3R - 409

ANNUAL MONITORING REPORT

01/31/2006

XTO ENERGY

RECEIVED

JAN 31 2006

Oil Conservation Division
Environmental

January 30, 2006

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 Report 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:

- Abrams J #1 3R0100
- Bruington Gas Com B #1 3R0106
- EJ Johnson C #1E 3R0385
- PO Pipken #3E 3R0409
- Romero Gas Com A #1 3R0123
- Rowland Gas Com #1 3R0124
- Sullivan Gas Com D #1 3R0131
- Valdez A #1E 3R0134

Also enclosed in the third volume of our Annual Report are three sites that meet the closure requirements outlined in the GMP. XTO respectfully requests closure of:

- Armenta Gas Com #1E 3R0394
- Bergin Gas Com #1E 3R0105
- State Gas Com BS #1 3R0127

As we discussed this afternoon, several sites are being reviewed to make sure we have a comprehensive set of reports submitted. An extension will be allowed for reports on the remaining sites to be submitted by April 30, 2006.

Thank you for your review of the reports and allowing some flexibility with this years reporting schedule. If you have any questions please do not hesitate to contact me at (505) 566-7942.

Sincerely,

Lisa Winn
Environmental Specialist
San Juan Division

cc: Mr. Denny Foust, Environmental, NMOCD District III Office, Aztec, NM
Mr. Jeff Blagg, Blagg Engineering Inc.
File – San Juan Groundwater

RECEIVED

JAN 31 2006

Oil Conservation Division
Environmental Bureau

XTO ENERGY INC.

ANNUAL GROUNDWATER REMEDIATION REPORT

2005

P.O. PIPKIN #3E
(F) SECTION 17, T27N, R10W, 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

TABLE OF CONTENTS

XTO Energy Inc.
P.O. Pipkin # 3E - Dehydrator Pit
NE/4 SE/4 Sec. 17, T27N, R10W

Pit Closure Date: **9/2/94 (Documentation Included)**

Monitor Well Installation Dates: **MW 1 - 12/14/99**
MW 2, 3 - 12/17/99
MW 4, 5 - 6/23/00

Monitor Well Sampling Dates: **12/21/99, 6/28/00, 5/15/01, 6/26/02, 8/28/02, 12/9/02, 3/14/03, 6/23/03, 8/26/03, 6/16/04, 6/28/05**

Historical Information:

- September 1994 – Impacted soils were identified by Amoco Production Company during work to close an earthen dehydrator pit (Figure 1). Remediation of impacted soils via excavation was immediately conducted.
- January 1998 - XTO Energy Inc. (XTO) acquires the P.O. Pipken #3E from Amoco Production Company
- December 1999 - Evidence of groundwater impacts were discovered during investigation of the prior earthen dehydrator pit.
- December 1999 to Present – Continued quarterly/annual monitor well sampling and analysis has been conducted to evaluate water quality and natural attenuation.

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 and 2. 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:

The groundwater gradient has consistently been in the northwest direction (Figures 2 - 7) since monitoring was initiated in June 2000. The gradient is consistent and parallels the nearby surface drainage (Kutz Wash).

BTEX and general chemistry results for quarterly sampling events are summarized in Tables 1 - 3. With the exception of monitor well MW 2, analyses of groundwater from other site wells are below the New Mexico Water Quality Control Commission (NMWQCC) standards for BTEX. Well MW 2 is located within the original source area of the earthen dehydrator pit (Figure 1). Down-gradient from the source area is MW1, which has tested below NMWQCC closure standards and establish the extent of impact. Monitor well MW 3 is located cross-gradient of the source area and demonstrates natural attenuation of hydrocarbon levels. The up-gradient monitoring wells, MW 4 and MW 5, have shown no detectable levels of BTEX constituents.

Total dissolved solids (TDS) levels within wells MW 1 and MW3 exceeded NMWQCC standards (1,000 milligram per liter) during general chemistry analytical testing in December 1999 and June 2000.

Summary:

Pursuant to the NMOCD approved groundwater management plan (GMP), continued annual sampling is recommended until natural attenuation reduces BTEX concentrations in MW 2. The addition of nutrients or application of an oxidizer is recommended for MW 2. Quarterly sampling will be conducted once groundwater is below NMWQCC standards in MW 2, until site closure is achieved. Hydrocarbon impacts have been delineated down-gradient of the source area (MW 2).

TABLE 1

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

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

REVISED DATE: JANUARY 17, 2006

FILENAME: (3E-2Q-05.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
21-Dec-99	MW #1	25.01	33.00		11,200	8.0		1.2	ND	2.3	15.9
28-Jun-00		25.33		8,340	6,800	7.8		ND	ND	ND	ND
21-Dec-99	MW #2	24.66	33.00		3,900	7.4		**510**	45	140	**990**
28-Jun-00		24.69		3,350	3,400	7.4		**600**	5.4	120	**277**
15-May-01		24.79			4,100	7.45		**260**	ND	67	**153**
26-Jun-02		25.64			4,100	8.01		**52**	0.6	7.5	**7.4**
23-Jun-03		25.79			2,700	7.29		**5.2**	1.5	0.99	**1.6**
26-Aug-03		25.49			3,300	7.04		**160**	ND	14	**140**
16-Jun-04		25.10			3,200	7.23		**110**	ND	12	**24**
28-Jun-05		25.44			3,000	7.12		**200**	2.9	33	**73**
21-Dec-99	MW #3	24.14	33.00		15,700	7.6		**1,500**	5.6	520	**935**
28-Jun-00		24.44		9,700	9,400	7.7		**300**	ND	77	**218.8**
15-May-01		24.53			5,400	7.71		**56**	0.8	17	**26**
26-Jun-02		23.58	30.50		6,600	8.13		**1.4**	ND	1	**ND**
28-Aug-02		23.82			4,600	7.70		**ND**	ND	ND	**ND**
09-Dec-02		23.12	29.89		4,400	7.97		**ND**	ND	ND	**ND**
14-Mar-03		25.68			3,700	8.06		**0.9**	ND	ND	**ND**
28-Jun-00	MW #4	23.66	30.00	4,000	3,400	7.8		ND	ND	ND	ND
28-Jun-00	MW #5	23.52	30.00	3,760	3,200	7.9		ND	ND	ND	ND
					NMWQCC GROUNDWATER STANDARDS			**10**	**750**	**750**	**620**

NOTES : 1) RESULTS IN BOLD RED TYPE INDICATE EXCEEDING NMWQCC STANDARDS .
2) RESULTS IN BOLD BLUE TYPE INDICATE BELOW NMWQCC STANDARDS AFTER PROCEEDING RESULTS EXCEEDED .

TABLE 2

GENERAL WATER QUALITY

CROSS TIMBERS OIL COMPANY

P.O. PIPKIN # 3E

SAMPLE DATE : December 21 , 1999

PARAMETERS	MW # 1	MW # 2	MW # 3	Units
LAB pH	7.89	7.30	7.56	s. u.
LAB CONDUCTIVITY @ 25 C	15,020	5,210	40,300	umhos / cm
TOTAL DISSOLVED SOLIDS @ 180 C	13,200	3,216	22,112	mg / L
TOTAL DISSOLVED SOLIDS (Calc)	12,410	3,030	19,820	mg / L
SODIUM ABSORPTION RATIO	64.5	39.9	86.2	ratio
TOTAL ALKALINITY AS CaCO3	540	1,092	1,872	mg / L
TOTAL HARDNESS AS CaCO3	648	116	964	mg / L
BICARBONATE as HCO3	540	1,092	1,872	mg / L
CARBONATE AS CO3	< 0.1	< 0.1	< 0.1	mg / L
HYDROXIDE AS OH	< 0.1	< 0.1	< 0.1	mg / L
NITRATE NITROGEN	0.4	0.1	0.7	mg / L
NITRITE NITROGEN	0.038	0.011	0.006	mg / L
CHLORIDE	84	28	208	mg / L
FLUORIDE	8.20	1.98	11.70	mg / L
PHOSPHATE	1.2	1.4	6.0	mg / L
SULFATE	7,960	1,290	12,000	mg / L
IRON	0.043	0.053	0.044	mg / L
CALCIUM	211	46	142	mg / L
MAGNESIUM	29	< 0.1	148	mg / L
POTASSIUM	15.0	15.0	12.5	mg / L
SODIUM	3,770	988	6,152	mg / L
CATION / ANION DIFFERENCE	0.06	0.04	0.00	%

TABLE 3

GENERAL WATER QUALITY

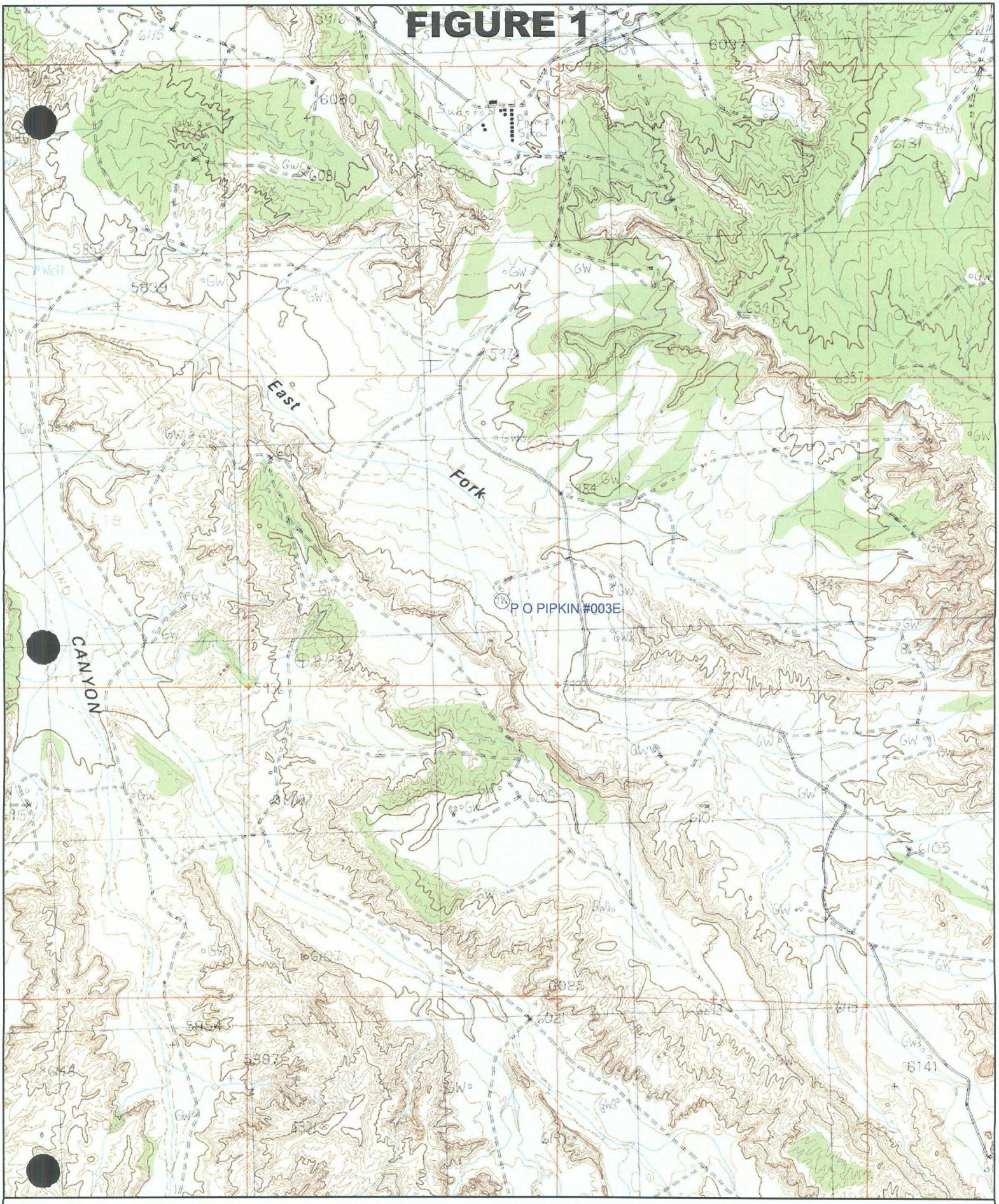
CROSS TIMBERS OIL COMPANY

P.O. PIPKIN # 3E

SAMPLE DATE : June 28 , 2000

PARAMETERS	MW # 1	MW # 2	MW # 3	MW # 4	MW # 5	Units
LAB pH	7.79	7.44	7.84	7.95	7.93	s. u.
LAB CONDUCTIVITY @ 25 C	17,000	6,720	19,600	8,030	7,540	umhos / cm
TOTAL DISSOLVED SOLIDS @ 180 C	8,340	3,350	9,700	4,000	3,760	mg / L
TOTAL DISSOLVED SOLIDS (Calc)	8,270	3,330	9,630	3,980	3,700	mg / L
SODIUM ABSORPTION RATIO	95.1	39.6	80.6	46.7	44.7	ratio
TOTAL ALKALINITY AS CaCO3	512	788	1,020	484	452	mg / L
TOTAL HARDNESS AS CaCO3	148	148	284	138	130	mg / L
BICARBONATE as HCO3	512	788	1,020	484	452	mg / L
CARBONATE AS CO3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	mg / L
HYDROXIDE AS OH	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	mg / L
NITRATE NITROGEN	0.2	0.1	0.3	2.3	< 0.1	mg / L
NITRITE NITROGEN	0.003	< 0.001	0.002	0.017	< 0.001	mg / L
CHLORIDE	124	44.0	588	46.0	18	mg / L
FLUORIDE	7.05	4.55	7.40	4.45	4.40	mg / L
PHOSPHATE	3.3	0.2	2.0	0.5	0.5	mg / L
SULFATE	5,110	1,680	5,190	2,320	2,180	mg / L
IRON	0.021	0.028	0.070	0.021	0.014	mg / L
CALCIUM	46.4	47.2	88.0	50.4	49.6	mg / L
MAGNESIUM	7.81	4.88	15.6	2.93	1.46	mg / L
POTASSIUM	1.9	3.9	2.1	2.0	2.1	mg / L
SODIUM	2,660	1,070	3,120	1,260	1,170	mg / L
CATION / ANION DIFFERENCE	0.04	0.04	0.26	0.35	0.03	

