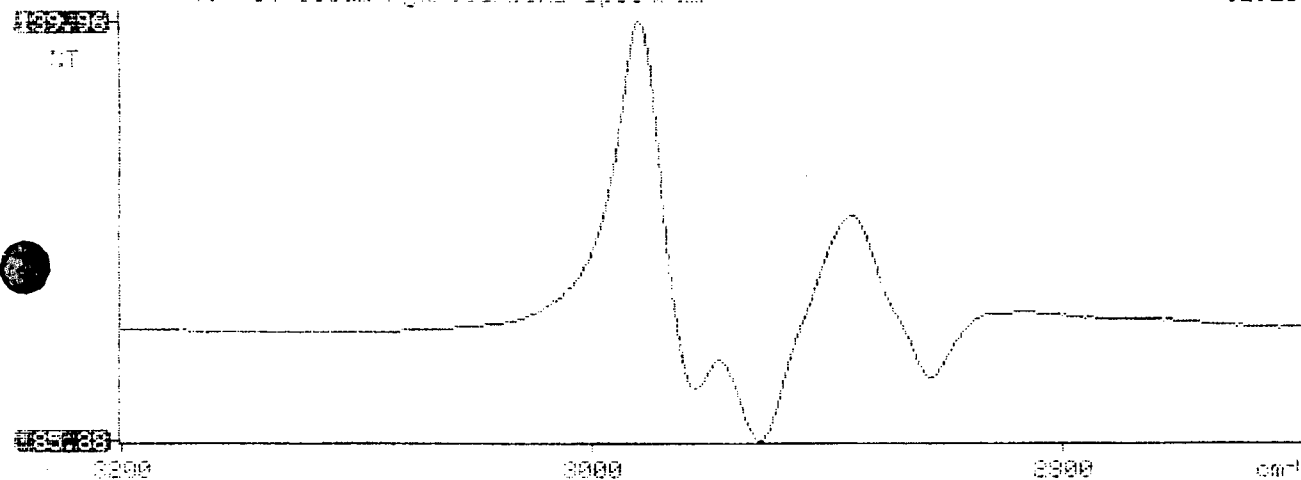
% Net absorbance of hydrocarbons (2930 cm⁻¹)

0.068

%
%
%

%: Petroleum hydrocarbons spectrum

12:25





Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. 405313

May 13, 1994

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 05/03/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-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.

EPA Method 8015 analysis was added on 05/05/94 for sample 945008 per Stacy Sendler.

The matrix spike/spike duplicate data from the samples extracted on 05/05/94 is reported twice reflecting quantification using both the internal standard and external standard protocols. Both protocols were employed to quantify the samples submitted for this project.

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

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405313
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
22	945033	NON-AQ	04/28/94	05/05/94	05/05/94	1
23	945035	NON-AQ	04/28/94	05/05/94	05/05/94	1
24	945036	NON-AQ	04/28/94	05/05/94	05/06/94	20

PARAMETER	UNITS	22	23	24
BENZENE	MG/KG	<0.025	<0.025	2.6
TOLUENE	MG/KG	<0.025	<0.025	59
ETHYLBENZENE	MG/KG	<0.025	<0.025	8.8
TOTAL XYLENES	MG/KG	<0.025	<0.025	110
METHYL-t-BUTYL ETHER	MG/KG	<0.12	<0.12	<2.4

SURROGATE:

BROMOFLUOROBENZENE (%) 91 95 81



Analytical Technologies, Inc.

COPY

ORIGINAL
INVOICE

AL 72053

Albuquerque Office: 2709-D Pan American Fwy., NE
Albuquerque, NM 87107
(505) 344-3777

Remit To:
Analytical Technologies, Inc.
P. O. Box 840438
Dallas, Texas 75284-0438

Billed to: EL PASO NATURAL GAS COMPANY
P.O. BOX 4990
FARMINGTON, NM 87499
Accession No.: 9405-313
Date: 05/13/94
Client No.: 850-020
810

Attention: ACCOUNTS PAYABLE

Telephone: 505-325-2841

Authorized by: JOHN LAMBDIN

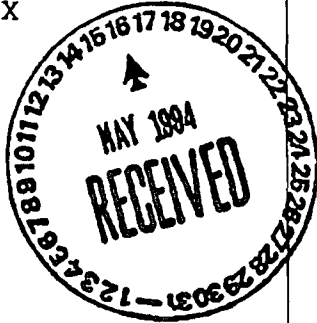
P.O. Number: 38822

Samples: 39 NON-AQ

Project: PIT CLOSURE
Project No.: 24324

EPNG SAMPLE # 945008
to
945027
945032, 945033, 945035 to 945039, 945041
to 945050, 945034 and 945040
received 05/03/94

TEST DESCRIPTION	QUANTITY	PRICE	TOTAL
EPA METHOD 8015M/8020	-10 % 1	125.00	112.50
BTEX/MTBE (8020)	-10 % 38	80.00	2736.00
NM GROSS RECEIPTS TAX	1	165.57	165.57
***** Amount due: 3014.07 *****			
5/17/94 APPROVED FOR PAYMENT DATE 50% 108-52452-24-0001-0012-SI-2010 CHARGE 50% 108-51570-24-0001-0012-SI-2010 SIGNATURE _____ David H. V. 541-3531			
TERMS: Net 30 Days - 1½% Finance Charge on Balance Due over 30 days.			



RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

326-2262 FAX (505) 326-2388

Borehole # BH-1

Well #

Page

of

Project Name EPNG PITS

Project Number 14509 Phase 6000 / 77

Project Location Bravington Gas Com #1 73746

Well Logged By CM Chance

Personnel On-Site K. Padilla, E. Rivera, D. Tsalats

Contractors On-Site

Client Personnel On-Site

Elevation

Borehole Location

GWL Depth

Logged By CM CHANCE

Drilled By M. DONOHUE K. Padilla

Date/Time Started 6/13/95-0930

Date/Time Completed 6/13/95-1050

Drilling Method 4 1/4" ID HSA

Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring			Drilling Conditions & Blow Counts
							Units: PPM	S	HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	6"	Blk silty CLAY, with xstn parting, med stiff, sl moist, ader			0	36	292 298	0940 hr
20	2	20-22	6"	Blk silty SAND, vf-f sand, tr med sand, med dense, sl moist, ader			3	69	28 232	0949
25	3	25-25.5	3"	lt br SANDSTONE, med sand, sl xstn, v. hard			0	40	12	hard drilling 1007 Refusal @ 25.5
30				TDB 25.5						
35										
40										

Comments:

25-25.5 sample sent to lab (CMC SD) (RTEX, TPH) BH grouted to surface

Geologist Signature



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	Field ID CMC50	Lab ID 946892
MTR CODE SITE NAME:	73746	Bruington Gas Com #1
SAMPLE DATE TIME (Hrs):	6/13/95	1007
PROJECT:	PHASE II Drilling	
DATE OF TPH EXT. ANAL.:	6/15/95	6/15/95
DATE OF BTEX EXT. ANAL.:	6/16/95	6/16/95
TYPE DESCRIPTION:	VG	Light tan fine sand

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.03	MG/KG				
TOLUENE	<0.03	MG/KG				
ETHYL BENZENE	<0.03	MG/KG				
TOTAL XYLENES	<0.03	MG/KG				
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	23.2	MG/KG			2.00	28
HEADSPACE PID	1	PPM				
PERCENT SOLIDS	94.1	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 97.0 for this sample All QA/QC was acceptable.
Narrative:

F = Dilution Factor Used

Approved By:

John L. Linder

INGVZPIT.XLS

Date:

6/28/95
7/17/97



Phase II

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	602 0250 CMC50	946892
MTR CODE SITE NAME:	009000 73746	N/A
SAMPLE DATE TIME (Hrs):	6-13-95	0250 1007
Project SAMPLED BY:	NEA Phase II Drilling	
DATE OF TPH EXT. ANAL.:	6-15-95	6-15-95
DATE OF BTEX EXT. ANAL.:	6-16-95	6-16-95
TYPE DESCRIPTION:	V.G.	009000000000 Light tan Fine Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	<0.025	MG/KG	1			
ETHYL BENZENE	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	0.02 23.2	MG/KG			2.0	28
HEADSPACE PID	0.01 1	PPM				
PERCENT SOLIDS	94.1 0.01	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at ~~0.00~~ 97 % for this sample All QA/QC was acceptable.

Narrative:

All Results attached.

DF = Dilution Factor Used

Approved By: J.P.

Date: 6/28/95

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506376
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946891	NON-AQ	06/13/95	06/16/95	06/16/95	1
02	946892	NON-AQ	06/13/95	06/16/95	06/16/95	1
03	946893	NON-AQ	06/13/95	06/16/95	06/16/95	1
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE			MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES			MG/KG	<0.025	<0.025	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%) 111 97 97



Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. 506376

June 21, 1995

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE/PHASE II 24324

Attention: John Lambdin

On 06/16/95, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-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.

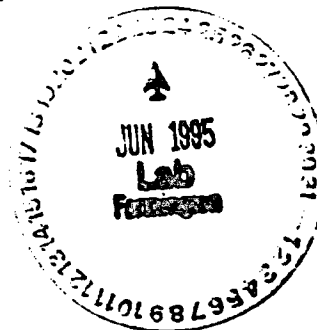
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure





CHAIN OF CUSTODY RECORD

[illegible]