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2005 AGWMR

JAN 2006

XTO ENERGY INC.

ANNUAL GROUNDWATER REMEDIATION REPORT

2005

STATE GC BS #1
(K) SECTION 23, T29N, R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO

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

JANUARY 2006

PREPARED BY:
BLAGG ENGINEERING, INC.

Consulting Petroleum / Reclamation Services
P.O. Box 87
Bloomfield, New Mexico 87413

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XTO Energy Inc.
State GC BS # 1
NE/4 SW/4 Sec. 23, T29N, R11W

Pit Closure Date: **2/17/94**

Monitor Well Installation Dates: **MW 1X – MW 5X - 4/01/03**
MW 6X - 6/10/03
MW 7X - 8/18/04

Monitor Well Sampling Dates: **Wells MW1 – MW6: 6/5/96, 9/11/96, 6/23/97, 9/22/97, 12/18/97, 5/30/98, 5/13/99, 8/25/99, 11/30/99, 6/29/00**
(Note: These wells destroyed in 6/02 during additional site remedial efforts)

Wells MW1X – MW7X: 8/25/03, 4/10/03, 8/28/03, 11/19/03, 3/27/04, 6/22/04, 9/24/04

Historical Information:

- February 1994 – Groundwater impacts were observed following remedial work at an earthen separator pit area (Figure 1). Initial remedial efforts included removal of impacted soils in the pit tank area. Site operated by Amoco Production Co.
- April 1996 – Amoco conducts investigation of impacts with installation of wells MW's 1-3.
- June 1996 – Well sampling identifies benzene in excess of standards at original pit area in well MW2.
- June 1997 – Well MW4 installed to investigate down gradient impacts.
- December 1997 – Well MW5 installed to further define site impacts.
- January 1998 - XTO Energy Inc. (XTO) acquires the State GC BS #1 from Amoco Production Company.
- June 2000 – Site sampling and laboratory analysis indicates all wells have reached New Mexico Water Quality Control Commission (NMWQCC) standards for closure, via natural attenuation.
- June 2002 – Additional soil impacts were discovered at the site during pipeline installation by Questar Pipeline Company. Remediation by excavation (Figures 1A – 1C) was conducted, followed by installation and sampling of monitor wells MW1X – 7X to confirm success of the remedial effort.
- September 2004 – Sampling of site wells completes four quarters of testing with all wells meeting NMWQCC standards for closure.

General Site History:

Groundwater impacts at this site were first identified in February, 1994 following work at a separator tank. Initial remediation included excavation of impacted soils to groundwater (found at approximately 5 feet below grade) in the separator pit tank area. Groundwater sampling of monitor wells installed following this discovery indicated a limited area of impact (reference report dated February 1999). Water quality in and around the separator release reached New Mexico Water Quality Control Commission (NMWQCC) closure standards in June 2000 and sampling was terminated.

In June 2002 additional soil impacts at the site were discovered during installation of a pipeline by Questar

Pipeline Company. Remediation by excavation was conducted (see Site Excavation Figures and associated soil sampling tables) to address these impacts. Excavated soils were treated on site until residual hydrocarbon levels reached NMOCD closure standards and then delivered to the surface rights owner (fee surface) for land application. Subsequent groundwater monitor wells were installed and sampling of these wells indicated that no groundwater impacts in excess of NMWQCC standards were present.

Groundwater Monitor Well Sampling Procedures:

Groundwater samples were collected from site monitor wells (MW) following US EPA: SW-846 protocol. Samples were collected using new disposable bailers and placed in laboratory supplied containers and stored in a cooler on ice. The samples were delivered to an accredited environmental laboratory according to chain-of-custody procedures. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) per US EPA Method 8021B and general water chemistry per US EPA Method 600/4-79-020. Analytical results are summarized on Tables 1 - 6. Waste generated (groundwater) during monitor well sampling and development was placed in the produced water separator tank located on the well site.

Water Quality and Gradient Information:

Groundwater elevation data (Figures 3 – 5) indicates that groundwater flow at this site is predominately to the south.

Laboratory analytical results indicate that following remedial efforts, groundwater from monitor wells MW 1X through MW 7X exhibit no detectable levels or trace levels of BTEX constituents and are below NMWQCC closure standards.

Summary:

XTO requests closure of this groundwater site according to the NMOCD approved Groundwater Management Plan. Analytical data from monitor well sampling indicates that water quality standards have been achieved in the source area and down-gradient wells. Permanent closure of this site is recommended. Following NMOCD approval for closure, all site monitor wells will be abandoned by placing a cement/bentonite grout mix in the well and cutting the casing to below surface grade.

TABLE 1

Summary Analytical Test Results for 2002 Remediation

DATE	TIME	SAMP. PT.	SOIL TYPE	DIST.(ft.) & BEARING	SOIL DEPTH (ft.)	OVM (ppm)	SOIL TPH (ppm)	GW DEPTH (ft.)	GW SAMP. TIME	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	TOTAL XYLENES (ppb)
6/10/02	1120	TH1	SAND	230, S36W	4.5	219.2	ND	-	-	-	-	-	-
6/10/02	-	TH2	SAND, CLAY, GRAV.	147, S15W	VISUALLY INSPECTED ONLY, NO DISCOLORATION OBSERVED WITHIN THE SOIL OR GROUNDWATER								
6/10/02	1147	TH3	SAND, GRAV.	207, S25W	4.5	504	179	5.5	1157	ND	7.4	170	610
6/10/02	1635	TH4	SAND, GRAV.	198, S13W	4	0.0	ND	5.5	1630	ND	ND	ND	ND
6/11/02	-	TH5	SAND, CLAY	348, S42W	-	-	-	5.5	1430	ND	ND	2.6	6.9
6/11/02	-	TH6	SAND, CLAY	375, S41W	-	-	-	5.5	1440	ND	ND	1.2	2.2
6/11/02	-	TH7	SAND, GRAV.	285, S32W	-	-	-	5	1500	ND	ND	ND	ND
6/14/02	0830	TH8	SAND, GRAV.	220, N84W	2.5	659	828	BTEX RESULTS FOR SOIL		17.1	186	159	1030
6/11/02	-	TH9	SAND, GRAV.	118, S50W	VISUALLY INSPECTED ONLY, NO DISCOLORATION OBSERVED WITHIN THE SOIL OR GROUNDWATER								
6/11/02	-	TH10	SAND, GRAV.	106, S43W	VISUALLY INSPECTED ONLY, NO DISCOLORATION OBSERVED WITHIN THE SOIL OR GROUNDWATER								
6/11/02	-	TH11	SAND, GRAV.	192, S1E	VISUALLY INSPECTED ONLY, NO DISCOLORATION OBSERVED WITHIN THE SOIL OR GROUNDWATER								
6/11/02	-	TH12	SAND, GRAV.	225, DUE SOUTH	VISUALLY INSPECTED ONLY, NO DISCOLORATION OBSERVED WITHIN THE SOIL OR GROUNDWATER								
6/11/02	-	TH13	SAND, GRAV.	154, S2E	VISUALLY INSPECTED ONLY, NO DISCOLORATION OBSERVED WITHIN THE SOIL OR GROUNDWATER								
7/12/02	0706	TH #101	SAND, GRAV.	41, N27E	4	0.1	ND	-	-	-	-	-	-
7/12/02	0710	TH #102	SAND, GRAV.	36, N5W	4	0.7	ND	-	-	-	-	-	-
7/12/02	0722	TH #103	SAND, GRAV.	49, N88W	4	1.0	ND	-	-	-	-	-	-
6/14/02	-	N-EX @GW	-	SEE SITE MAP	-	-	-	5	0900	89	520	160	1440

TABLE 1 (continued)

Summary Analytical Test Results for 2002 Remediation

DATE	TIME	SAMP. PT.	SOIL TYPE	DIST.(ft.) & BEARING	SOIL DEPTH (ft.)	OVM (ppm)	SOIL TPH (ppm)	GW DEPTH (ft.)	GW SAMP. TIME	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	TOTAL XYLENES (ppb)
6/14/02	-	C-EX @GW	-	SEE SITE MAP	-	-	-	5.5	1330	ND	0.9	ND	1.2
6/14/02	-	WET-SS @GW	-	SEE SITE MAP	-	-	-	5	1340	0.6	0.9	0.8	4.5
6/17/02	0655	N-EX (MW #2)	SAND, GRAV.	SEE SITE MAP	5	217.4	ND	-	-	-	-	-	-
6/17/02	-	N-EX (MW #2 So.)	SAND, GRAV.	SEE SITE MAP	3.5	127.4	-	-	-	-	-	-	-
6/17/02	1100	N-EX (NE)	SILTY CLAY	SEE SITE MAP	4	54.4	78.1	-	-	-	-	-	-
6/10/02	1440	1A	SILTY SAND	25 NO. OF MW # 4R	4	198.2	22.4	-	-	-	-	-	-
6/17/02	1308	M-EX (MW #4R)	SAND, SILT	SEE SITE MAP	4	2.7	ND	-	-	-	-	-	-
6/10/02	-	MW # 4R	-	228, S12W	-	-	-	5	1000	ND	ND	1.4	1.8
6/10/02	-	MW #X (#4R DUP.)	-	"	-	-	-	"	"	ND	ND	1.5	1.9
6/19/02	0750	SW-SEEX	SAND	SEE SITE MAP	4.5	0.0	-	-	-	-	-	-	-
6/19/02	0755	NE-SEEX	SAND	SEE SITE MAP	4.5	70.1	-	-	-	-	-	-	-
6/19/02	0815	NW-SEEX	SAND	SEE SITE MAP	4.5	352	0.8	BTEX RESULTS FOR SOIL		ND	ND	ND	ND
6/19/02	-	NW-SEEX @GW	-	SEE SITE MAP	-	-	-	5.5	0858	ND	11	9.9	256
6/11/02	1330	PT	SILTY CLAY	297, S22W	3	24.3	-	-	-	-	-	-	-

NOTES: SAMP. = SAMPLE, PT. = POINT, DIST. = DISTANCE, (ft.) = FEET, OVM = ORGANIC VAPOR METER OR PHOT IONIZATION DETECTOR (PID), TPH = TOTAL PETROLEUM HYDROCARBONS, (ppm) = PARTS PER MILLION, GW = GROUNDWATER, (ppb) = PARTS PER BILLION, TH = TEST HOLE (advanced with trackhoe), GRAV. = GRAVEL OF VARYING SIZE, ND = NON DETECTABLE AT LABORATORY DETECTION LIMITS, SYMBOL (-) = NOT AVAILABLE AND/OR COLLECTED. DISTANCE & BEARING DERIVED FROM PEARCE GC # 1 PLUGGED & ABANDONED MARKER.