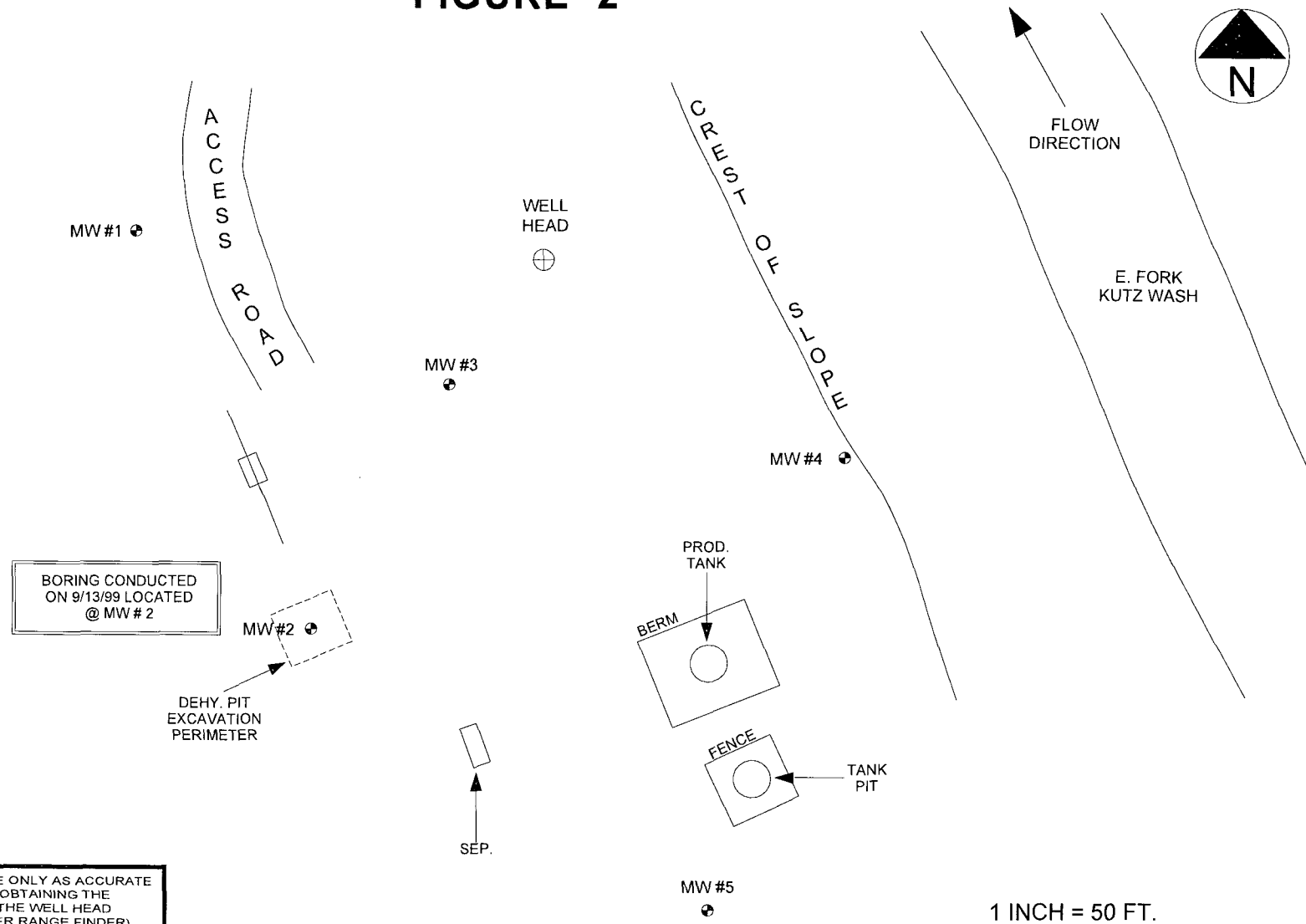
FIGURE 1



Name: EAST FORK KUTZ CANYON
Date: 10/18/2005
Scale: 1 inch equals 2000 feet

Location: 036.5721166° N 107.9132849° W
Caption: P.O. Pipkin # 3E
(I) - SEC. 17, T27N, R10W

FIGURE 2



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

XTO ENERGY, INC.

P.O. PIPKIN # 3E

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

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW INSTALL.

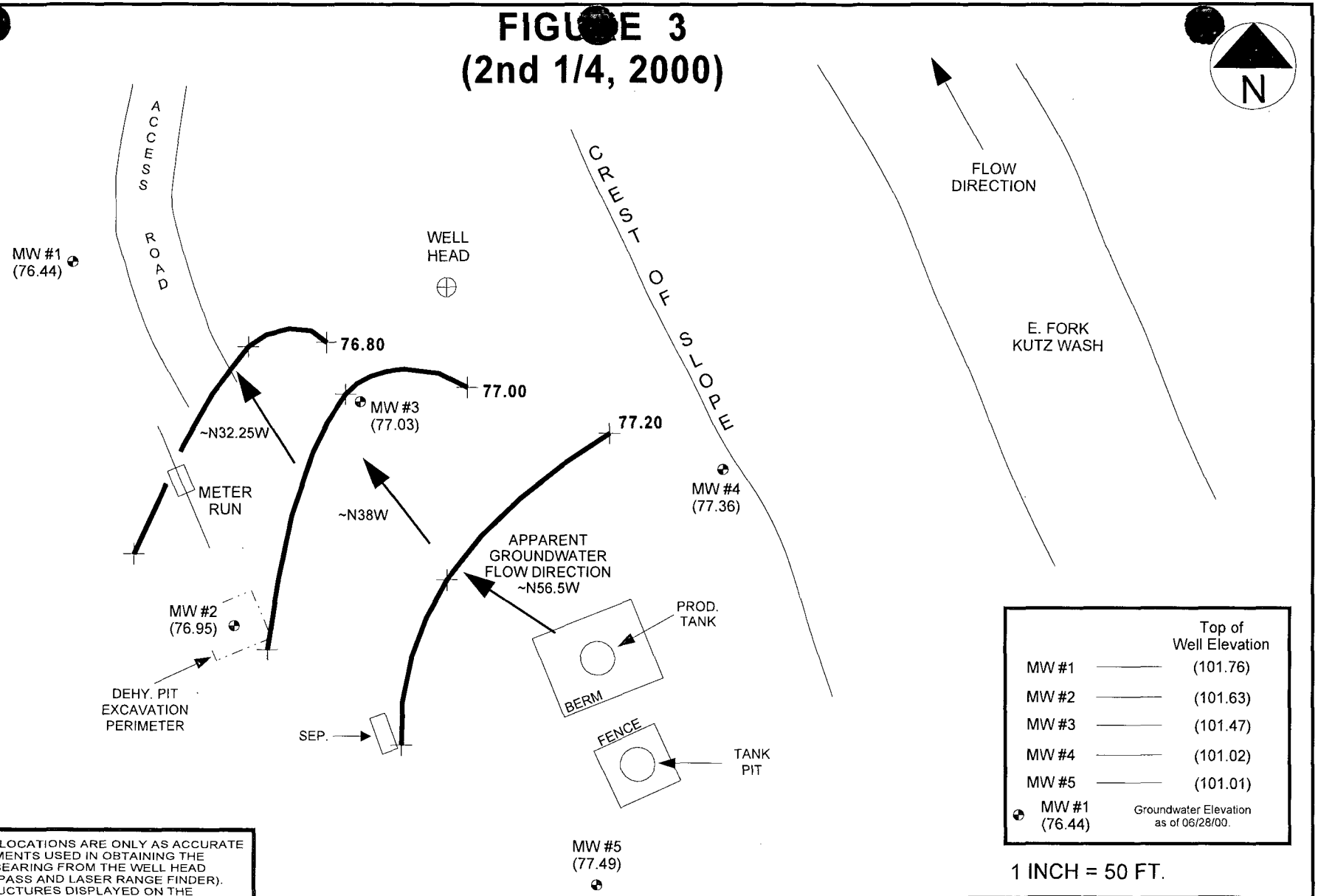
REVISED BY: NJV

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

SITE MAP

06/00

FIGURE 3
(2nd 1/4, 2000)



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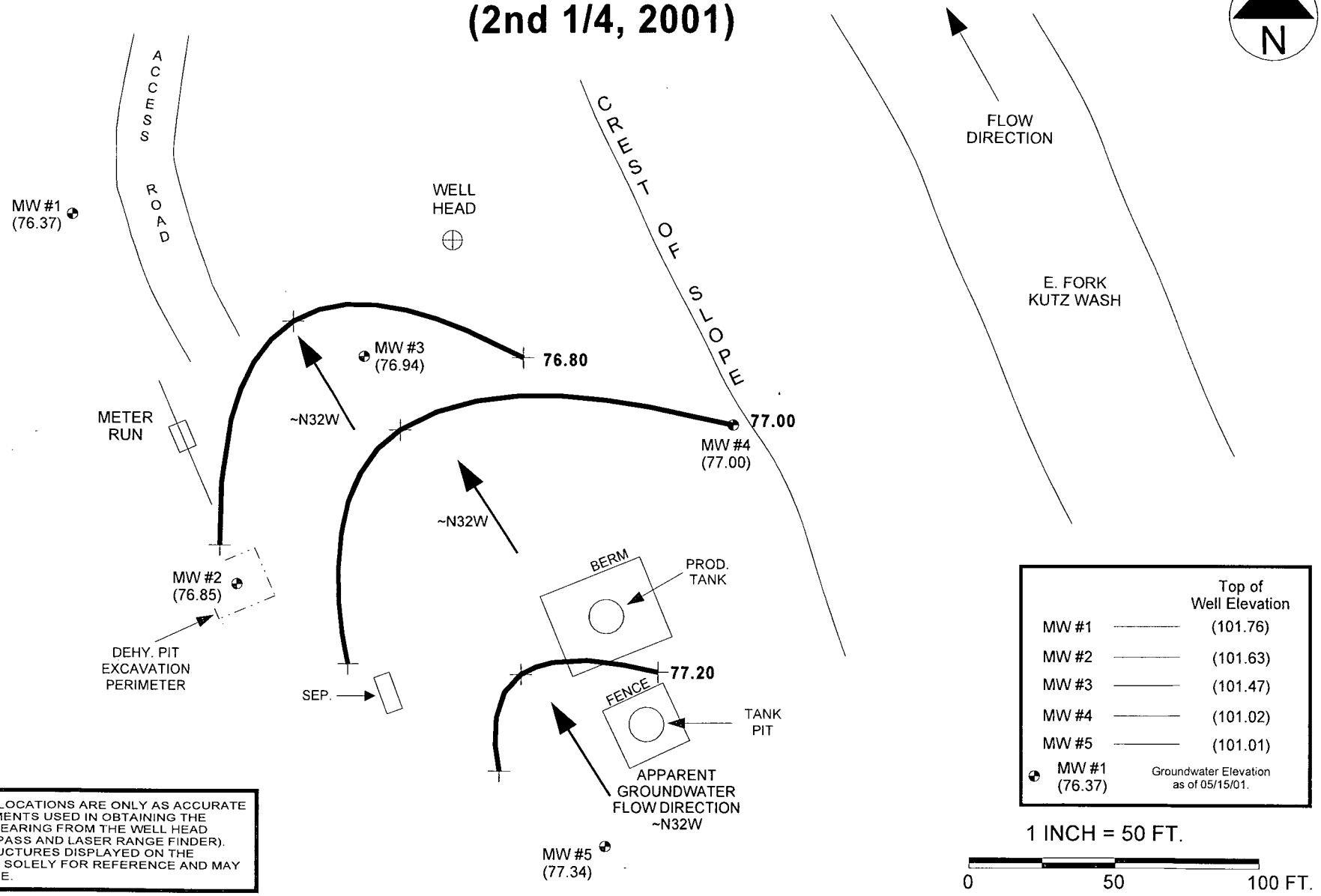
CROSS TIMBERS OIL COMPANY P.O. PIPKIN #3E NE/4 SE/4 SEC. 17, T27N, R10W SAN JUAN COUNTY, NEW MEXICO	BLAGG ENGINEERING, INC. CONSULTING PETROLEUM / RECLAMATION SERVICES P.O. BOX 87 BLOOMFIELD, NEW MEXICO 87413 PHONE: (505) 632-1199	PROJECT: MW SAMPLING REVISED BY: NJV FILENAME: 06-28-00-GW.SKF	GROUNDWATER GRADIENT MAP 06/00

FIGURE 4
(2nd 1/4, 2001)