TABLE 2

Summary Soil Analytical Test Results for 2002 Remediation

DATE	SAMP. ID	SOIL DEPTH (ft.)	OVM (ppm)	TIME COLLECTED	TIME READ	DATE	SAMP. ID	SOIL DEPTH (ft.)	OVM (ppm)	TIME COLLECTED	TIME READ
6/20/02	1	4	0.0	0958	1035	6/20/02	7	5	0.0	1106	1121
6/20/02	2	4	0.0	1003	1036	6/20/02	8	5	0.9	1044	1050
6/20/02	3	3.5	0.0	1005	1036	6/20/02	9	5	0.0	1042	1049
6/20/02	4	4.5	0.0	1058	1113	6/20/02	10	3.5	0.0	1038	1048
6/20/02	5	4.5	0.0	1055	1112	6/20/02	11	4	0.0	1012	1035
6/20/02	6	5	0.0	1109	1122						

NOTES: SAMP. = SAMPLE, (ft.) = FEET, OVM = ORGANIC VAPOR METER OR PHOT IONIZATION DETECTOR (PID), (ppm) = PARTS PER MILLION.

TABLE 3

Summary Groundwater PAH/General Chemistry for 2002 Remediation

DATE	TIME	SAMPLE ID	PAH (ppb)	DATE	TIME	SAMPLE ID	pH	TDS (mg/L)	CHLORIDE (mg/L)	SULFATE (mg/L)	NITRATE (mg/L)	FLUORIDE (mg/L)
6/10/02	**1157**	**TH3 @ GW (5.5')**	**72.0**	**6/14/02**	**1330**	**C-EX @ GW (5.5')**	**7.76**	**2,960**	**48.0**	**1,700**	**1.9**	**1.51**
6/14/02	**0900**	**N-EX @ GW (5')**	**60.0**									
6/17/02	**1525**	**D.T.H. @ GW (8')**	**6.0**									

NOTES: PAH = POLYNUCLEAR AROMATIC HYDROCARBONS, (ppb) = PARTS PER BILLION, TDS = TOTAL DISSOLVED SOLIDS, (mg/L) = MILLIGRAMS PER LITER.

TABLE 4

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

STATE GC BS # 1

UNIT K, SEC. 23, T29N, R11W

REVISED DATE: AUGUST 28, 2000

FILENAME: (ST-2Q-00.WK4) NJV

								BTEX EPA METHOD 8021B (ppb)			
SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
05-Jun-96	MW #1	5.60	8.43	4,660	3,200	6.80		ND	ND	ND	ND
13-May-99		5.77		4,275	8,550	7.50		-	-	-	-
29-Jun-00		7.11			NA	NA		-	-	-	-
05-Jun-96	MW #2	5.57	8.43	5,120	4,400	6.70		57.2	ND	277	2,804
11-Sep-96		6.36			3,800	7.40		17.3	19.7	177	197.23
23-Jun-97		5.82	8.42		4,000	7.60		8.6	3.6	4.8	26.5
22-Sep-97		5.50			2,900	7.40		0.4	4.4	ND	14.8
18-Dec-97		5.29			3,300	6.90		ND	0.7	2.7	11.2
30-May-98		5.27			3,200	7.20		1.2	1.9	2.7	5.5
13-May-99		6.15		4,860	9,740	7.60		-	-	-	-
05-Jun-96	MW #3	5.75	8.62	13,000	6,500	7.00		ND	ND	ND	ND
13-May-99		6.40		8,050	16,200	7.50		-	-	-	-
29-Jun-00		7.67			4,300	7.30		ND	ND	ND	ND
23-Jun-97	MW #4	6.74	8.95	4,119	3,800	7.20		26.4	87	186	1,062
26-Jun-98	MW #4R	5.56	10.00		2,600	7.70		17.1	10	9	47
13-May-99		4.87		4,700	9,450	7.30		3.9	4.5	2.9	8.3
25-Aug-99		3.35			3,200	7.00		8.6	2.0	0.5	2.6
30-Nov-99		4.22			3,300	7.10		10.5	0.8	7.5	8.2
29-Jun-00		6.13			3,400	7.10		ND	ND	ND	ND
18-Dec-97	MW #5	6.45	9.00	1,870	3,200	6.90		ND	0.4	ND	0.6
13-May-99	MW #5R	7.65	10.00	4,790	9,600	7.30		-	-	-	-
29-Jun-00		8.90			3,400	7.10		ND	ND	ND	ND
25-Aug-00	MW #6	5.30	10.00	8,070	4,000	7.10		-	-	-	-
					NMWQCC GROUNDWATER STANDARDS			10	750	750	620

NOTES : 1) RESULTS HIGHLIGHTED IN RED INDICATE EXCEEDING NMWQCC STANDARDS .

2) RESULTS HIGHLIGHTED IN BLUE INDICATE BELOW NMWQCC STANDARDS AFTER PROCEEDING RESULTS HAD EXCEEDED .

TABLE 5

GENERAL WATER QUALITY

CROSS TIMBERS OIL COMPANY

STATE GC BS # 1

SAMPLE DATE : May 13 , 1999

PARAMETERS	MW # 1	MW # 2	MW # 3	MW # 4R	MW # 5R	Units
LAB pH	7.46	7.58	7.50	7.32	7.31	s. u.
LAB CONDUCTIVITY @ 25 C	8,550	9,740	16,200	9,450	9,600	umhos / cm
TOTAL DISSOLVED SOLIDS @ 180 C	4,275	4,860	8,050	4,700	4,790	mg / L
TOTAL DISSOLVED SOLIDS (Calc)	4,264	4,841	8,004	4,669	4,755	mg / L
SODIUM ABSORPTION RATIO	8.7	12.2	25.2	11.1	11.7	ratio
TOTAL ALKALINITY AS CaCO3	364	568	876	316	332	mg / L
TOTAL HARDNESS AS CaCO3	1,445	1,325	1,295	1,350	1,320	mg / L
BICARBONATE as HCO3	364	568	876	316	332	mg / L
CARBONATE AS CO3	< 1	< 1	< 1	< 1	< 1	mg / L
HYDROXIDE AS OH	< 1	< 1	< 1	< 1	< 1	mg / L
NITRATE NITROGEN	< 0.1	< 0.1	< 0.1	0.7	3.1	mg / L
NITRITE NITROGEN	0.029	0.015	0.007	0.024	0.094	mg / L
CHLORIDE	15.5	50.0	56.5	17.0	13.5	mg / L
FLUORIDE	1.25	1.52	1.69	1.31	1.26	mg / L
PHOSPHATE	0.3	0.2	0.1	< 0.1	< 0.1	mg / L
SULFATE	2,690	2,910	4,840	2,990	3,040	mg / L
IRON	0.553	0.038	0.029	0.207	0.001	mg / L
CALCIUM	504	446	428	494	480	mg / L
MAGNESIUM	45.2	51.3	55.0	28.1	29.3	mg / L
POTASSIUM	26.5	17.5	11.0	6.0	6.0	mg / L
SODIUM	760	1020	2,080	940	980	mg / L
CATION / ANION DIFFERENCE	0.20	0.14	0.14	0.02	0.13	%

NOTE : Chloride & TDS samples collected on June 29, 2000 ; TDS sample collected from newly installed MW # 6 on August 25, 2000 ; results are as follows:

	TDS	CHLORIDE	
MW # 3	5,180	23.0	mg / L
MW # 4R	-	11.0	mg / L
MW # 5R	-	12.9	mg / L
MW # 6	8,070	-	mg / L

TABLE 6

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

STATE GC BS # 1

UNIT K, SEC. 23, T29N, R11W

REVISED DATE: JANUARY 19, 2006

FILENAME: (STAT3Q04.WK4) NJV

								BTEX EPA METHOD 8021B (ppb)			
SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
10-Apr-03	MW #1X	4.98	9.83		6,900	6.95		ND	ND	ND	ND
28-Aug-03		6.05			7,800	6.73		ND	ND	0.55	0.56
27-Mar-04		4.61			6,200	7.10		ND	ND	ND	ND
22-Jun-04		5.90			8,000	6.79		0.65	ND	ND	ND
24-Sep-04		5.80			5,700	6.65		ND	ND	ND	ND
10-Apr-03	MW #2X	3.79	8.55		2,200	6.95		ND	ND	ND	1.9
28-Aug-03		4.74			3,300	6.81		ND	ND	ND	ND
27-Mar-04		3.36			3,500	6.96		ND	ND	ND	ND
22-Jun-04		4.86			3,200	6.86		ND	ND	ND	ND
24-Sep-04		4.11			3,100	6.73		ND	ND	ND	ND
10-Apr-03	MW #3X	4.93	8.43		2,700	6.99		ND	ND	ND	ND
28-Aug-03		5.72			3,600	6.78		ND	ND	ND	ND
27-Mar-04		4.52			3,400	7.00		ND	ND	ND	ND
22-Jun-04		5.81			3,300	6.95		ND	ND	ND	ND
24-Sep-04		5.21			3,300	6.72		ND	ND	ND	ND
10-Apr-03	MW #4X	4.96	7.85		3,300	6.77		ND	0.5	1.4	2.5
28-Aug-03		5.48			4,100	6.71		ND	ND	1.1	ND
27-Mar-04		4.59			3,900	6.91		ND	ND	1.2	ND
22-Jun-04		5.56			4,200	6.85		ND	ND	0.73	ND
24-Sep-04		4.96			3,800	6.60		ND	ND	0.70	ND
10-Apr-03	MW #5X	6.48	10.00		3,300	6.90		11	150	100	790
28-Aug-03		6.82			3,900	6.75		2.6	4.9	22	100
"	duplicate	"						3.4	5.9	30	140
20-Nov-03		6.09			3,600	6.95		1.4	4.9	17	93
27-Mar-04		6.08			3,700	7.01		1.5	ND	5.4	19
22-Jun-04		6.93			4,400	6.74		3.3	2.5	37	120
24-Sep-04		6.37			3,700	6.68		ND	1.9	9.0	38
					NMWQCC GROUNDWATER STANDARDS			10	750	750	620