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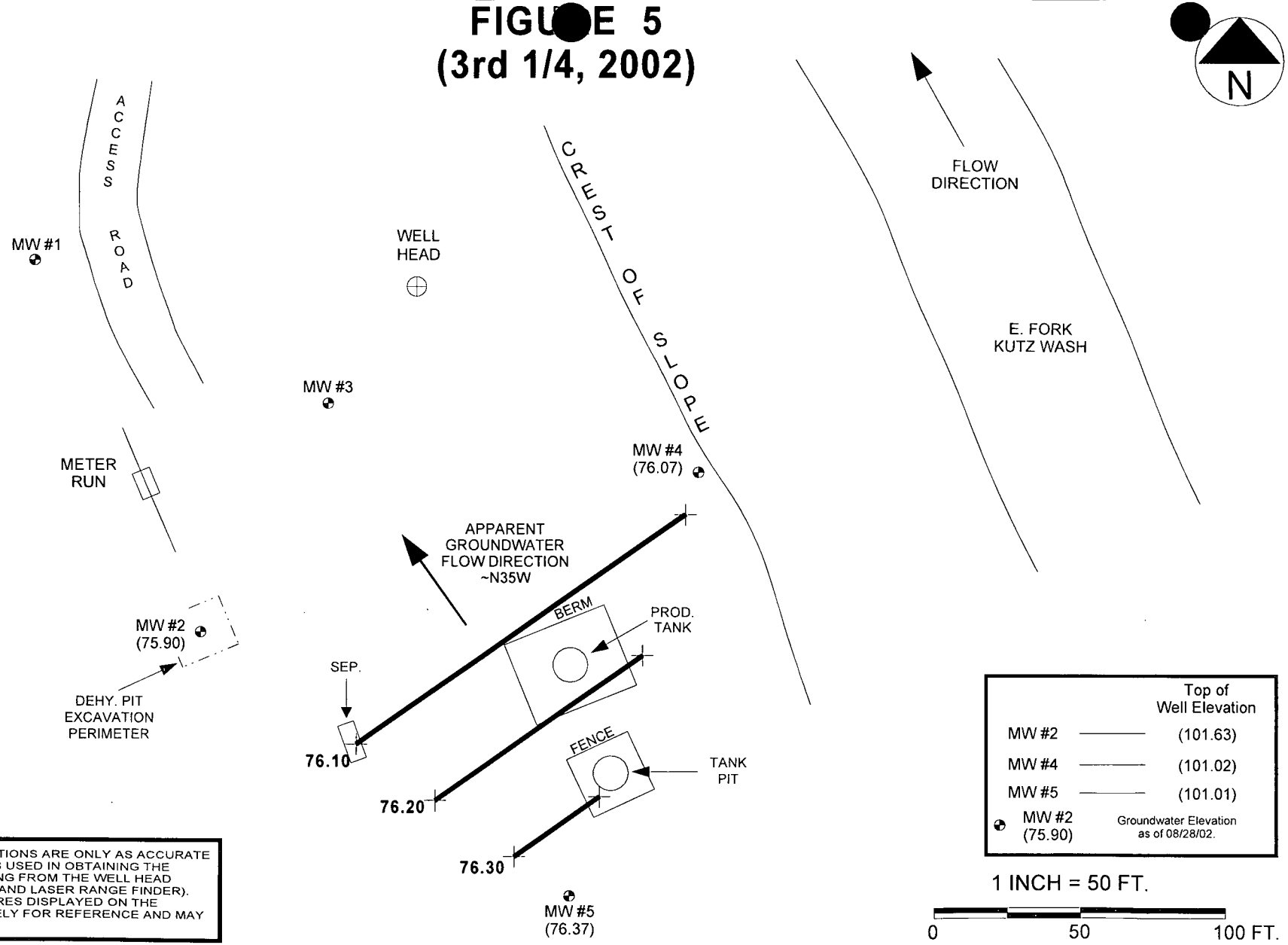
CROSS TIMBERS OIL COMPANY P.O. PIPKIN #3E NE/4 SE/4 SEC. 17, T27N, R10W SAN JUAN COUNTY, NEW MEXICO	BLAGG ENGINEERING, INC. CONSULTING PETROLEUM / RECLAMATION SERVICES P.O. BOX 87 BLOOMFIELD, NEW MEXICO 87413 PHONE: (505) 632-1199	PROJECT: MW SAMPLING REVISED BY: NJV FILENAME: 05-15-01-GW.SKF	GROUNDWATER GRADIENT MAP 05/01

FIGURE 5
(3rd 1/4, 2002)



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CROSS TIMBERS OIL COMPANY

P.O. PIPKIN #3E

NE/4 SE/4 SEC. 17, T27N, R10W

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

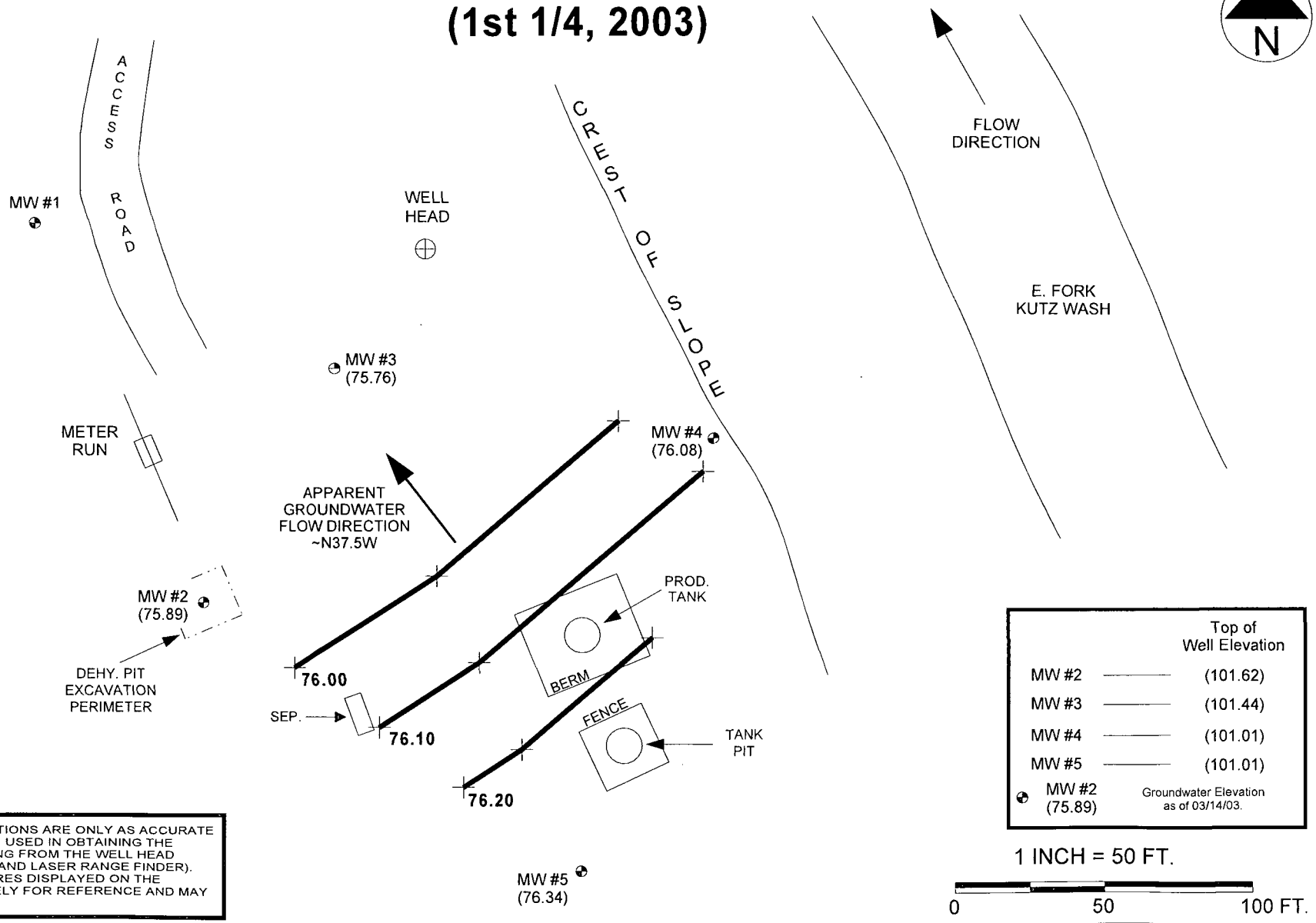
REVISED BY: NJV

FILENAME: 08-28-02-GW.SKF

GROUNDWATER GRADIENT MAP

08/02

FIGURE 6
(1st 1/4, 2003)



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CROSS TIMBERS OIL COMPANY

P.O. PIPKIN #3E

NE/4 SE/4 SEC. 17, T27N, R10W

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

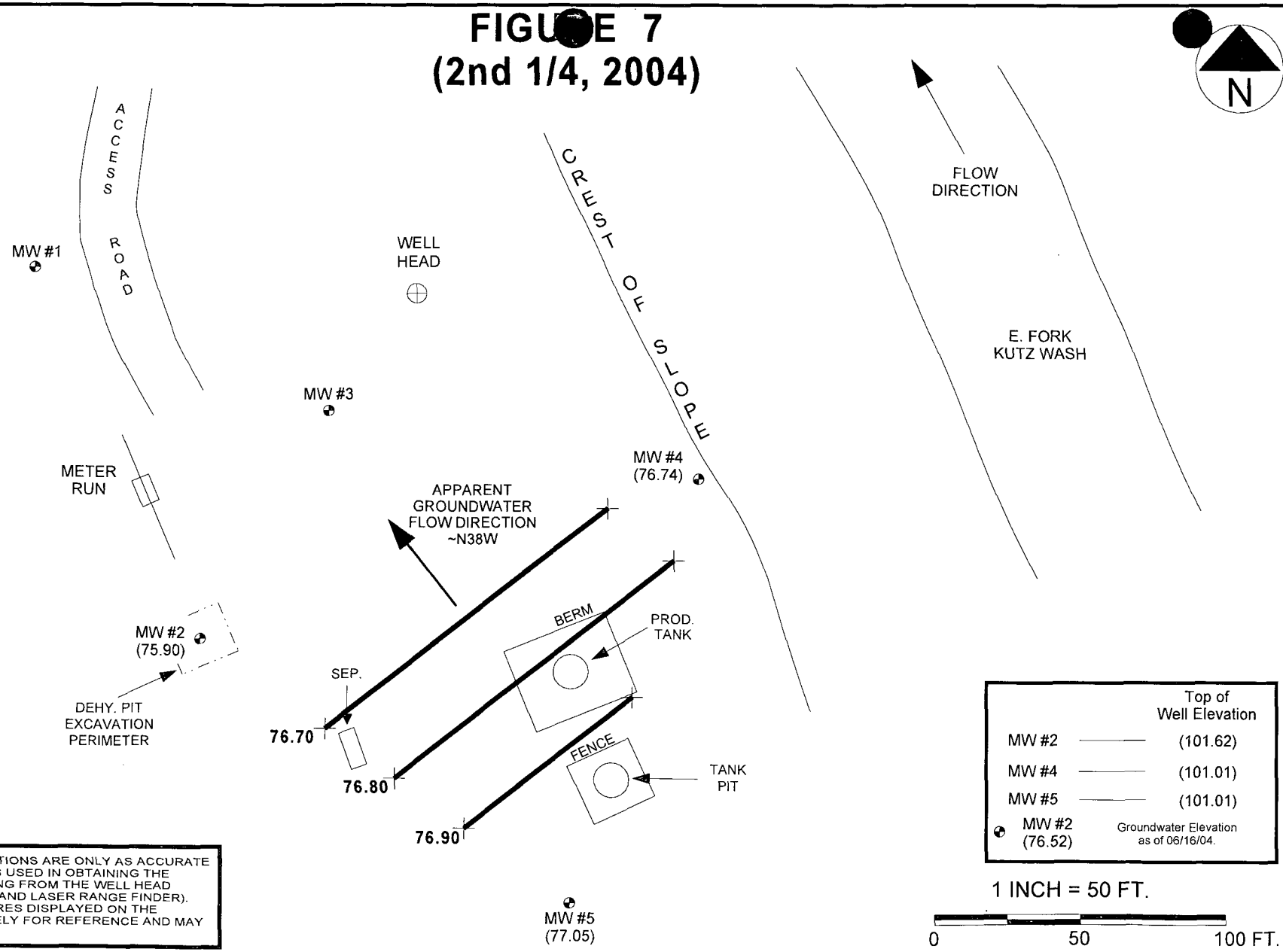
REVISED BY: NJV

FILENAME: 03-14-03-GW.SKF

GROUNDWATER GRADIENT MAP

03/03

FIGURE 7
(2nd 1/4, 2004)