TABLE 6 (continued)

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

STATE GC BS # 1

UNIT K, SEC. 23, T29N, R11W

REVISED DATE: JANUARY 19, 2006

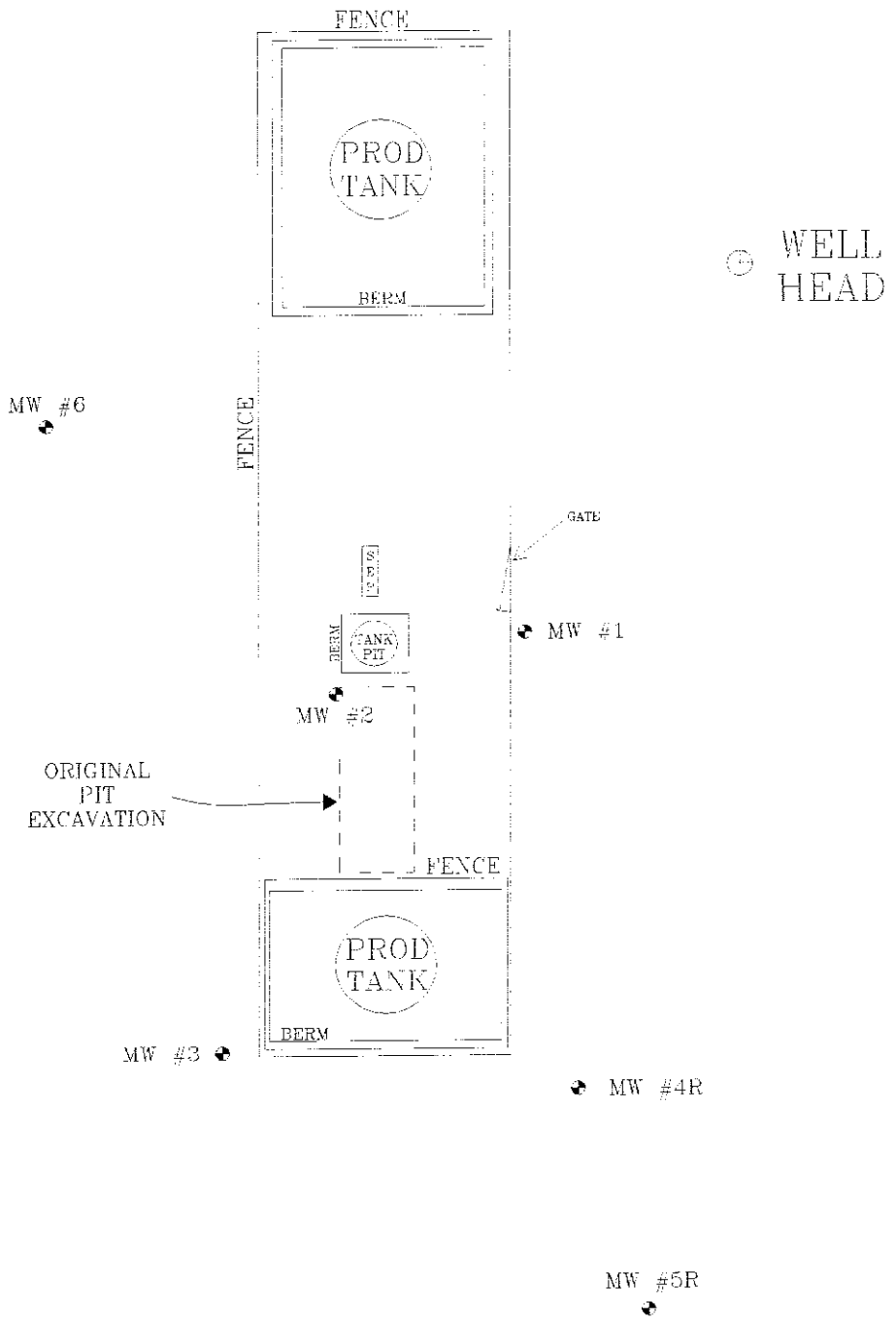
FILENAME: (STAT3Q04.WK4) NJV

								BTEX EPA METHOD 8021B (ppb)			
SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
28-Aug-03	MW #6X	6.80	10.00		3,700	6.87		ND	ND	ND	ND
20-Nov-03		6.05			3,700	6.99		ND	ND	ND	ND
27-Mar-04		6.09			3,700	7.05		ND	ND	ND	ND
22-Jun-04		6.92			4,000	6.91		ND	ND	ND	ND
24-Sep-04		6.35			3,700	6.73		ND	ND	ND	ND
24-Sep-04	MW #7X	5.68	10.00		4,900	6.93		1.3	ND	2.9	ND
					NMWQCC GROUNDWATER STANDARDS			10	750	750	620

NOTES : 1) RESULTS HIGHLIGHTED IN RED INDICATE EXCEEDING NMWQCC STANDARDS .

2) RESULTS HIGHLIGHTED IN BLUE INDICATE BELOW NMWQCC STANDARDS AFTER PROCEEDING RESULTS HAD EXCEEDED .

FIGURE 1



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.

ONE INCH = 50 FEET

0 50 100 FT.

AMOCO PRODUCTION COMPANY

STATE GC BS 1

NE/4 NW/4 SEC. 23, T29N, R11W

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

DRAWN BY: MJV

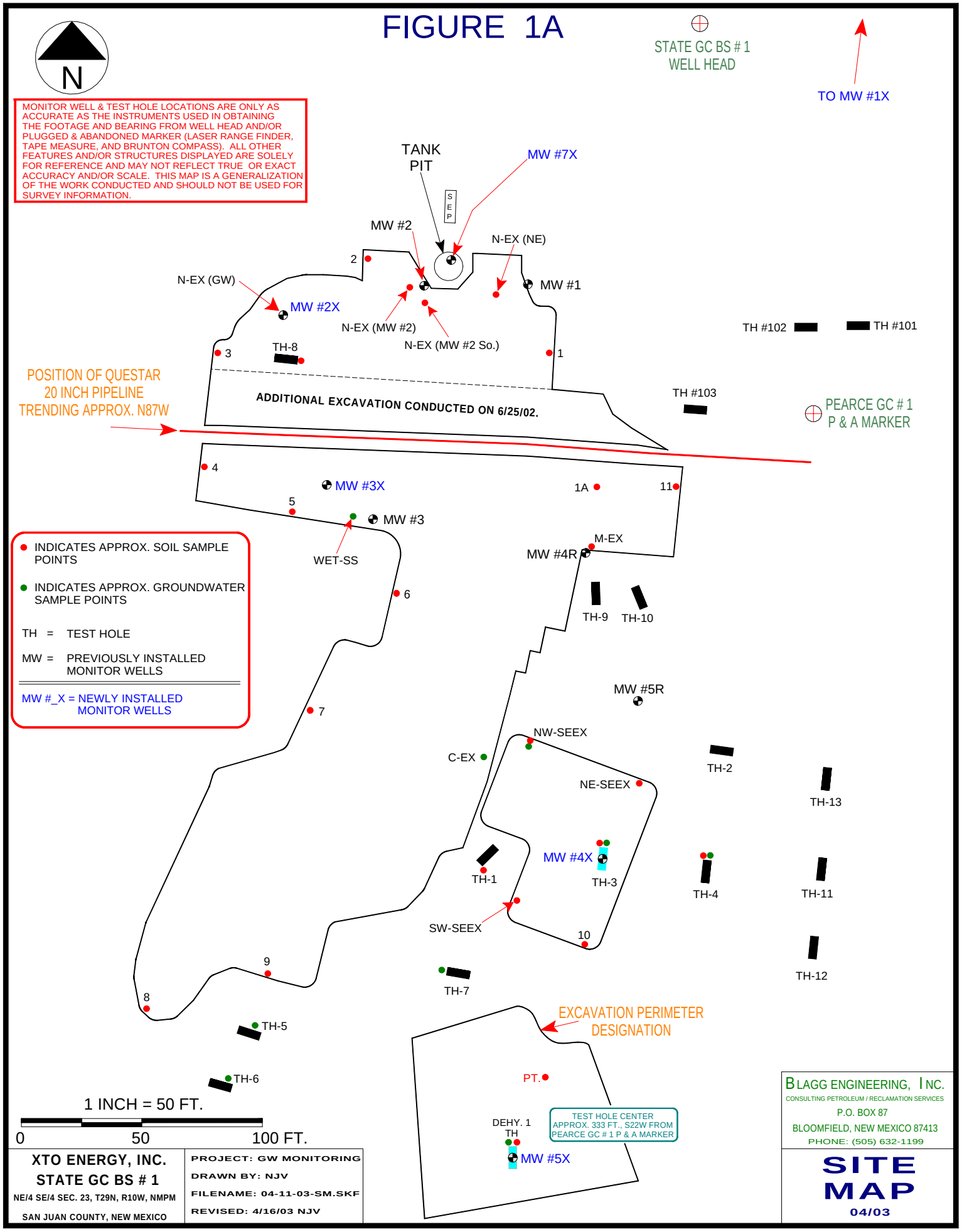
FILENAME: 08-PS-SM.SKD

REVISED: 4/04/01 MJV

SITE MAP

08/00

FIGURE 1A



XTO ENERGY, INC.	PROJECT: GW MONITORING
STATE GC BS # 1	DRAWN BY: NJV
NE/4 SE/4 SEC. 23, T29N, R10W, NMPM	FILENAME: 04-11-03-SM.SKF
SAN JUAN COUNTY, NEW MEXICO	REVISED: 4/16/03 NJV