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CROSS TIMBERS OIL COMPANY

P.O. PIPKIN #3E

NE/4 SE/4 SEC. 17, T27N, R10W

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

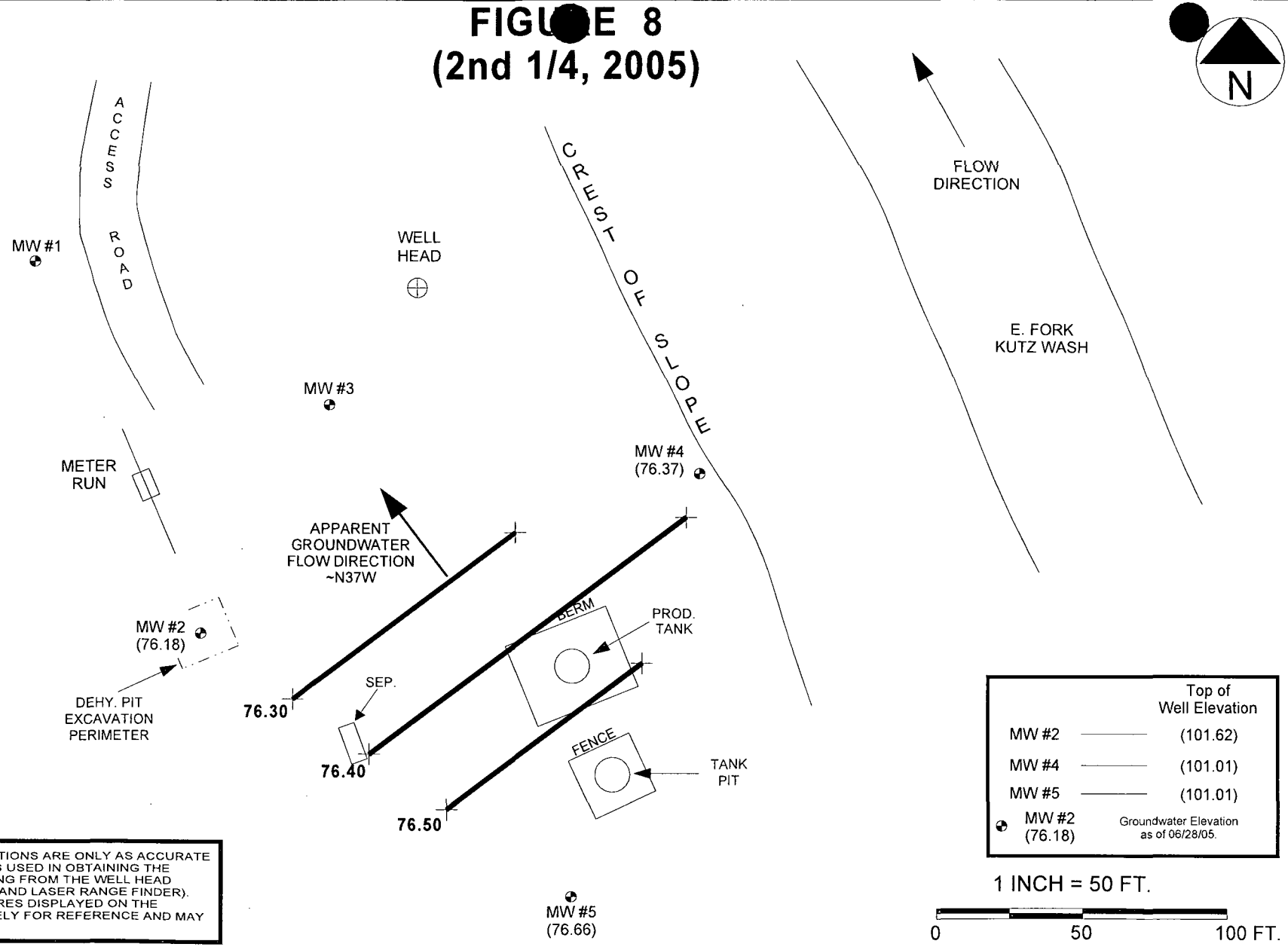
REVISED BY: NJV

FILENAME: 06-16-04-GW.SKF

GROUNDWATER GRADIENT MAP

06/04

FIGURE 8
(2nd 1/4, 2005)



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XTO ENERGY INC. P.O. PIPKIN #3E NE/4 SE/4 SEC. 17, T27N, R10W 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 REVISED BY: NJV FILENAME: 06-28-05-GW.SKF REVISED: 10-18-05 NJV	GROUNDWATER GRADIENT MAP 06/05

FIGURE 9

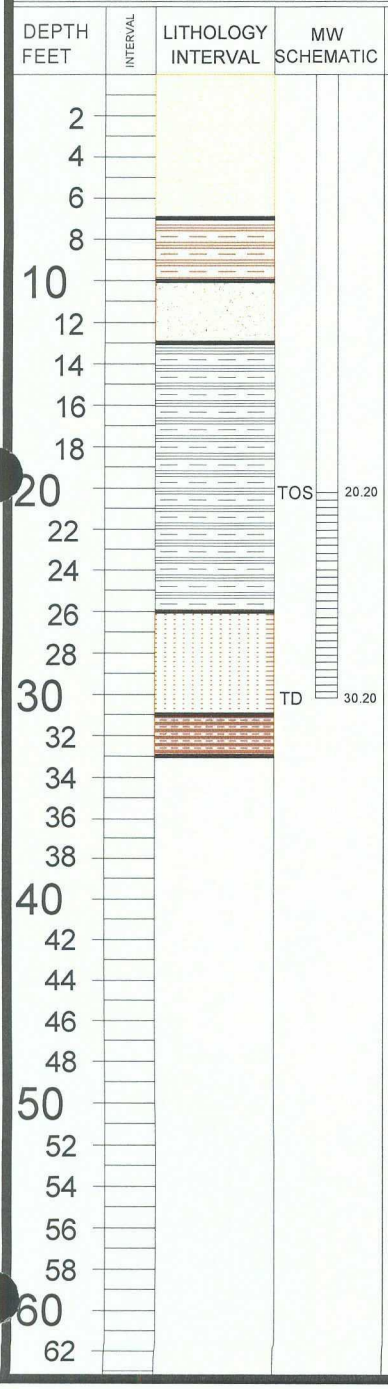
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

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

CLIENT: CROSS TIMBERS OIL COMPANY
LOCATION NAME: PIPKIN P.O. # 3E - DEHY. PIT, UNIT I, SEC. 17, T27N, R10W
CONTRACTOR: BLAGG ENGINEERING, INC.
EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION: 186 FT., N86W FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

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

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

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

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

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

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

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

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

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

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

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

FIGURE 10

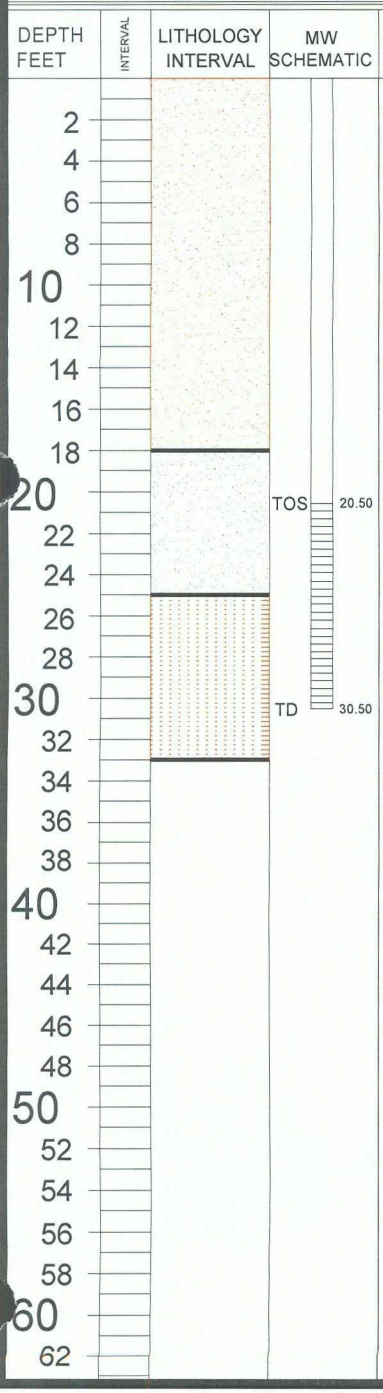
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

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

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



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

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

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

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

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

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

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

NOTE:

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

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

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

FIGURE 11

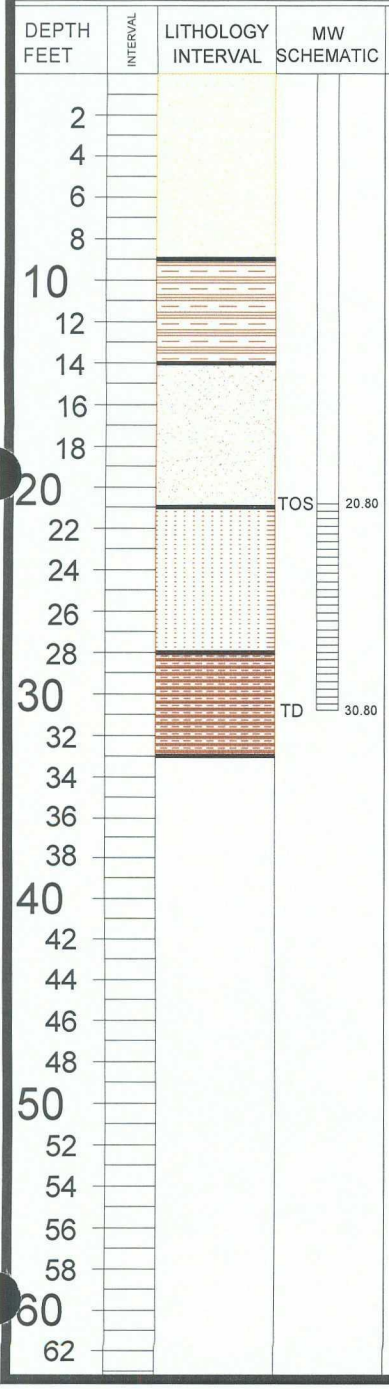
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

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

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



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

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

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

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

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

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

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

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

NOTE:

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

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

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

FIGURE 12

BLAGG ENGINEERING, Inc.

P.O. BOX 87

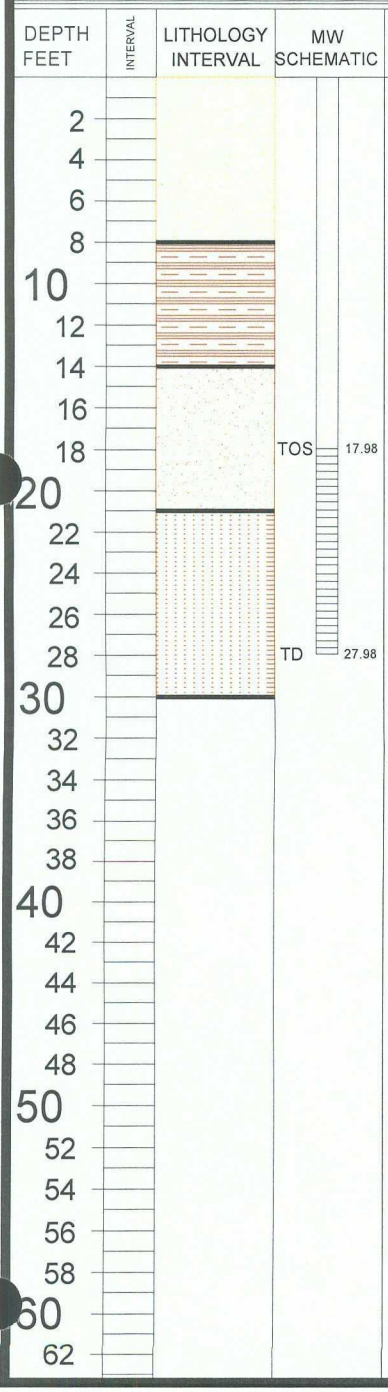
BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

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

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



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

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

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

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

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

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

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

NOTE:

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

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

GW - GROUND WATER.

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

FIGURE 13

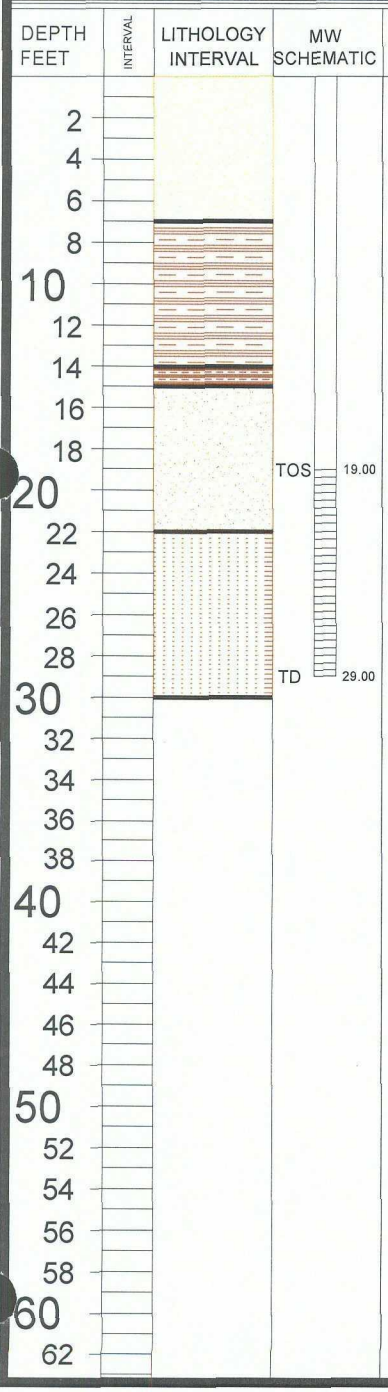
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

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

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



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

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

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

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

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

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

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

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

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

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

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

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 7317
10065

LOCATION : P.O. PIPKIN # 3E

LABORATORY (S) USED : ENVIROTECH, INC.
ON - SITE TECH.

Date : December 21, 1999

SAMPLER : R E P

Filename : 12-21-99.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	101.77	76.76	25.01	33.00	1115	8.0	11,200	4.00	-
2	101.64	76.98	24.66	33.00	1135	7.4	3,900	4.25	-
3	101.47	77.33	24.14	33.00	1150	7.6	15,700	4.50	-

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 ".
Collected BTEX and anion / cation samples for all MW 's listed above .
Excellent recovery in all MW 's .

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 10606
7023

LOCATION : P.O. PIPKIN # 3E

LABORATORY (S) USED : ON - SITE TECH.
ENVIROTECH, INC.

Date : June 28, 2000

SAMPLER : N J V

Filename : 06-28-00.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	101.77	76.44	25.33	33.00	1230	7.8	6,800	3.75	-
2	101.64	76.95	24.69	33.00	1310	7.4	3,400	4.00	-
3	101.47	77.03	24.44	33.00	1335	7.7	9,400	4.25	-
4	101.02	77.36	23.66	30.00	1055	7.8	3,400	3.25	-
5	101.01	77.49	23.52	30.00	1135	7.9	3,200	3.25	-

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 ".

Collected BTEX and anion / cation samples from all MW 's listed above .

Developed MW # 4 & 5 prior to purging for sampling (3.25 gal. each) .

Excellent recovery in MW # 4 & 5 .

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OPER. CO. **CHAIN-OF-CUSTODY # :** 11045

LOCATION : P.O. PIPKIN # 3E **LABORATORY (S) USED :** ON - SITE TECH.

Date : May 15, 2001 **SAMPLER :** N J V

Filename : 05-15-01.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	101.77	76.37	25.40	33.00	-	-	-	-	-
2	101.64	76.85	24.79	33.00	0850	7.45	4,100	2.00	-
3	101.47	76.94	24.53	33.00	0915	7.71	5,400	4.25	-
4	101.02	77.00	24.02	30.00	-	-	-	-	-
5	101.01	77.34	23.67	30.00	-	-	-	-	-

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 ".

Collected BTEX samples from MW's 2 & 3 only. Poor recovery in MW # 2 , bailed to TD , then collected sample after water level recovery to approx. 25.30 ft. . Excellent recovery in MW # 3 .

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : XTO ENERGY , INC. **CHAIN-OF-CUSTODY # :** 11784

LOCATION : P.O. PIPKIN # 3E **LABORATORY (S) USED :** ON - SITE TECH.

Date : June 26, 2002 **SAMPLER :** N J V

Filename : 06-26-02.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	101.77		DRY	33.00	-	-	-	-	-
2	101.64	76.00	25.64	33.00	0700	8.01	4,100	1.75	-
3			23.58	30.50	0650	8.13	6,600	3.50	-
4	101.02	76.14	24.88	30.00	-	-	-	-	-
5	101.01	76.46	24.55	30.00	-	-	-	-	-

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 ".

Collected BTEX samples from MW 's 2 & 3 only . Poor recovery in MW # 2 , bailed to TD , then collected sample after water level recovery to approx. 25.82 ft. . Excellent recovery in MW # 3 . MW # 1 potentially tampered with . MW # 3 top of casing cut off ; probably during installation of pump jack at well head .

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC. CHAIN-OF-CUSTODY # : 12146

LOCATION : P.O. PIPKIN # 3E LABORATORY (S) USED : ON - SITE TECH.

Date : August 28, 2002 SAMPLER : N J V

Filename : 08-28-02.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	101.77		DRY	33.00	-	-	-	-	-
2	101.64	75.90	25.74	33.00	-	-	-	-	-
3			23.82	30.50	0740	7.70	4,600	3.25	-
4	101.02	76.07	24.95	30.00	-	-	-	-	-
5	101.01	76.37	24.64	30.00	-	-	-	-	-

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 ".

Excellent recovery in MW # 3 . Collected BTEX samples from MW # 3 only . MW # 1 potentially tampered with . MW # 3 top of casing cut off ; probably during installation of pump jack at well head .

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY, INC. CHAIN-OF-CUSTODY # : 12150

LOCATION : P.O. PIPKIN # 3E LABORATORY (S) USED : ON - SITE TECH.

Date : December 9, 2002 SAMPLER : N J V

Filename : 12-09-02.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	101.77		DRY	33.00	-	-	-	-	-
2	101.64	75.93	25.71	33.00	-	-	-	-	-
3			23.12	29.89	1420	7.97	4,400	3.25	-
4	101.02	76.10	24.92	30.00	-	-	-	-	-
5	101.01	76.39	24.62	30.00	-	-	-	-	-

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".

Excellent recovery in MW # 3 . Collected BTEX samples from MW # 3 only . MW # 1 potentially tampered with . MW # 3 top of casing cut off ; probably during installation of pump jack at well head . Cut off an additional 0.61 ft. from MW # 3 after witnessing casing damage near its top .

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY, INC.

CHAIN-OF-CUSTODY # : 12161

LOCATION : P.O. PIPKIN # 3E

LABORATORY (S) USED : ON - SITE TECH.

Date : March 14, 2003

SAMPLER : N J V

Filename : 03-14-03.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)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	75.89	25.73	33.00	-	-	-	-	-
3	101.44	75.76	25.68	32.59	1000	8.06	3,700	3.50	-
4	101.01	76.08	24.93	30.00	-	-	-	-	-
5	101.01	76.34	24.67	30.00	-	-	-	-	-

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 ".

Excellent recovery in MW # 3 . Collected BTEX samples from MW # 3 only .

MW # 3 - TOC ~ 2.15 ft. AGS .

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 23, 2003**

SAMPLER : N J V

Filename : **06-23-03.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	75.83	25.79	33.00	1125	7.29	2,700	23.1	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	-	-	30.00	-	-	-	-	-
5	101.01	-	-	30.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	06/27/03	06:45

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .
MW # 3 top of casing removed / destroyed .

MW #	DTW
2	25.79

(prior to purging - in ft.)

MW #	DTW
2	27.00

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 26, 2003**

SAMPLER : N J V

Filename : **08-26-03.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	76.13	25.49	33.00	0940	7.04	3,300	20.4	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	-	-	30.00	-	-	-	-	-
5	101.01	-	-	30.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	08/25/03	0910

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .

MW #	DTW
2	25.49

(prior to purging - in ft.)

MW #	DTW
2	26.40

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 16, 2004**

SAMPLER : N J V

Filename : **06-16-04.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	76.52	25.10	33.00	0920	7.23	3,200	21.6	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	76.74	24.27	30.00	-	-	-	-	-
5	101.01	77.05	23.96	30.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	06/16/04	0750

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .

MW #	DTW	(prior to purging - in ft.)
2	24.27	

MW #	DTW	(@ time of sampling - in ft.)
2	25.90	

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : June 28, 2005

SAMPLER : N J V

Filename : 06-28-05.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	76.18	25.44	33.00	0750	7.12	3,000	18.8	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	76.37	24.64	30.00	-	-	-	-	-
5	101.01	76.66	24.35	30.00	-	-	-	-	-
INSTRUMENT CALIBRATIONS =						7.00	2,800		
DATE & TIME =						06/28/05	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:

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .

CLIENT: AMOCO

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

LOCATION NO: 80076
C.O.C. NO: ______

FIELD REPORT: PIT CLOSURE VERIFICATION

LOCATION: NAME: P.O. PIPKIN WELL #: 3E PIT: DEHYDRATOR
QUAD/UNIT: I SEC: 17 TWP: 27N RNG: 13W BM: CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 SE/4 CONTRACTOR: EPC / BLAGG

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

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

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

SOIL AND EXCAVATION DESCRIPTION:

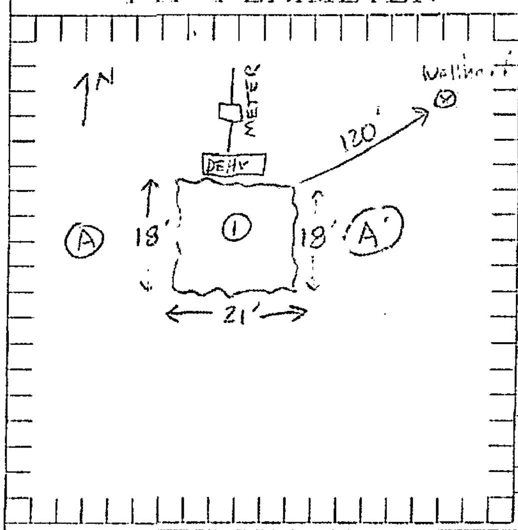
SANDY SOIL. PIT WALLS [illegible]. BLACK CONTAMINATION [illegible] EVIDENT ON BASE & N wall [illegible] [illegible]. Could not [illegible] without losing [illegible].
Sample ① collected [illegible]
- CONDITIONAL CLOSURE - PIT [illegible] HAVE LINED TANK [illegible]

FIELD 418.1 CALCULATIONS

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

SCALE
0 FT

PIT PERIMETER

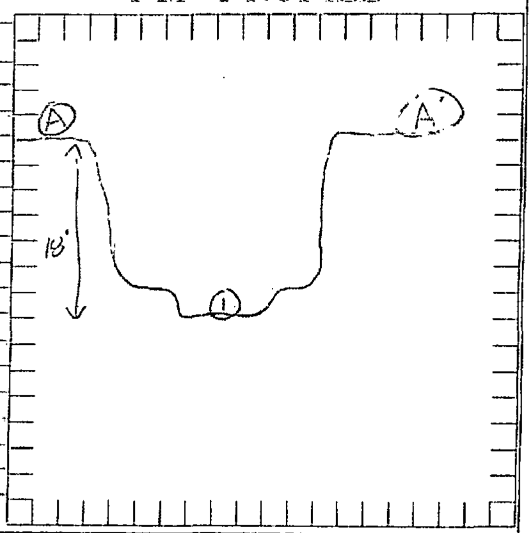


OVM RESULTS

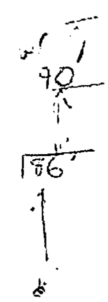
SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 Base @ 18'	620
2	
3	
4	
5	

LAB SAMPLES

PIT PROFILE



276' TO WASH



TRAVEL NOTES: CALLOUT: 0800 9/2/94 ONSITE: 10:15 9/2/94

BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

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

BORING #.....	BH - 1A
MW #.....	NA
PAGE #.....	1
DATE STARTED	9/13/99
DATE FINISHED	9/13/99
OPERATOR.....	REP
PREPARED BY	NJV

DEPTH FEET	INTERVAL	LITHOLOGY INTERVAL	OVM READINGS (ppm)	FIELD CLASSIFICATION AND REMARKS
				GROUND SURFACE
1–4				MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.0 - 18.0 FT. INTERVAL).
5–18				
19–20			934	DARK GRAY TO BLACK SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG HYDROCARBON ODOR DETECTED (18.0 - 20.0 FT. INTERVAL). LAB SAMPLE 1A @ 20 ft.; TPH = 678 ppm, BENZENE = 1.5 ppm, TOTAL BTEX = 51.18 ppm collected 9/13/99 @ time - 1115.
21–31				

NOTES:
- SAND.
- SAND (HYDROCARBON IMPACTED).

OVM - Organic vapor meter or photo ionization detector (PID).
ppm - Parts per million or milligram per kilogram (mg/Kg).
TPH - Total petroleum hydrocarbons - US EPA method 8015B modified.
BTEX - Benzene, toluene, ethylbenzene, & total zylenes.

DRAWING: PIPKIN-3E-DEHY.SKF | DATE: 9/13/99 | DWN BY: NJV

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 7317
10065

LOCATION : P.O. PIPKIN # 3E

LABORATORY (S) USED : ENVIROTECH, INC.
ON - SITE TECH.

Date : December 21, 1999

SAMPLER : R E P

Filename : 12-21-99.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	101.77	76.76	25.01	33.00	1115	8.0	11,200	4.00	-
2	101.64	76.98	24.66	33.00	1135	7.4	3,900	4.25	-
3	101.47	77.33	24.14	33.00	1150	7.6	15,700	4.50	-

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 ".

Collected BTEX and anion / cation samples for all MW 's listed above .

Excellent recovery in all MW 's .

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *05-Jan-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	9912028	**Client Sample ID:**	MW #1
Lab ID:	9912028-01A **Matrix:** AQUEOUS	**Collection Date:**	12/21/1999 11:15:00 AM
Project:	P.O. Pipkin #3E	**COC Record:**	10065

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	1.2	1		µg/L	2	12/21/1999
Toluene	ND	1		µg/L	2	12/21/1999
Ethylbenzene	2.3	1		µg/L	2	12/21/1999
m,p-Xylene	14	2		µg/L	2	12/21/1999
o-Xylene	1.9	1		µg/L	2	12/21/1999

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *05-Jan-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	9912028	**Client Sample ID:**	MW #2
Lab ID:	9912028-02A **Matrix:** AQUEOUS	**Collection Date:**	12/21/1999 11:35:00 AM
Project:	P.O. Pipkin #3E	**COC Record:**	10065

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	510	2.5		µg/L	5	12/22/1999
Toluene	45	2.5		µg/L	5	12/22/1999
Ethylbenzene	140	2.5		µg/L	5	12/22/1999
m,p-Xylene	870	5		µg/L	5	12/22/1999
o-Xylene	120	2.5		µg/L	5	12/22/1999

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: *05-Jan-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	9912028	**Client Sample ID:**	MW #3
Lab ID:	9912028-03A **Matrix:** AQUEOUS	**Collection Date:**	12/21/1999 11:50:00 AM
Project:	P.O. Pipkin #3E	**COC Record:**	10065

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	1500	5		µg/L	10	12/22/1999
Toluene	5.6	5		µg/L	10	12/22/1999
Ethylbenzene	520	5		µg/L	10	12/22/1999
m,p-Xylene	900	10		µg/L	10	12/22/1999
o-Xylene	35	5		µg/L	10	12/22/1999