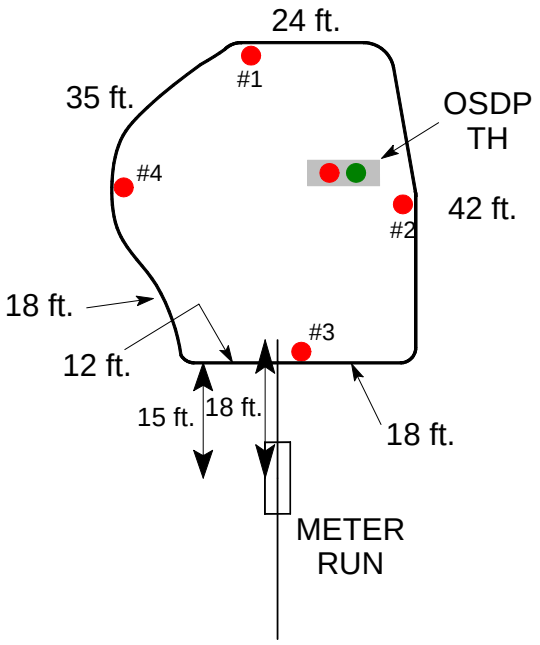
BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

SITE MAP
04/03

FIGURE 1B

N

TEST HOLE CENTER APPROX. 102 FT., N48E FROM WELL HEAD



CENTER OF METER HOUSE APPROX. 73 FT., N67E FROM WELL HEAD

STATE GC BS # 1
WELL HEAD

DATE	TIME	SAMPLE ID	SAMPLE DEPTH	OVM (ppm)	TPH (ppm)
7/9/02	0740	#1	4 ft.	0.8	ND
7/9/02	0742	#2	4 ft.	1.1	ND
7/9/02	0746	#3	4 ft.	0.9	ND
7/9/02	0748	#4	4 ft.	0.7	ND
6/17/02	1112	OSDP	2 ft.	243	ND

DATE	SAMPLE ID	SAMPLE DEPTH	BENZENE (ppb)	ETHYL-BENZENE (ppb)	TOLUENE (ppb)	XYLENES (ppb)	TIME
6/17/02	OSDP	2 ft.	ND	ND	ND	ND	1112
6/17/02	OSDP @ GW	7 ft.	6.6	76	36	243	1120

1 INCH = 25 FT.

0 25 50 FT.

- INDICATES APPROX. SOIL SAMPLE POINTS
- INDICATES APPROX. GROUNDWATER SAMPLE POINT

TH = TEST HOLE

TEST HOLE & SAMPLE POINT LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE OR EXACT ACCURACY AND/OR SCALE. THIS MAP IS A GENERALIZATION OF THE WORK CONDUCTED AND SHOULD NOT BE USED FOR SURVEY INFORMATION.

XTO ENERGY, INC.

STATE GC BS # 1

NE/4 SE/4 SEC. 23, T29N, R10W, NMPM

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: REMEDIAL ACTION

DRAWN BY: NJV

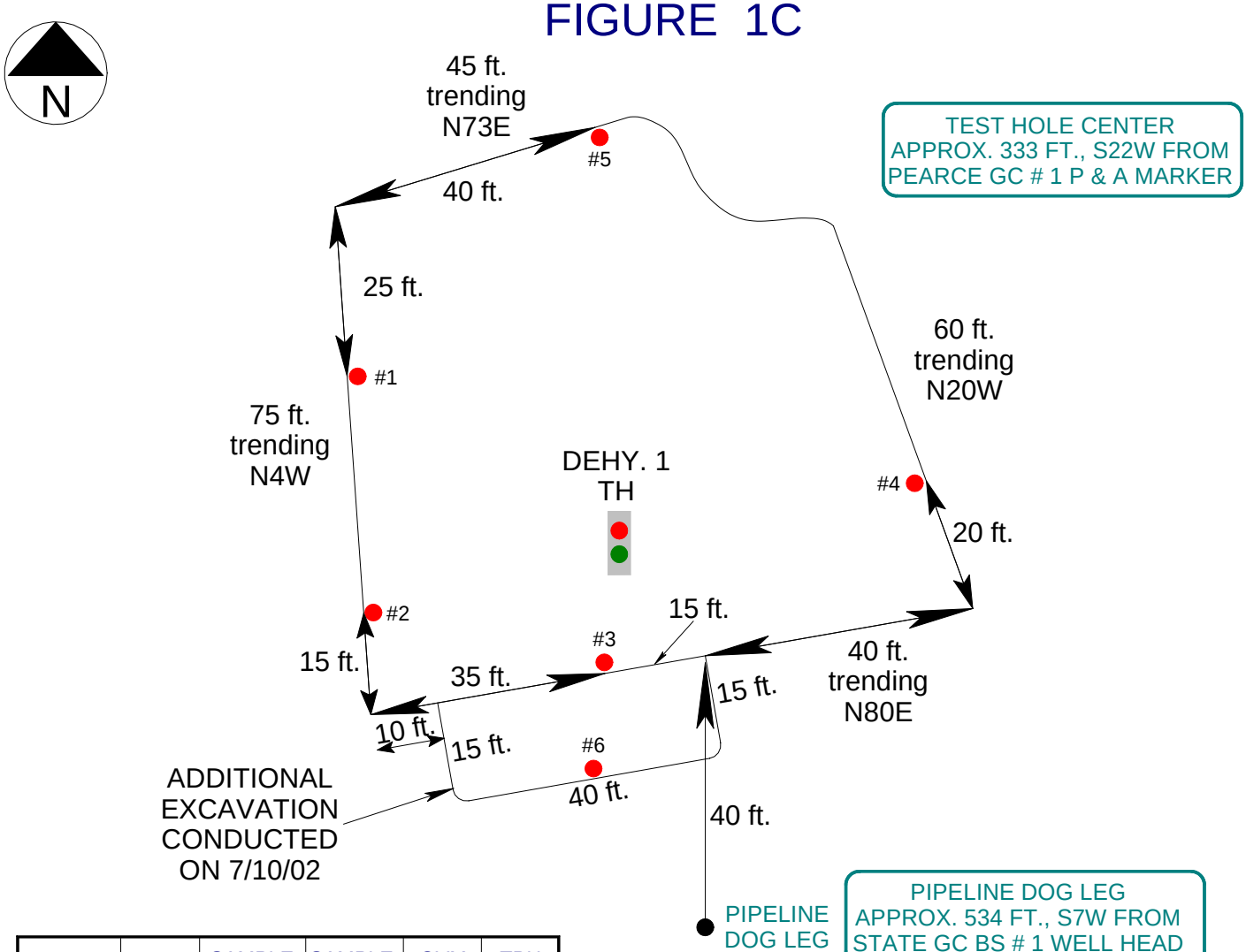
FILENAME: 0SDP-SM.SKF

DRAWN: 7/23/02 NJV

ON SITE DEHYDRATOR PIT EXCAVATION SITE MAP

07/02

FIGURE 1C



DATE	TIME	SAMPLE ID	SAMPLE DEPTH	OVM (ppm)	TPH (ppm)
6/17/02	1515	DEHY. 1	3.5 ft.	607	112
7/9/02	1549	#1	3.5 ft.	0.4	ND
7/9/02	1554	#2	5 ft.	17.0	ND
7/9/02	1603	#3	3.5 ft.	149	4.1
7/9/02	1606	#4	4 ft.	5.8	ND
7/9/02	1613	#5	4 ft.	0.6	ND
7/10/02	0845	#6	4 ft.	1.4	NA

DATE	TIME	SAMPLE ID	SAMPLE DEPTH	BENZENE (ppb)	ETHYL-BENZENE (ppb)	TOLUENE (ppb)	XYLENES (ppb)	TOTAL BTEX (ppb)
6/17/02	1515	DEHY. 1	3.5 ft.	5.7	113	20.3	298.7	438
6/17/02	1525	D.T.H. @ GW	8 ft.	13	320	72	800	NA
7/09/02	1603	#3	3.5 ft.	4.0	26.9	9.9	106.4	147

- INDICATES APPROX. SOIL SAMPLE POINTS
- INDICATES APPROX. GROUNDWATER SAMPLE POINT

TH = TEST HOLE

TEST HOLE SAMPLE POINT LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE OR EXACT ACCURACY AND/OR SCALE. THIS MAP IS A GENERALIZATION OF THE WORK CONDUCTED AND SHOULD NOT BE USED FOR SURVEY INFORMATION.

1 INCH = 25 FT.

0 25 50 FT.

XTO ENERGY, INC.

STATE GC BS # 1

NE/4 SE/4 SEC. 23, T29N, R10W, NMPM

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: REMEDIAL ACTION

DRAWN BY: NJV

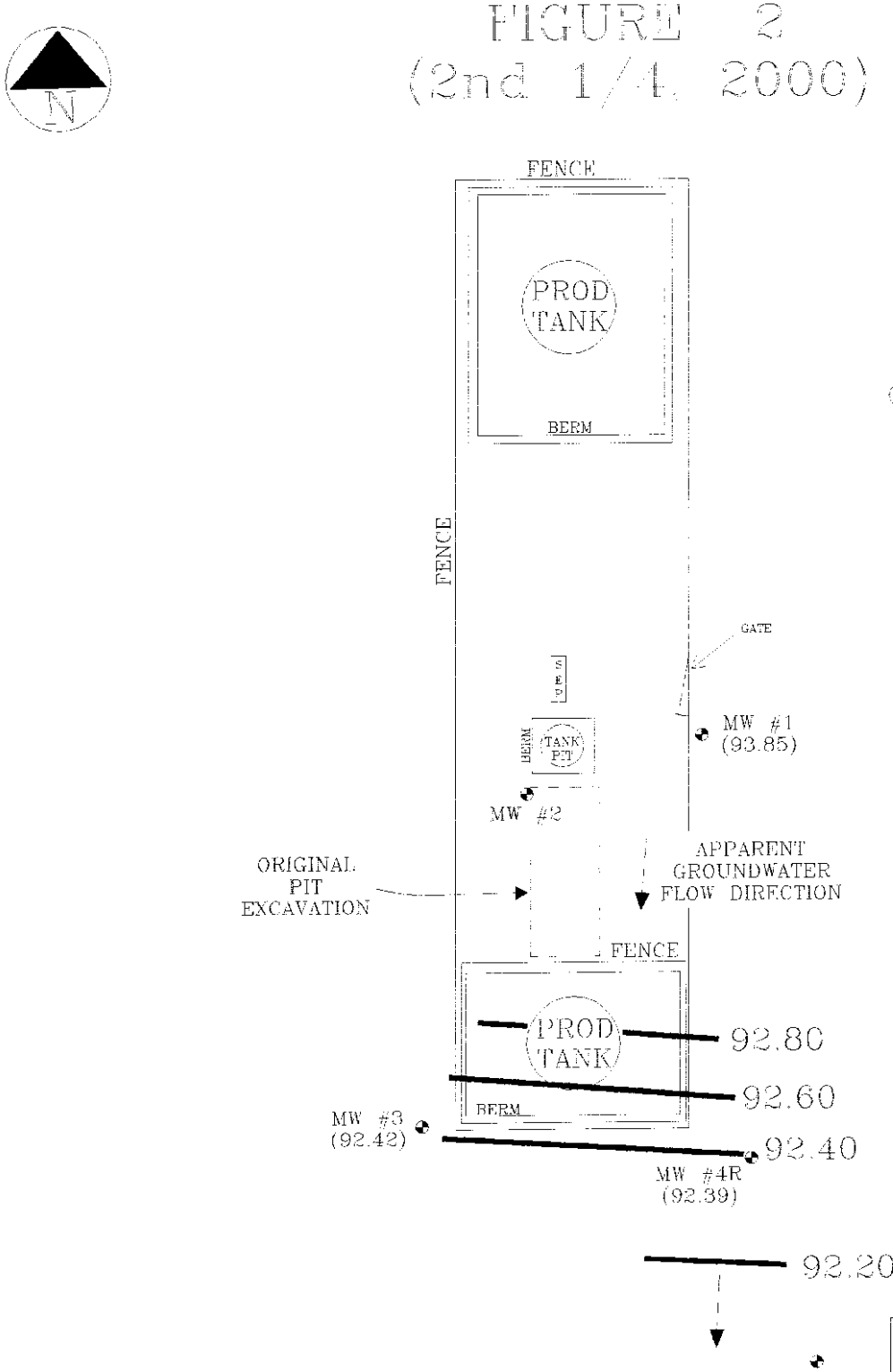
FILENAME: EPNG-DP-SM.SKF

DRAWN: 7/23/02 NJV

EPNG DEHYDRATOR PIT EXCAVATION SITE MAP

07/02

FIGURE 2
(2nd 1/4, 2000)



Top of Well Elevation	
MW #1	(100.96)
MW #2	(100.99)
MW #3	(100.09)
MW #4R	(98.52)
MW #5R	(100.93)

MW #1 (93.85) Groundwater Elevation as of 6/29/00.

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.

1 inch = 50 ft

0 50 100 FT

AMOCO PRODUCTION COMPANY

STATE GC BS 1

NE/4 NW/4 SEC. 23, T29N, R11W

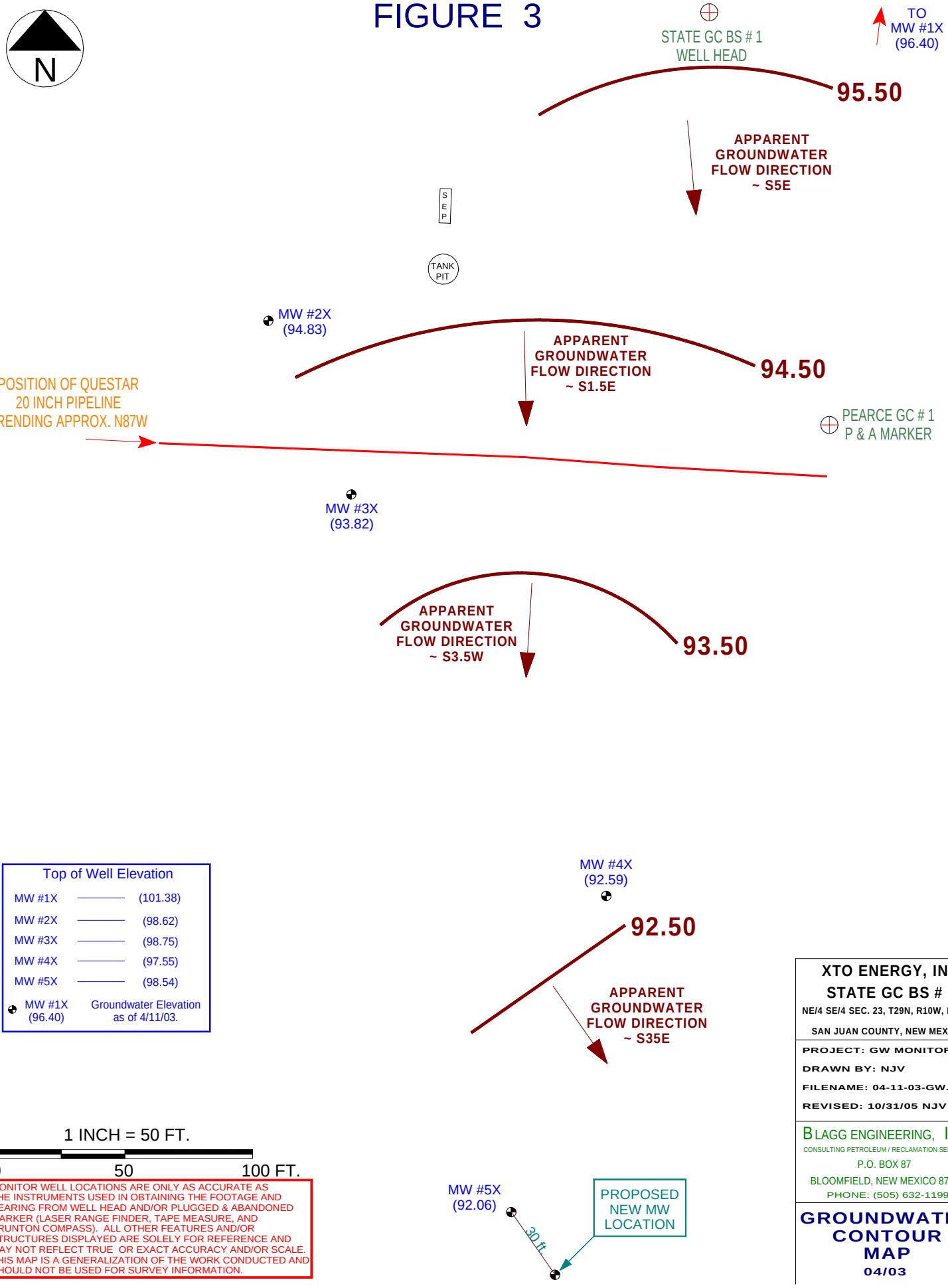
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW Sampling
DRAWN BY: NJV
FILENAME: 06-29-GW.SKD
REVISED: 4/4/01 NJV

GROUNDWATER GRADIENT MAP
06/00

FIGURE 3



Top of Well Elevation	
MW #1X	(101.38)
MW #2X	(98.62)
MW #3X	(98.75)
MW #4X	(97.55)
MW #5X	(98.54)

MW #1X (96.40) Groundwater Elevation as of 4/11/03.

1 INCH = 50 FT.

0 50 100 FT.

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE OR EXACT ACCURACY AND/OR SCALE. THIS MAP IS A GENERALIZATION OF THE WORK CONDUCTED AND SHOULD NOT BE USED FOR SURVEY INFORMATION.

XTO ENERGY, INC.