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #1	Date Reported:	12-27-99
Laboratory Number:	G644	Date Sampled:	12-21-99
Chain of Custody:	7317	Date Received:	12-21-99
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	12-21-99
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.89**	s.u.		
Conductivity @ 25° C	**15,020**	umhos/cm		
Total Dissolved Solids @ 180C	**13,200**	mg/L		
Total Dissolved Solids (Calc)	**12,410**	mg/L		
SAR	**64.5**	ratio		
Total Alkalinity as CaCO3	**540**	mg/L		
Total Hardness as CaCO3	**648**	mg/L		
Bicarbonate as HCO3	**540**	mg/L	8.85	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.4**	mg/L	0.01	meq/L
Nitrite Nitrogen	**0.038**	mg/L	0.00	meq/L
Chloride	**84**	mg/L	2.37	meq/L
Fluoride	**8.20**	mg/L	0.43	meq/L
Phosphate	**1.2**	mg/L	0.04	meq/L
Sulfate	**7,960**	mg/L	165.73	meq/L
Iron	**0.043**	mg/L		
Calcium	**211**	mg/L	10.53	meq/L
Magnesium	**29**	mg/L	2.41	meq/L
Potassium	**15.0**	mg/L	0.38	meq/L
Sodium	**3,770**	mg/L	164.00	meq/L
Cations			177.32	meq/L
Anions			177.42	meq/L
Cation/Anion Difference			**0.06%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P.O. Pipkin #3E.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #2	Date Reported:	12-27-99
Laboratory Number:	G645	Date Sampled:	12-21-99
Chain of Custody:	7317	Date Received:	12-21-99
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	12-21-99
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.30**	s.u.		
Conductivity @ 25° C	**5,210**	umhos/cm		
Total Dissolved Solids @ 180C	**3,216**	mg/L		
Total Dissolved Solids (Calc)	**3,030**	mg/L		
SAR	**39.9**	ratio		
Total Alkalinity as CaCO3	**1,092**	mg/L		
Total Hardness as CaCO3	**116**	mg/L		
Bicarbonate as HCO3	**1,092**	mg/L	17.90	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.1**	mg/L	0.00	meq/L
Nitrite Nitrogen	**0.011**	mg/L	0.00	meq/L
Chloride	**28**	mg/L	0.79	meq/L
Fluoride	**1.98**	mg/L	0.10	meq/L
Phosphate	**1.4**	mg/L	0.04	meq/L
Sulfate	**1,290**	mg/L	26.86	meq/L
Iron	**0.053**	mg/L		
Calcium	**46**	mg/L	2.32	meq/L
Magnesium	**<0.1**	mg/L	0.00	meq/L
Potassium	**15.0**	mg/L	0.38	meq/L
Sodium	**988**	mg/L	42.98	meq/L
Cations			45.68	meq/L
Anions			45.70	meq/L
Cation/Anion Difference			**0.04%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P.O. Pipkin #3E.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #3	Date Reported:	12-27-99
Laboratory Number:	G645	Date Sampled:	12-21-99
Chain of Custody:	7317	Date Received:	12-21-99
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	12-21-99
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.56**	s.u.		
Conductivity @ 25° C	**40,300**	umhos/cm		
Total Dissolved Solids @ 180C	**22,112**	mg/L		
Total Dissolved Solids (Calc)	**19,820**	mg/L		
SAR	**86.2**	ratio		
Total Alkalinity as CaCO3	**1,872**	mg/L		
Total Hardness as CaCO3	**964**	mg/L		
Bicarbonate as HCO3	**1,872**	mg/L	30.68	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.7**	mg/L	0.01	meq/L
Nitrite Nitrogen	**0.006**	mg/L	0.00	meq/L
Chloride	**208**	mg/L	5.87	meq/L
Fluoride	**11.70**	mg/L	0.62	meq/L
Phosphate	**6.0**	mg/L	0.19	meq/L
Sulfate	**12,000**	mg/L	249.84	meq/L
Iron	**0.044**	mg/L		
Calcium	**142**	mg/L	7.09	meq/L
Magnesium	**148**	mg/L	12.18	meq/L
Potassium	**12.5**	mg/L	0.32	meq/L
Sodium	**6,152**	mg/L	267.61	meq/L
Cations			287.20	meq/L
Anions			287.21	meq/L
Cation/Anion Difference			**0.00%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P.O. Pipkin #3E.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

9065

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 12-21-99

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name	JEFF BLAGG	REPORT RESULTS TO: Name	Title
Company	BLAGG ENG. Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

PROJECT LOCATION: N. FLORA # 35

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	SAMPLE PRES.	Number of Containers	ANALYSIS REQUESTED: BTEX (8021)	LAB ID
MW-1	11-29-99	1115	W	$HgCl_2$	2	✓	
MW-2	11-29-99	1135	W	$HgCl_2$	2	✓	
MW-3	11-29-99	1150	W	$HgCl_2$	2	✓	

Relinquished by:	Date/Time 12/21/99 1250	Received by: Heather Kaus	Date/Time 12/21/99 1250
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Rush	24-48 Hours	10 Working Days	By Date

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

CHAIN OF CUSTODY RECORD

Client / Project Name	Project Location
BLAGG / CROSS TIMBERS	P.O. PIPKIN #3E
Sampler: REP	Client No. 403416

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	ANION/ CATION						Remarks
MW#1	12.21.99	1115	G644	WATER	1	✓						
MW#2	12.21.99	1135	G645	WATER	1	✓						
MW#3	12.21.99	1150	G646	WATER	1	✓						
												SAMPLES PRESERVED COOL

ANALYSIS / PARAMETERS

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ed Fontana	12.21.99	1235	Mat Wade	12.21.99	1235
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.
5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

On Site Technologies, LTD.

Date: *05-Jan-00*

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB1** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22213**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.1926	0.5									J
Ethylbenzene	.215	0.5									J
m,p-Xylene	.3975	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	.1448	0.5									J
Toluene	.2676	0.5									J

Sample ID: **MB1** Batch ID: **GC-1_991222** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/22/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991222A** SeqNo: **22319**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0482	0.5									J
Ethylbenzene	ND	0.5									
m,p-Xylene	.1076	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1032	0.5									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *05-Jan-00*

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **9912026-01AMS** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1940	5	400	1500	110.1%	80	116				
Ethylbenzene	1229	5	400	820.6	102.2%	80	118				
m,p-Xylene	4004	10	800	3093	113.8%	77	116				E
Methyl tert-Butyl Ether	618.2	10	400	217.8	100.1%	62	122				
o-Xylene	862.7	5	400	458.6	101.0%	83	117				
Toluene	2128	5	400	1687	110.4%	80	116				E

Sample ID: **9912026-01AMSD** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22215**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1999	5	400	1500	124.7%	80	116	1940	3.0%	7	S
Ethylbenzene	1261	5	400	820.6	110.1%	80	118	1229	2.5%	7	
m,p-Xylene	4113	10	800	3093	127.5%	77	116	4004	2.7%	7	ES ✓
Methyl tert-Butyl Ether	644.8	10	400	217.8	106.8%	62	122	618.2	4.2%	7	
o-Xylene	887.8	5	400	458.6	107.3%	83	117	862.7	2.9%	6	
Toluene	2181	5	400	1687	123.5%	80	116	2128	2.4%	6	ES ✓

CONFIRMED – LCS
(DC) 1/5/2

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **9912028-03AMS** Batch ID: **GC-1_991222** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/22/1999** Prep Date:
Client ID: **MW #3** **9912028** Run ID: **GC-1_991222A** SeqNo: **22320**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1804	5	400	1464	84.8%	80	116				
Ethylbenzene	894.8	5	400	519.2	93.9%	80	118				
m,p-Xylene	1640	10	800	896.1	93.0%	77	116				
Methyl tert-Butyl Ether	407	10	400	0	101.8%	62	122				
o-Xylene	431.4	5	400	34.98	99.1%	83	117				
Toluene	409.3	5	400	5.57	100.9%	80	116				

Sample ID: **9912028-03AMSD** Batch ID: **GC-1_991222** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/22/1999** Prep Date:
Client ID: **MW #3** **9912028** Run ID: **GC-1_991222A** SeqNo: **22321**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1752	5	400	1464	71.8%	80	116	1804	2.9%	7	S ✓
Ethylbenzene	868.2	5	400	519.2	87.3%	80	118	894.8	3.0%	7	
m,p-Xylene	1596	10	800	896.1	87.4%	77	116	1640	2.7%	7	
Methyl tert-Butyl Ether	404.2	10	400	0	101.1%	62	122	407	0.7%	7	
o-Xylene	421.7	5	400	34.98	96.7%	83	117	431.4	2.3%	6	
Toluene	397.5	5	400	5.57	98.0%	80	116	409.3	2.9%	6	

CONFIRMED-LCS
@ 1/5/00

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *05-Jan-00*

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22212**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.16	0.5	40	0.1926	104.9%	87	119				
Ethylbenzene	42.31	0.5	40	0.215	105.2%	89	117				
m,p-Xylene	81.01	1	80	0.3975	100.8%	88	114				
Methyl tert-Butyl Ether	42.24	1	40	0	105.6%	69	129				
o-Xylene	42.3	0.5	40	0.1448	105.4%	90	116				
Toluene	42.24	0.5	40	0.2676	104.9%	90	115				

Sample ID: **LCS WATER** Batch ID: **GC-1_991222** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/22/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991222A** SeqNo: **22318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.58	0.5	40	0.0482	101.3%	87	119				
Ethylbenzene	40.85	0.5	40	0	102.1%	89	117				
m,p-Xylene	78.33	1	80	0.1076	97.8%	88	114				
Methyl tert-Butyl Ether	40.96	1	40	0	102.4%	69	129				
o-Xylene	40.94	0.5	40	0	102.3%	90	116				
Toluene	40.74	0.5	40	0.1032	101.6%	90	115				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *05-Jan-00*

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 BTEX_9910** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:
Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22209**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.19	0.5	20	0	101.0%	85	115				
Ethylbenzene	21.09	0.5	20	0	105.5%	85	115				
m,p-Xylene	39.89	1	40	0	99.7%	85	115				
Methyl tert-Butyl Ether	20.47	1	20	0	102.3%	85	115				
o-Xylene	21.06	0.5	20	0	105.3%	85	115				
Toluene	20.47	0.5	20	0	102.4%	85	115				
1,4-Difluorobenzene	90.48	0	100	0	90.5%	80	120				
4-Bromochlorobenzene	89.17	0	100	0	89.2%	80	120				
Fluorobenzene	89.51	0	100	0	89.5%	80	120				

Sample ID: **CCV2 BTEX_9910** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:
Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22210**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.09	0.5	20	0	100.5%	85	115				
Ethylbenzene	20.96	0.5	20	0	104.8%	85	115				
m,p-Xylene	39.78	1	40	0	99.4%	85	115				
Methyl tert-Butyl Ether	21.34	1	20	0	106.7%	85	115				
o-Xylene	21.09	0.5	20	0	105.5%	85	115				
Toluene	20.44	0.5	20	0	102.2%	85	115				
1,4-Difluorobenzene	89.86	0	100	0	89.9%	80	120				
4-Bromochlorobenzene	89.56	0	100	0	89.6%	80	120				
Fluorobenzene	89.56	0	100	0	89.6%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 BTEX_9910** Batch ID: **GC-1_991221** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/21/1999** Prep Date:
Client ID: **9912028** Run ID: **GC-1_991221A** SeqNo: **22211**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.02	0.5	20	0	105.1%	85	115				
Ethylbenzene	21.24	0.5	20	0	106.2%	85	115				
m,p-Xylene	40.76	1	40	0	101.9%	85	115				
Methyl tert-Butyl Ether	21.72	1	20	0	108.6%	85	115				
o-Xylene	21.42	0.5	20	0	107.1%	85	115				
Toluene	21.19	0.5	20	0	105.9%	85	115				
1,4-Difluorobenzene	89.99	0	100	0	90.0%	80	120				
4-Bromochlorobenzene	88.33	0	100	0	88.3%	80	120				
Fluorobenzene	89.32	0	100	0	89.3%	80	120				

Sample ID: **CCV1 BTEX_9910** Batch ID: **GC-1_991222** Test Code: **SW8021B** Units: **µg/L** Analysis Date **12/22/1999** Prep Date:
Client ID: **9912028** Run ID: **GC-1_991222A** SeqNo: **22316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.76	0.5	20	0	103.8%	85	115				
Ethylbenzene	21.35	0.5	20	0	106.7%	85	115				
m,p-Xylene	40.5	1	40	0	101.3%	85	115				
Methyl tert-Butyl Ether	21.06	1	20	0	105.3%	85	115				
o-Xylene	21.43	0.5	20	0	107.1%	85	115				
Toluene	20.72	0.5	20	0	103.6%	85	115				
1,4-Difluorobenzene	90.55	0	100	0	90.6%	80	120				
4-Bromochlorobenzene	89.36	0	100	0	89.4%	80	120				
Fluorobenzene	89.65	0	100	0	89.6%	80	120				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2 BTEX_9910** Batch ID: **GC-1_991222** Test Code: **SW8021B** Units: µg/L Analysis Date **12/22/1999** Prep Date:

Client ID: **9912028** Run ID: **GC-1_991222A** SeqNo: **22317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.94	0.5	20	0	99.7%	85	115				
Ethylbenzene	20.72	0.5	20	0	103.6%	85	115				
m,p-Xylene	39.34	1	40	0	98.4%	85	115				
Methyl tert-Butyl Ether	21.35	1	20	0	106.8%	85	115				
o-Xylene	20.94	0.5	20	0	104.7%	85	115				
Toluene	20.19	0.5	20	0	101.0%	85	115				
1,4-Difluorobenzene	89.99	0	100	0	90.0%	80	120				
4-Bromochlorobenzene	89.04	0	100	0	89.0%	80	120				
Fluorobenzene	89.2	0	100	0	89.2%	80	120				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 05-Jan-00

CLIENT: Blagg Engineering
Work Order: 9912028
Project: P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
9912011-07A	88.9	89.8	88.7
9912021-05A	90.2	89.7	90
9912026-01A	90.3	90.8	87.7
9912026-01AMS	90	91.5	87.8
9912026-01AMSD	92	90.8	89.5
9912026-02A	89.5	89.2	89.3
9912026-03A	90.4	89.6	90
9912027-03A	90.6	89.7	90.1
9912027-04A	91.1	88.4	91
9912027-05A	90.6	88.4	90.5
9912027-06A	90.3	89.4	90.1
9912027-07A	90.4	87.4	89.6
9912027-08A	90.1	89.8	90.1
9912027-09A	90.9	90	89.9
9912028-01A	91	89.2	90.4
9912028-02A	87.7	90	87.6
9912028-03A	88.4	89.6	88.1
9912028-03AMS	88.1	90.4	87.2
9912028-03AMSD	88.4	90.2	87.2
9912029-01A	90.8	89.4	89.9
9912029-02A	90.8	89.9	89.9
CCV1 BTEX_99100	90.6	89.4	89.6
CCV2 BTEX_99100	90	89	89.2
CCV3 BTEX_99100	90	88.3	89.3
LCS WATER	90.1	90.1	88.7
MB1	90.2	90.5	90.2

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	80-120
4BCBZ	=	4-Bromochlorobenzene	80-120
FLBZ	=	Fluorobenzene	80-120

* Surrogate recovery outside acceptance limits

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO. **CHAIN-OF-CUSTODY # :** -

LOCATION : P.O. PIPKIN # 3E **LABORATORY (S) USED :** ENVIROTECH, INC.