STATE GC BS # 1

NE/4 SE/4 SEC. 23, T29N, R10W, NMPM

SAN JUAN COUNTY, NEW MEXICO

PROJECT: GW MONITORING

DRAWN BY: NJV

FILENAME: 04-11-03-GW.SKF

REVISED: 10/31/05 NJV

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

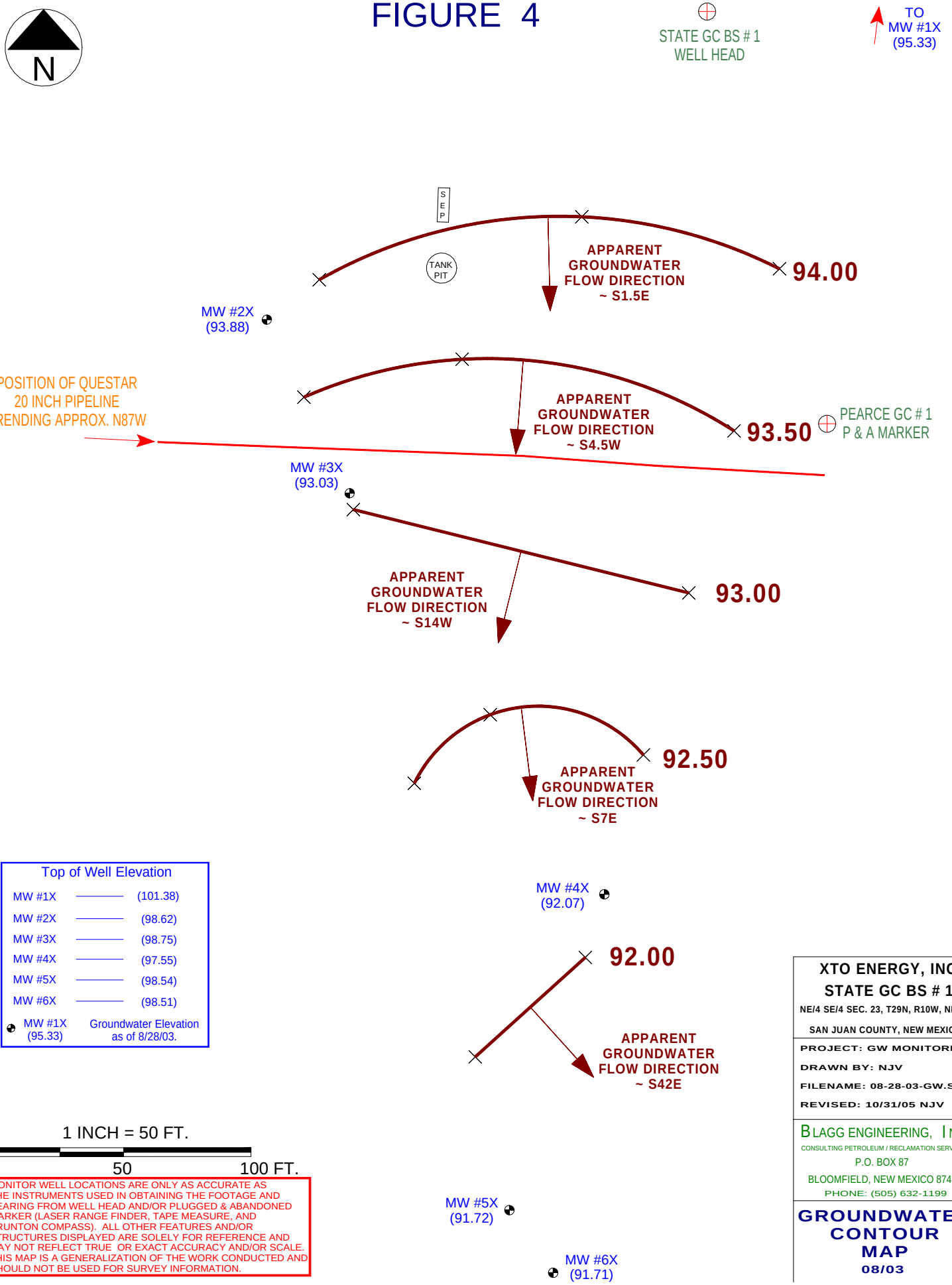
BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

GROUNDWATER CONTOUR MAP

04/03

FIGURE 4



Top of Well Elevation	
MW #1X	(101.38)
MW #2X	(98.62)
MW #3X	(98.75)
MW #4X	(97.55)
MW #5X	(98.54)
MW #6X	(98.51)

MW #1X (95.33) Groundwater Elevation as of 8/28/03.

1 INCH = 50 FT.

0 50 100 FT.

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE OR EXACT ACCURACY AND/OR SCALE. THIS MAP IS A GENERALIZATION OF THE WORK CONDUCTED AND SHOULD NOT BE USED FOR SURVEY INFORMATION.

XTO ENERGY, INC.

STATE GC BS # 1

NE/4 SE/4 SEC. 23, T29N, R10W, NMPM

SAN JUAN COUNTY, NEW MEXICO

PROJECT: GW MONITORING

DRAWN BY: NJV

FILENAME: 08-28-03-GW.SKF

REVISED: 10/31/05 NJV

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

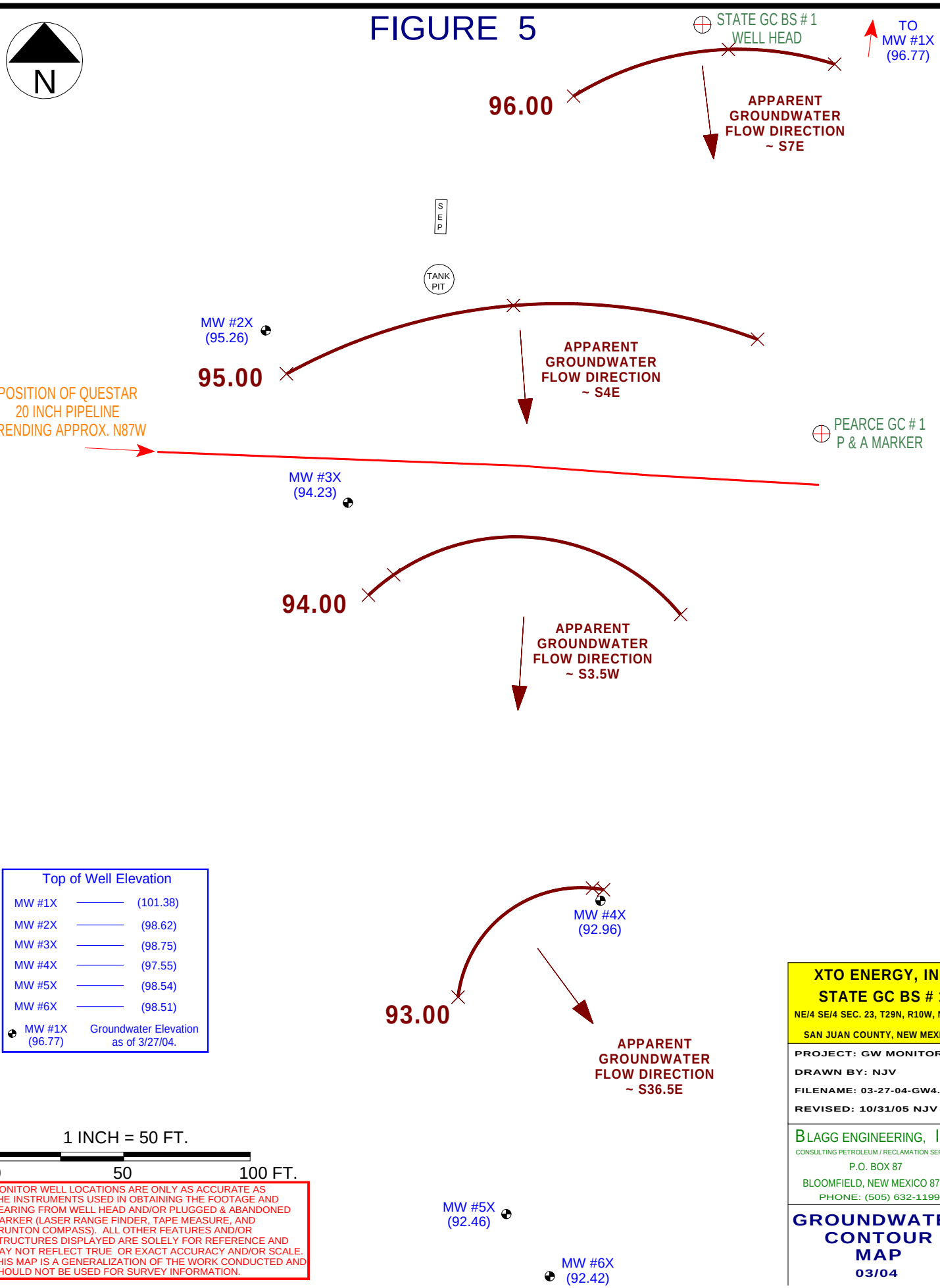
BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

GROUNDWATER CONTOUR MAP

08/03

FIGURE 5



Top of Well Elevation	
MW #1X	(101.38)
MW #2X	(98.62)
MW #3X	(98.75)
MW #4X	(97.55)
MW #5X	(98.54)
MW #6X	(98.51)

MW #1X (96.77) Groundwater Elevation as of 3/27/04.

1 INCH = 50 FT.

0 50 100 FT.

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE OR EXACT ACCURACY AND/OR SCALE. THIS MAP IS A GENERALIZATION OF THE WORK CONDUCTED AND SHOULD NOT BE USED FOR SURVEY INFORMATION.

XTO ENERGY, INC.
STATE GC BS # 1
NE/4 SE/4 SEC. 23, T29N, R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO

PROJECT: GW MONITORING
DRAWN BY: NJV
FILENAME: 03-27-04-GW4.SKF
REVISED: 10/31/05 NJV

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

GROUNDWATER CONTOUR MAP
03/04

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : **CROSS TIMBERS OIL CO.**

CHAIN-OF-CUSTODY # : 10608

7025

STATE GC BS # 1 - SEPARATOR PIT

UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : ON - SITE TECH.

ENVIROTECH, INC.

Date : June 29, 2000

SAMPLER : N J V

Filename : 06-29-00.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
1	100.96	93.85	7.11	8.43	-	-	-	-	-
2	100.99		-	8.42	-	-	-	-	-
3	100.09	92.42	7.67	8.62	1125	7.3	4,300	0.50	-
4R	98.52	92.39	6.13	10.00	1055	7.1	3,400	2.00	-
5R	100.93	92.03	8.90	10.00	1105	7.1	3,400	0.50	-

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

2.00 " well diameter = 0.49 gallons per foot of water.

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Very low quantity in all MW 's . Collected BTEX & chloride samples from MW #'s 3, 4R, & 5R .

Collected TDS sample from MW # 3 only .

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : **CROSS TIMBERS OIL CO.**

CHAIN-OF-CUSTODY # : 7482

STATE GC BS # 1 - SEPARATOR PIT
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : ENVIROTECH, INC.

Date : August 25, 2000

SAMPLER : N J V

Filename : 08-25-00.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
6	-	-	5.30	10.00	0855	7.1	4,000	2.25	-

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3 / 4 " teflon bailer.

2.00 " well diameter = 0.49 gallons per foot of water.

4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Installed MW # 6 on July 13 , 2000 . 5 ft. casing , 5 ft. 0.020 slotted screen with pointed end cap , sanded annular with silica sand to surface . Top of casing approx. 2 ft. above ground surface . Developed MW # 6 prior to sampling . Poor recovery in MW # 6 . Collected TDS sample from MW # 6 only .

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC.

CHAIN-OF-CUSTODY # : 12164

STATE GC BS # 1
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : ON - SITE TECH.

Date : April 11, 2003

Filename : 04-11-03.WK4

SAMPLER : N J V

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
1X	101.38	96.40	4.98	9.83	1320	6.95	6,900	1.00	-
2X	98.62	94.83	3.79	8.55	1306	6.95	2,200	2.25	-
3X	98.75	93.82	4.93	8.43	1253	6.99	2,700	1.00	-
4X	97.55	92.59	4.96	7.85	1212	6.77	3,300	1.50	-
5X	98.54	92.06	6.48	10.00	1235	6.90	3,300	1.00	-

INSTRUMENT CALIBRATIONS =	7.01	2,800
DATE & TIME =	04/11/03	09:00

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.
2.00 " well diameter = 0.49 gallons per foot of water.
4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Drilled all MW ' s on 4 / 1 / 03 except MW # 3X - 4 / 2 / 03 . Surveyed MW tops & measured depth to water on 4 / 8 / 03 . Developed all MW ' s on 4 / 9 / 03 . Excellent recovery in MW # 2X & # 4X . Poor recovery in MW # 3X , & # 5X . MW # 1X - yellowish tint in appearance (initial bail) & very poor recovery . Collected BTEX samples from all MW ' s listed above .

Top of casing MW # 1X ~ 1.00 ft. , MW # 2X ~ 0.55 ft. , MW # 3X ~ 0.30 ft. , MW # 4X ~ 0.40 ft. , MW # 5X ~ 0.80 ft. above grade .

MW #	DTW
1X	4.98
2X	3.79
3X	4.93
4X	4.96
5X	6.48

(prior to purging - in ft.)

MW #	DTW
1X	7.25
2X	3.79
3X	5.05
4X	4.96
5X	6.62

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

STATE GC BS # 1
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : August 28, 2003

SAMPLER : N J V

Filename : 08-28-03.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.33	6.05	9.83	1045	6.73	7,800	24.6	1.00
2X	98.62	93.88	4.74	8.55	0910	6.81	3,300	24.2	1.75
3X	98.75	93.03	5.72	8.43	0930	6.78	3,600	24.4	0.75
4X	97.55	92.07	5.48	7.85	0945	6.71	4,100	25.7	1.00
5X	98.54	91.72	6.82	10.00	1030	6.75	3,900	22.0	0.75
6X	98.51	91.71	6.80	10.00	1015	6.87	3,700	21.7	3.00

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	08/28/03	0700

NOTES : Volume of water purged from well prior to sampling; V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.
2.00 " well diameter = 0.49 gallons per foot of water.
4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Sample duplicate collected from MW # 5X (labeled MW # 7X). Excellent recovery in MW # 6X . # 2X & # 4X . Poor recovery in # 3X , # 5X . Very poor recovery in MW # 1X . MW # 1X - yellowish tint in appearance (initial bail). MW # 6X installed on 6 / 10 / 03 - (5 ft. casing & 5 ft. screen [0.010 diameter slots]). Collected BTEX samples from all MW ' s listed above .

Top of casing MW # 1X ~ 1.00 ' , MW # 2X ~ 0.55 ' , MW # 3X ~ 0.30 ' , MW # 4X ~ 0.40 ' , MW # 5X ~ 0.80 ' , MW # 6X ~ 0.80 ' above grade .

MW #	DTW
1X	6.05
2X	4.74
3X	5.72
4X	5.48
5X	6.82
6X	6.80

(prior to purging - in ft.)

MW #	DTW
1X	7.75
2X	4.74
3X	5.70
4X	5.48
5X	7.17
6X	6.80

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC. **CHAIN-OF-CUSTODY # :** N / A

STATE GC BS # 1
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : November 19, 2003 **SAMPLER :** N J V

Filename : 11-19-03.WK4 **PROJECT MANAGER :** N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38		-	9.83	-	-	-	-	-
2X	98.62		-	8.55	-	-	-	-	-
3X	98.75		-	8.43	-	-	-	-	-
4X	97.55		-	7.85	-	-	-	-	-
5X	98.54		6.09	10.00	0830	6.95	3,600	12.2	1.00
6X	98.51		6.05	10.00	0845	6.99	3,700	11.7	2.00

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	11/11/03	0730

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.
2.00 " well diameter = 0.49 gallons per foot of water.
4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 6X , poor recovery in # 5X . Collected BTEX samples from MW # 5X & # 6X only .

Top of casing MW # 1X ~ 1.00 ' , MW # 2X ~ 0.55 ' , MW # 3X ~ 0.30 ' , MW # 4X ~ 0.40 ' , MW # 5X ~ 0.80 ' , MW # 6X ~ 0.80 ' above grade .

MW #	DTW
1X	-
2X	-
3X	-
4X	-
5X	6.09
6X	6.05

(prior to purging - in ft.)

MW #	DTW
1X	-
2X	-
3X	-
4X	-
5X	6.12
6X	6.05

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

STATE GC BS # 1
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : March 27, 2004

SAMPLER : N J V

Filename : 03-27-04.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	96.77	4.61	9.83	1130	7.10	6,200	12.8	1.25
2X	98.62	95.26	3.36	8.55	1113	6.96	3,500	11.3	2.50
3X	98.75	94.23	4.52	8.43	1109	7.00	3,400	12.0	1.25
4X	97.55	92.96	4.59	7.85	1035	6.91	3,900	11.0	1.50
5X	98.54	92.46	6.08	10.00	1044	7.01	3,700	11.1	1.00
6X	98.51	92.42	6.09	10.00	1023	7.05	3,700	12.4	2.00

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	03/27/04	0800

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.
2.00 " well diameter = 0.49 gallons per foot of water.
4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2X , # 4X , & # 6 ; poor recovery in # 3X & # 5X , very poor recovery in MW # 1X . Collected BTEX samples from all MW ' s listed above .

Top of casing MW # 1X ~ 1.00 ' , MW # 2X ~ 0.55 ' , MW # 3X ~ 0.30 ' , MW # 4X ~ 0.40 ' , MW # 5X ~ 0.80 ' , MW # 6X ~ 0.80 ' above grade .

MW #	DTW
1X	4.61
2X	3.36
3X	4.52
4X	4.59
5X	6.08
6X	6.09

(prior to purging - in ft.)

MW #	DTW
1X	5.07
2X	3.38
3X	4.90
4X	4.60
5X	6.84
6X	6.09

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

STATE GC BS # 1
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : June 22, 2004

SAMPLER : N J V

Filename : 06-22-04.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.48	5.90	9.83	0855	6.79	8,000	18.6	1.00
2X	98.62	93.76	4.86	8.55	0835	6.86	3,200	18.1	1.75
3X	98.75	92.94	5.81	8.43	0825	6.95	3,300	18.4	0.75
4X	97.55	91.99	5.56	7.85	0750	6.85	4,200	16.6	1.00
5X	98.54	91.61	6.93	10.00	0800	6.74	4,400	16.0	0.75
6X	98.51	91.59	6.92	10.00	0740	6.91	4,000	14.8	1.50

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	06/21/04	1220

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.
2.00 " well diameter = 0.49 gallons per foot of water.
4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2X , # 4X , & # 6X . Poor recovery in MW # 3X & # 5X . MW # 1X - yellowish tint in appearance (initial bail) & very poor recovery . Collected BTEX samples from all MW ' s listed above .

Top of casing MW # 1X ~ 1.00 ' , MW # 2X ~ 0.55 ' , MW # 3X ~ 0.30 ' , MW # 4X ~ 0.40 ' , MW # 5X ~ 0.80 ' , MW # 6X ~ 0.80 ' above grade .

MW #	DTW
1X	5.90
2X	4.86
3X	5.81
4X	5.56
5X	6.93
6X	6.92

(prior to purging - in ft.)

MW #	DTW
1X	7.59
2X	4.86
3X	5.83
4X	5.56
5X	7.06
6X	6.92

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

STATE GC BS # 1
UNIT K, SEC. 23, T29N, R11W

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : Sept. 24, 2004

SAMPLER : N J V

Filename : 09-24-04.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.58	5.80	9.83	1455	6.65	5,700	23.6	1.00
2X	98.62	94.51	4.11	8.55	1250	6.73	3,100	23.3	2.25
3X	98.75	93.54	5.21	8.43	1330	6.72	3,300	23.7	0.75
4X	97.55	92.59	4.96	7.85	1430	6.60	3,800	23.5	1.50
5X	98.54	92.17	6.37	10.00	1440	6.68	3,700	22.5	1.00
6X	98.51	92.16	6.35	10.00	1420	6.73	3,700	23.7	1.75
7X			5.68	10.00	1310	6.93	4,900	24.5	1.00

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	09/24/04	1245

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).

(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

1.25 " well diameter = 0.19 gallons per foot of water (or 24 oz.).
2 bails per foot - small teflon bailer.
3 bails per foot - 3 / 4 " teflon bailer.
2.00 " well diameter = 0.49 gallons per foot of water.
4.00 " well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2 ".