Date : January 05, 2000 **SAMPLER :** -

Filename : 01-05-00.WK4 **PROJECT MANAGER :** -

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	101.76	76.51	25.25	33.00	-	-	-	-	-
2	101.63	76.97	24.66	33.00	-	-	-	-	-
3	101.47	77.01	24.46	33.00	-	-	-	-	-

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 ".

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 10606
7023

LOCATION : P.O. PIPKIN # 3E

LABORATORY (S) USED : ON - SITE TECH.
ENVIROTECH, INC.

Date : June 28, 2000

SAMPLER : N J V

Filename : 06-28-00.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	101.77	76.44	25.33	33.00	1230	7.8	6,800	3.75	-
2	101.64	76.95	24.69	33.00	1310	7.4	3,400	4.00	-
3	101.47	77.03	24.44	33.00	1335	7.7	9,400	4.25	-
4	101.02	77.36	23.66	30.00	1055	7.8	3,400	3.25	-
5	101.01	77.49	23.52	30.00	1135	7.9	3,200	3.25	-

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 ".

Collected BTEX and anion / cation samples from all MW 's listed above .

Developed MW # 4 & 5 prior to purging for sampling (3.25 gal. each) .

Excellent recovery in MW # 4 & 5 .

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *12-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0006061	**Client Sample ID:**	MW-1
Lab ID:	0006061-01A **Matrix:** AQUEOUS	**Collection Date:**	6/28/2000 12:30:00 PM
Project:	P.O. Pipkin #3E	**COC Record:**	10606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	ND	0.5		µg/L	1	6/30/2000
Toluene	ND	0.5		µg/L	1	6/30/2000
Ethylbenzene	ND	0.5		µg/L	1	6/30/2000
m,p-Xylene	ND	1		µg/L	1	6/30/2000
o-Xylene	ND	0.5		µg/L	1	6/30/2000

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667
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ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *12-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0006061	**Client Sample ID:**	MW-2
Lab ID:	0006061-02A **Matrix:** AQUEOUS	**Collection Date:**	6/28/2000 1:10:00 PM
Project:	P.O. Pipkin #3E	**COC Record:**	10606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	600	2.5		µg/L	5	6/30/2000
Toluene	5.4	2.5		µg/L	5	6/30/2000
Ethylbenzene	120	2.5		µg/L	5	6/30/2000
m,p-Xylene	260	5		µg/L	5	6/30/2000
o-Xylene	17	2.5		µg/L	5	6/30/2000

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *12-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0006061	**Client Sample ID:**	MW-3
Lab ID:	0006061-03A **Matrix:** AQUEOUS	**Collection Date:**	6/28/2000 1:35:00 PM
Project:	P.O. Pipkin #3E	**COC Record:**	10606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	300	5		µg/L	10	6/30/2000
Toluene	ND	5		µg/L	10	6/30/2000
Ethylbenzene	77	0.5		µg/L	1	7/5/2000
m,p-Xylene	210	1		µg/L	1	7/5/2000
o-Xylene	8.8	0.5		µg/L	1	7/5/2000

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr - Surrogate

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FAX: (505) 327-1496

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 12-Jul-00

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0006061	**Client Sample ID:**	MW-4
Lab ID:	0006061-04A **Matrix:** AQUEOUS	**Collection Date:**	6/28/2000 10:55:00 AM
Project:	P.O. Pipkin #3E	**COC Record:**	10606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	ND	0.5		µg/L	1	6/30/2000
Toluene	ND	0.5		µg/L	1	6/30/2000
Ethylbenzene	ND	0.5		µg/L	1	6/30/2000
m,p-Xylene	ND	1		µg/L	1	6/30/2000
o-Xylene	ND	0.5		µg/L	1	6/30/2000

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

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LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *12-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0006061	**Client Sample ID:**	MW-5
Lab ID:	0006061-05A **Matrix:** AQUEOUS	**Collection Date:**	6/28/2000 11:35:00 AM
Project:	P.O. Pipkin #3E	**COC Record:**	10606

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: DM
Benzene	ND	0.5		µg/L	1	6/30/2000
Toluene	ND	0.5		µg/L	1	6/30/2000
Ethylbenzene	ND	0.5		µg/L	1	6/30/2000
m,p-Xylene	ND	1		µg/L	1	6/30/2000
o-Xylene	ND	0.5		µg/L	1	6/30/2000

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 1	Date Reported:	06-29-00
Laboratory Number:	H585	Date Sampled:	06-28-00
Chain of Custody:	7023	Date Received:	06-28-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-29-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.79**	s.u.		
Conductivity @ 25° C	**17,000**	umhos/cm		
Total Dissolved Solids @ 180C	**8,340**	mg/L		
Total Dissolved Solids (Calc)	**8,270**	mg/L		
SAR	**95.1**	ratio		
Total Alkalinity as CaCO3	**512**	mg/L		
Total Hardness as CaCO3	**148**	mg/L		
Bicarbonate as HCO3	**512**	mg/L	8.39	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.2**	mg/L	0.00	meq/L
Nitrite Nitrogen	**0.003**	mg/L	0.00	meq/L
Chloride	**124**	mg/L	3.50	meq/L
Fluoride	**7.05**	mg/L	0.37	meq/L
Phosphate	**3.3**	mg/L	0.10	meq/L
Sulfate	**5,110**	mg/L	106.39	meq/L
Iron	**0.021**	mg/L		
Calcium	**46.4**	mg/L	2.32	meq/L
Magnesium	**7.81**	mg/L	0.64	meq/L
Potassium	**1.9**	mg/L	0.05	meq/L
Sodium	**2,660**	mg/L	115.71	meq/L
Cations			118.72	meq/L
Anions			118.76	meq/L
Cation/Anion Difference			**0.04%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P. O. Pipkin # 3E.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 2	Date Reported:	06-29-00
Laboratory Number:	H586	Date Sampled:	06-28-00
Chain of Custody:	7023	Date Received:	06-28-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-29-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.44**	s.u.		
Conductivity @ 25° C	**6,720**	umhos/cm		
Total Dissolved Solids @ 180C	**3,350**	mg/L		
Total Dissolved Solids (Calc)	**3,330**	mg/L		
SAR	**39.6**	ratio		
Total Alkalinity as CaCO3	**788**	mg/L		
Total Hardness as CaCO3	**148**	mg/L		
Bicarbonate as HCO3	**788**	mg/L	12.92	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.1**	mg/L	0.00	meq/L
Nitrite Nitrogen	**<0.001**	mg/L	0.00	meq/L
Chloride	**44.0**	mg/L	1.24	meq/L
Fluoride	**4.55**	mg/L	0.24	meq/L
Phosphate	**0.2**	mg/L	0.01	meq/L
Sulfate	**1,680**	mg/L	34.98	meq/L
Iron	**0.028**	mg/L		
Calcium	**47.2**	mg/L	2.36	meq/L
Magnesium	**4.88**	mg/L	0.40	meq/L
Potassium	**3.9**	mg/L	0.10	meq/L
Sodium	**1,070**	mg/L	46.55	meq/L
Cations			49.40	meq/L
Anions			49.38	meq/L
Cation/Anion Difference			**0.04%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P. O. Pipkin # 3E.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 3	Date Reported:	06-29-00
Laboratory Number:	H587	Date Sampled:	06-28-00
Chain of Custody:	7023	Date Received:	06-28-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-29-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.84**	s.u.		
Conductivity @ 25° C	**19,600**	umhos/cm		
Total Dissolved Solids @ 180C	**9,700**	mg/L		
Total Dissolved Solids (Calc)	**9,630**	mg/L		
SAR	**80.6**	ratio		
Total Alkalinity as CaCO3	**1,020**	mg/L		
Total Hardness as CaCO3	**284**	mg/L		
Bicarbonate as HCO3	**1,020**	mg/L	16.72	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**0.3**	mg/L	0.00	meq/L
Nitrite Nitrogen	**0.002**	mg/L	0.00	meq/L
Chloride	**588**	mg/L	16.59	meq/L
Fluoride	**7.40**	mg/L	0.39	meq/L
Phosphate	**2.0**	mg/L	0.06	meq/L
Sulfate	**5,190**	mg/L	108.06	meq/L
Iron	**0.070**	mg/L		
Calcium	**88.0**	mg/L	4.39	meq/L
Magnesium	**15.6**	mg/L	1.28	meq/L
Potassium	**2.1**	mg/L	0.05	meq/L
Sodium	**3,120**	mg/L	135.72	meq/L
Cations			141.45	meq/L
Anions			141.82	meq/L
Cation/Anion Difference			**0.26%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P. O. Pipkin # 3E.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 4	Date Reported:	06-29-00
Laboratory Number:	H588	Date Sampled:	06-28-00
Chain of Custody:	7023	Date Received:	06-28-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-29-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.95**	s.u.		
Conductivity @ 25° C	**8,030**	umhos/cm		
Total Dissolved Solids @ 180C	**4,000**	mg/L		
Total Dissolved Solids (Calc)	**3,980**	mg/L		
SAR	**46.7**	ratio		
Total Alkalinity as CaCO3	**484**	mg/L		
Total Hardness as CaCO3	**138**	mg/L		
Bicarbonate as HCO3	**484**	mg/L	7.93	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**2.3**	mg/L	0.04	meq/L
Nitrite Nitrogen	**0.017**	mg/L	0.00	meq/L
Chloride	**46.0**	mg/L	1.30	meq/L
Fluoride	**4.45**	mg/L	0.23	meq/L
Phosphate	**0.5**	mg/L	0.02	meq/L
Sulfate	**2,320**	mg/L	48.30	meq/L
Iron	**0.021**	mg/L		
Calcium	**50.4**	mg/L	2.51	meq/L
Magnesium	**2.93**	mg/L	0.24	meq/L
Potassium	**2.0**	mg/L	0.05	meq/L
Sodium	**1,260**	mg/L	54.81	meq/L
Cations			57.62	meq/L
Anions			57.82	meq/L
Cation/Anion Difference			**0.35%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P. O. Pipkin # 3E.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 5	Date Reported:	06-29-00
Laboratory Number:	H589	Date Sampled:	06-28-00
Chain of Custody:	7023	Date Received:	06-28-00
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-29-00
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.93**	s.u.		
Conductivity @ 25° C	**7,540**	umhos/cm		
Total Dissolved Solids @ 180C	**3,760**	mg/L		
Total Dissolved Solids (Calc)	**3,700**	mg/L		
SAR	**44.7**	ratio		
Total Alkalinity as CaCO3	**452**	mg/L		
Total Hardness as CaCO3	**130**	mg/L		
Bicarbonate as HCO3	**452**	mg/L	7.41	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**<0.1**	mg/L	0.00	meq/L
Nitrate Nitrogen	**<0.1**	mg/L	0.00	meq/L
Nitrite Nitrogen	**<0.001**	mg/L	0.00	meq/L
Chloride	**18.4**	mg/L	0.52	meq/L
Fluoride	**4.40**	mg/L	0.23	meq/L
Phosphate	**0.5**	mg/L	0.02	meq/L
Sulfate	**2,180**	mg/L	45.39	meq/L
Iron	**0.014**	mg/L		
Calcium	**49.6**	mg/L	2.48	meq/L
Magnesium	**1.46**	mg/L	0.12	meq/L
Potassium	**2.1**	mg/L	0.05	meq/L
Sodium	**1,170**	mg/L	50.90	meq/L
Cations			53.54	meq/L
Anions			53.56	meq/L
Cation/Anion Difference			**0.03%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **P. O. Pipkin # 3E.**

Analyst

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ON SITE TECHNOLOGIES, LTD.

CHAIN OF CUSTODY RECORD

10606

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 4/25/

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name N. Vance	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
PROJECT LOCATION:		Telephone No. 632-1199	Telefax No. 632-3903
SAMPLER'S SIGNATURE:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	SAMPLE PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID
	4/24/00	1230	WATER	HCl & Soil	2	✓	
	"	1310	"	"	2	✓	
	"	1335	"	"	2	✓	
	"	1055	"	"	2	✓	
	"	1135	"	"	2	✓	

Relinquished by:	Date/Time 4/24/00 1569	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Rush [ ] 24-48 Hours [ ] 10 Working Days [ ] By Date [ ]	

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

CHAIN OF CUSTODY RECORD

7063

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/CROSS TIMBERS	P.O. PIPKIN #3E	
Sampler: NJV	Client No. 403410	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	ANION/ CATION						Remarks: ALL SAMPLES PRESERV. COOL
MW #1	6/28/00	1230	14585	WATER	1	✓						
MW #2	6/28/00	1310	14586	WATER	1	✓						
MW #3	6/28/00	1335	14587	WATER	1	✓						
MW #4	6/28/00	1055	14588	WATER	1	✓						
MW #5	6/28/00	1135	14589	WATER	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	6/28/00	1447	Allen L. Ayers	6.28.00	14:47
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

On Site Technologies, LTD.