Excellent recovery in MW # 2X , # 4X , & # 6 ; poor recovery in # 3X & # 5X , very poor recovery in MW # 1X . Collected BTEX samples from all MW ' s listed above . MW # 7X installed on 8 / 18 / 04 to address recent unreportable event with on-site tank pit (8 / 12 / 04) - (5 ft. casing & 5 ft. screen [0.010 diameter slots]) . Collected BTEX samples from all MW's listed .

Top of casing MW # 1X ~ 1.00 ' , MW # 2X ~ 0.55 ' , MW # 3X ~ 0.30 ' , MW # 4X ~ 0.40 ' , MW # 5X ~ 0.80 ' , MW # 6X ~ 0.80 ' above grade .

MW #	DTW
1X	5.80
2X	4.11
3X	5.21
4X	4.96
5X	6.37
6X	6.35
7X	5.68

(prior to purging - in ft.)

MW #	DTW
1X	6.34
2X	4.12
3X	5.28
4X	4.97
5X	7.00
6X	6.35
7X	5.79

(@ time of sampling - in ft.)

CLIENT: XTO

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

LOCATION NO: —
C.O.C. NO: 09084 09093

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: STATE GC B S WELL #: 1 PITS: —
QUAD/UNIT: K SEC: 23 TWP: 29N RNG: 11W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/SW CONTRACTOR: P+S

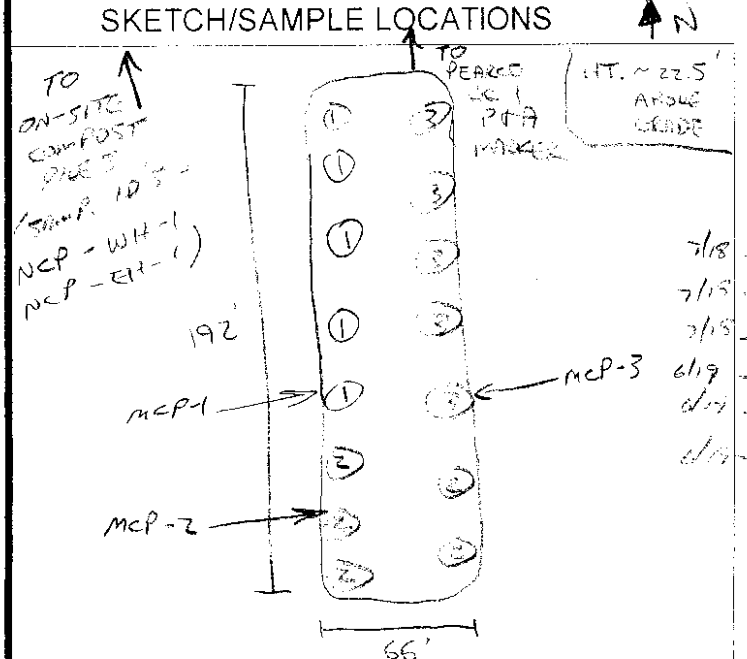
DATE STARTED: 6/19/02
DATE FINISHED: 7/18/02
ENVIRONMENTAL SPECIALIST: NV

SOIL REMEDIATION:
REMEDIATION SYSTEM: COMPOSTED APPROX. CUBIC YARDAGE: ~ 7,500
LAND USE: RANGE LIFT DEPTH (ft):

FIELD NOTES & REMARKS: DEPTH TO GROUNDWATER: <50' NEAREST SURFACE WATER: <1,000'
NEAREST WATER SOURCE: >1000' NMOCD RANKING SCORE: 30 NMOCD TPH CLOSURE STD: 100 PPM

SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / (GRAVEL) / OTHER
SOIL COLOR: OLIVE GRAY TO BLACK
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED
DISCOLORATION/STAINING OBSERVED: (YES) / NO EXPLANATION - VARYING GRAY TO BLACK & ALL
HC ODOR DETECTED: (YES) / NO EXPLANATION -
SAMPLING DEPTHS (LANDFARMS): NA (INCHES)
SAMPLE TYPE: GRAB / (COMPOSITE) - # OF PTS. 5
ADDITIONAL COMMENTS: COLLECTED ON-SITE SAMPLES 6/19/02 & OFF-SITE SAMPLES (SKETCHED BELOW) 7/18/02. PENETRATED PILES USING TRACKHOE. SAMPLE ECP-1 @ SAME LOCALE BELOW THEN ADDITIONAL SOIL & MANURE ADDED PRIOR TO 7/18/02 SAMPLING. ALL BTEX SAMPLES BELOW REG'S.

SKETCH/SAMPLE LOCATIONS



SCALE
0 FT

OVM CALIB READ. = 57.3 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 12:00 am/pm DATE: 7/17/02

OVM CALIB READING 50.0 PPM (CHECK) - 6/19/02 TIME - 0955

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE (ppm)
NCP-1	271
NCP-2	101
NCP-3	196
NCP-WH-1	120.4
NCP-EH-1	94.6
ECP-1	303

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	TPH RESULTS (ppm)
NCP-1	TPH + BTEX	0825	ND
NCP-2	TPH ONLY	0845	ND
NCP-3	TPH & BTEX	0900	ND
NCP-WH-1	TPH & BTEX	1320	25.3
NCP-EH-1	TPH ONLY	1335	13.7
ECP-1	TPH & BTEX	1402	77.2

TRAVEL NOTES: CALLOUT: N/A ONSITE: 6/19/02 & 7/18/02

VGL 30045

CLIENT: XTO

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

LOCATION NO:
COCR NO:

FIELD REPORT: PIT CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: STATE GC B S WELL #: 1 TYPE: SEP. II
QUAD/UNIT: K SEC: 23 TWP: 29N RNG: 11W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/NW CONTRACTOR: HDC (FERNANDO)

DATE STARTED: 8/10/04
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. ____ FT. x ____ FT. x ____ FT. DEEP. CUBIC YARDAGE: 100

DISPOSAL FACILITY: ENVIROTECH LANDFARM #2 REMEDIATION METHOD: LANDFARM

LAND USE: RANGE LEASE: FEE FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 133 FT. S43W FROM WELLHEAD.

DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: <1000'

NMOCD RANKING SCORE: 30 NMOCD TPH CLOSURE STD: 100 PPM

OVM CALIB. READ. = ____ ppm
OVM CALIB. GAS = ____ ppm RF = 0.52
TIME: ____ am/pm DATE: ____

SOIL AND EXCAVATION DESCRIPTION:

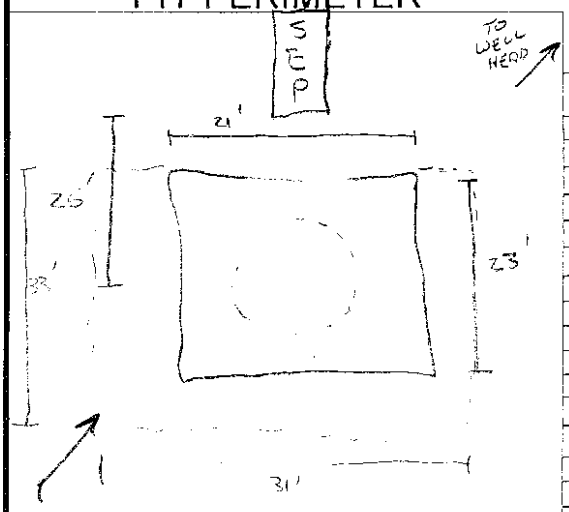
SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / (GRAVEL) / OTHER ____
SOIL COLOR: DK. YELL. ORANGE TO BLACK
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
MOISTURE: DRY / SLIGHTLY MOIST / (MOIST) / WET / SATURATED / (SUPER SATURATED) - WATER TABLE
DISCOLORATION/STAINING OBSERVED: (YES) / NO EXPLANATION - BLACK SOIL APPEARS TO BE IMPACTED & UNNATURAL.
HC ODOR DETECTED: YES / NO EXPLANATION - BLACK SOIL.
SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. ____
ADDITIONAL COMMENTS: EXCAVATED BLACK IMPACTED SOIL BELOW & AROUND STEEL TANK. UPON COMPLETION WILL BACKFILL W/ CLEAN SAND & INSTALL A MONITOR WELL, THEN SAMPLE GROUND-WATER (N 5'-6' BELOW GRADE).

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

SCALE 0 FT

PIT PERIMETER



EXCAVATION PERIMETER (SLOPED)
P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW
T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

OVM READING

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @	
2 @	
3 @	
4 @	
5 @	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE

TRAVEL NOTES: CALLOUT: 8/9/04 - AFTER ONSITE: 8/9/04 - AFTER 8/10/04 - MORN.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address	2. Destination Name:
XTO Energy Inc. **2700 Farmington Ave., Bldg. K, Suite 1** **Farmington, NM 87401**	J.F.J. Landfarm c/o Industrial Ecosystems Inc. 420 CR 3100 Aztec, NM 87410
3. Originating Site (name): STATE GC 85 #1 (PEARCE GC #1E)	Location of the Waste (Street address &/or ULSTR): NE/4 SW/4 UNIT K, SEC. 23, T29N, R11W
attach list of originating sites as appropriate	
4. Source and Description of Waste: CONDENSATE AND/OR PRODUCED WATER FROM SEPARATOR TANK PIT.	

I, **Nelson Velez**
Print Name
representative for :

Blagg Engineering, Inc. c/o XTO Energy Inc. do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,1988, regulatory determination, the above described waste is: (Check appropriate classification)

✓ EXEMPT oilfield waste

___ NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non –hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

___ MSDS Information
___ RCRA Hazardous Waste Analysis
___ Chain of Custody
___ Other (description

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): _____

Title: **Staff Geologist / AGENT for XTO Energy**

Date: AUGUST 10, 2004