Date: *12-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB1** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29660**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0662	0.5									J
Ethylbenzene	.0926	0.5									J
m,p-Xylene	.1955	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	.1915	0.5									J
Toluene	.2052	0.5									J

Sample ID: **MB1** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: µg/L Analysis Date **7/5/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0469	0.5									J
Ethylbenzene	ND	0.5									
m,p-Xylene	.1105	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.0849	0.5									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *12-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0006067-02AMS** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:

Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29661**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6142	50	4000	2160	99.6%	73	126				
Ethylbenzene	4770	50	4000	761.2	100.2%	88	113				
m,p-Xylene	10130	100	8000	2541	94.9%	83	112				
Methyl tert-Butyl Ether	4269	100	4000	192.6	101.9%	81	125				
o-Xylene	4523	50	4000	475	101.2%	93	110				
Toluene	6361	50	4000	2326	100.9%	76	126				

Sample ID: **0006067-02AMSD** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:

Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29662**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6030	50	4000	2160	96.7%	73	126	6142	1.9%	6	
Ethylbenzene	4686	50	4000	761.2	98.1%	88	113	4770	1.8%	5	
m,p-Xylene	9959	100	8000	2541	92.7%	83	112	10130	1.7%	7	
Methyl tert-Butyl Ether	4256	100	4000	192.6	101.6%	81	125	4269	0.3%	9	
o-Xylene	4455	50	4000	475	99.5%	93	110	4523	1.5%	6	
Toluene	6245	50	4000	2326	98.0%	76	126	6361	1.8%	6	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0006056-01AMS** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: **µg/L** Analysis Date **7/5/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29717**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	227.9	2.5	200	26	101.0%	73	126				
Ethylbenzene	299.6	2.5	200	94	102.8%	88	113				
m,p-Xylene	892.1	5	400	500	98.0%	83	112				
Methyl tert-Butyl Ether	202.4	5	200	0	101.2%	81	125				
o-Xylene	347	2.5	200	140	103.5%	93	110				
Toluene	208.7	2.5	200	2.5	103.1%	76	126				

Sample ID: **0006056-01AMSD** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: **µg/L** Analysis Date **7/5/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29718**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	223.9	2.5	200	26	99.0%	73	126	227.9	1.8%	6	
Ethylbenzene	295	2.5	200	94	100.5%	88	113	299.6	1.5%	5	
m,p-Xylene	879.8	5	400	500	94.9%	83	112	892.1	1.4%	7	
Methyl tert-Butyl Ether	204.4	5	200	0	102.2%	81	125	202.4	1.0%	9	
o-Xylene	342.5	2.5	200	140	101.2%	93	110	347	1.3%	6	
Toluene	205.5	2.5	200	2.5	101.5%	76	126	208.7	1.6%	6	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *12-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:

Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29659**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.35	0.5	40	0.0662	100.7%	89	112				
Ethylbenzene	40.86	0.5	40	0.0926	101.9%	93	112				
m,p-Xylene	77.5	1	80	0.1955	96.6%	88	108				
Methyl tert-Butyl Ether	40.23	1	40	0	100.6%	87	115				
o-Xylene	41.16	0.5	40	0.1915	102.4%	93	112				
Toluene	41.01	0.5	40	0.2052	102.0%	92	111				

Sample ID: **LCS WATER** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: **µg/L** Analysis Date **7/5/2000** Prep Date:

Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29715**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.5	0.5	40	0.0469	106.1%	89	112				
Ethylbenzene	43.3	0.5	40	0	108.3%	93	112				
m,p-Xylene	82.02	1	80	0.1105	102.4%	88	108				
Methyl tert-Butyl Ether	42.23	1	40	0	105.6%	87	115				
o-Xylene	43.47	0.5	40	0	108.7%	93	112				
Toluene	43.22	0.5	40	0.0849	107.8%	92	111				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *12-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 BTEX_0004** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:

Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29656**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.74	0.5	20	0	103.7%	85	115				
Ethylbenzene	21	0.5	20	0	105.0%	85	115				
m,p-Xylene	39.95	1	40	0	99.9%	85	115				
Methyl tert-Butyl Ether	20.49	1	20	0	102.5%	85	115				
o-Xylene	21.27	0.5	20	0	106.4%	85	115				
Toluene	21.05	0.5	20	0	105.3%	85	115				
1,4-Difluorobenzene	89.85	0	100	0	89.9%	80	105				
4-Bromochlorobenzene	84.68	0	100	0	84.7%	78	108				
Fluorobenzene	88.46	0	100	0	88.5%	78	108				

Sample ID: **CCV2 BTEX_0004** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:

Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29657**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.07	0.5	20	0	100.4%	85	115				
Ethylbenzene	20.26	0.5	20	0	101.3%	85	115				
m,p-Xylene	38.7	1	40	0	96.7%	85	115				
Methyl tert-Butyl Ether	20.64	1	20	0	103.2%	85	115				
o-Xylene	20.52	0.5	20	0	102.6%	85	115				
Toluene	20.42	0.5	20	0	102.1%	85	115				
1,4-Difluorobenzene	90.15	0	100	0	90.1%	80	105				
4-Bromochlorobenzene	85.09	0	100	0	85.1%	78	108				
Fluorobenzene	88.6	0	100	0	88.6%	78	108				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 BTEX_0004** Batch ID: **GC-1_000630** Test Code: **SW8021B** Units: **µg/L** Analysis Date **6/30/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000630A** SeqNo: **29658**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.36	0.5	40	0	100.9%	85	115				
Ethylbenzene	40.66	0.5	40	0	101.7%	85	115				
m,p-Xylene	77.16	1	80	0	96.4%	85	115				
Methyl tert-Butyl Ether	41.35	1	40	0	103.4%	85	115				
o-Xylene	41.21	0.5	40	0	103.0%	85	115				
Toluene	40.98	0.5	40	0	102.4%	85	115				
1,4-Difluorobenzene	89.84	0	100	0	89.8%	80	105				
4-Bromochlorobenzene	85.42	0	100	0	85.4%	78	108				
Fluorobenzene	87.99	0	100	0	88.0%	78	108				

Sample ID: **CCV1 BTEX_0004** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: **µg/L** Analysis Date **7/5/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29712**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.52	0.5	20	0	102.6%	85	115				
Ethylbenzene	20.95	0.5	20	0	104.7%	85	115				
m,p-Xylene	39.92	1	40	0	99.8%	85	115				
Methyl tert-Butyl Ether	20.47	1	20	0	102.4%	85	115				
o-Xylene	21.07	0.5	20	0	105.3%	85	115				
Toluene	20.88	0.5	20	0	104.4%	85	115				
1,4-Difluorobenzene	89.92	0	100	0	89.9%	80	105				
4-Bromochlorobenzene	85.7	0	100	0	85.7%	78	108				
Fluorobenzene	88.5	0	100	0	88.5%	78	108				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2 BTEX_0004** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: **µg/L** Analysis Date **7/5/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.74	0.5	20	0	98.7%	85	115				
Ethylbenzene	20	0.5	20	0	100.0%	85	115				
m,p-Xylene	38.14	1	40	0	95.3%	85	115				
Methyl tert-Butyl Ether	20.63	1	20	0	103.1%	85	115				
o-Xylene	20.26	0.5	20	0	101.3%	85	115				
Toluene	20.05	0.5	20	0	100.2%	85	115				
1,4-Difluorobenzene	90.14	0	100	0	90.1%	80	105				
4-Bromochlorobenzene	83.65	0	100	0	83.7%	78	108				
Fluorobenzene	88.53	0	100	0	88.5%	78	108				

Sample ID: **CCV3 BTEX_0004** Batch ID: **GC-1_000705** Test Code: **SW8021B** Units: **µg/L** Analysis Date **7/5/2000** Prep Date:
Client ID: **0006061** Run ID: **GC-1_000705A** SeqNo: **29714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.01	0.5	40	0	100.0%	85	115				
Ethylbenzene	40.66	0.5	40	0	101.6%	85	115				
m,p-Xylene	76.88	1	80	0	96.1%	85	115				
Methyl tert-Butyl Ether	41	1	40	0	102.5%	85	115				
o-Xylene	41.1	0.5	40	0	102.8%	85	115				
Toluene	40.66	0.5	40	0	101.7%	85	115				
1,4-Difluorobenzene	89.53	0	100	0	89.5%	80	105				
4-Bromochlorobenzene	85.63	0	100	0	85.6%	78	108				
Fluorobenzene	88.04	0	100	0	88.0%	78	108				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 12-Jul-00

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0006050-18A	90.2	82.4	89.6
0006054-02A	90.3	85	89.2
0006055-01A	90.7	83.9	89.4
0006055-02A	90.5	85	89.2
0006056-01A	89.6	82.8	88.9
0006056-01AMS	88.9	84.8	87.8
0006056-01AMSD	89.1	84.4	88
0006056-02A	87.4	83	86.9
0006056-03A	90.4	85	89.4
0006061-01A	91	85.2	89.2
0006061-02A	88.8	84	87
0006061-03A	88.5	87	87.4
0006061-04A	90.6	85	89.2
0006061-05A	90.6	84.7	89.1
0006067-01A	90.4	83.8	89.1
0006067-02A	89.6	85	88.6
0006067-02AMS	89.5	85.6	87.8
0006067-02AMSD	89.5	85.7	87.7
0006067-03A	89.8	84.6	89.2
0006068-01A	88.2	80.3	89.8
0006068-02A	89.3	85.2	87.3
0006068-03A	84.3	80.2	83.1
0006071-01A	90.7	83.4	89.1
0006072-01A	90.1	84.6	89.5
0006072-05A	90.1	83.2	89.3
0006072-07A	90.3	84.1	89.2
0006072-08A	90.5	84.2	89.5

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	80-105
4BCBZ	=	4-Bromochlorobenzene	78-108
FLBZ	=	Fluorobenzene	78-108

* Surrogate recovery outside acceptance limits

CLIENT: Blagg Engineering
Work Order: 0006061
Project: P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0006072-09A	88.4	85.6	88.7
0006072-10A	89.4	84	95.2
0006072-11A	94.5	84.6	91.4
0006072-15A	90.2	85.3	89.4
0006072-17A	90.4	85.3	89.2
0006072-18A	90.2	85	89.2
0006072-28A	89.4	83.9	89.1
0006072-31A	90.2	84.7	89.5
CCV1 BTEX_00040	89.9	85.7	88.5
CCV2 BTEX_00040	90.1	83.6	88.5
CCV3 BTEX_00040	89.5	85.6	88
LCS WATER	89.4	85.3	88.4
MB1	90.5	84.8	89.4

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	80-105
4BCBZ	=	4-Bromochlorobenzene	78-108
FLBZ	=	Fluorobenzene	78-108

* Surrogate recovery outside acceptance limits

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OPER. CO. **CHAIN-OF-CUSTODY # :** 11045

LOCATION : P.O. PIPKIN # 3E **LABORATORY (S) USED :** ON - SITE TECH.

Date : May 15, 2001 **SAMPLER :** N J V

Filename : 05-15-01.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	101.77	76.37	25.40	33.00	-	-	-	-	-
2	101.64	76.85	24.79	33.00	0850	7.45	4,100	2.00	-
3	101.47	76.94	24.53	33.00	0915	7.71	5,400	4.25	-
4	101.02	77.00	24.02	30.00	-	-	-	-	-
5	101.01	77.34	23.67	30.00	-	-	-	-	-

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 ".

Collected BTEX samples from MW 's 2 & 3 only . Poor recovery in MW # 2 , bailed to TD , then collected sample after water level recovery to approx. 25.30 ft. . Excellent recovery in MW # 3 .

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *31-May-01*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0105022	**Client Sample ID:**	MW #2
Lab ID:	0105022-01A **Matrix:** AQUEOUS	**Collection Date:**	5/15/2001 8:50:00 AM
Project:	Cross Timbers; P.O. Pipkin #3E	**COC Record:**	11045

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HR**
Benzene	260	2.5		µg/L	5	5/25/2001
Toluene	ND	2.5		µg/L	5	5/25/2001
Ethylbenzene	67	2.5		µg/L	5	5/25/2001
m,p-Xylene	130	5		µg/L	5	5/25/2001
o-Xylene	23	2.5		µg/L	5	5/25/2001

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499
EMAIL: ONSITE@ONSITELTD.COM

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667
FAX: (505) 327-1496

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *31-May-01*

Client:	Blagg Engineering	**Client Sample Info:**	P.O. Pipkin #3E
Work Order:	0105022	**Client Sample ID:**	MW #3
Lab ID:	0105022-02A **Matrix:** AQUEOUS	**Collection Date:**	5/15/2001 9:15:00 AM
Project:	Cross Timbers; P.O. Pipkin #3E	**COC Record:**	11045

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HR**
Benzene	56	0.5		µg/L	1	5/25/2001
Toluene	0.8	0.5		µg/L	1	5/25/2001
Ethylbenzene	17	0.5		µg/L	1	5/25/2001
m,p-Xylene	26	1		µg/L	1	5/25/2001
o-Xylene	ND	0.5		µg/L	1	5/25/2001

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499
EMAIL: ONSITE@ONSITELTD.COM

11045

ON SITE TECHNOLOGIES, LTD.

CHAIN OF CUSTODY RECORD

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 5/15/01

Page: 1 of 1

Purchase Order No.:	Project No.
SEND INVOICE TO — Name: [illegible]	
Company: [illegible] Engineering, Inc.	Dept.
Address:	
City, State, Zip:	

REPORT RESULTS TO — Name: Nelson Velez	Title
Company: Same	
Mailing Address:	
City, State, Zip:	
Telephone No.: 632-1199	Telefax No.: 632-3903

PROJECT LOCATION: [illegible]

SAMPLER'S SIGNATURE: [illegible]

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	PRES.	Number of Containers	[illegible]									LAB ID
[illegible]	5/15/01	0850	WATER	HCl & COOL	2	✓									0105022-01A
															↓
[illegible]	5/15/01	0915	WATER	HCl & COOL	2	✓									-02A

Relinquished by: [illegible]	Date/Time 5/15/01 1211	Received by: [illegible]	Date/Time 5/15/01 1210
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Rush / 24-48 Hours / 10 Working Days / By Date	

Authorized by: ______ Date ______
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

To Re-order Call 325-9600 or Fax 325-9764 alphagraphics FORM # 01

On Site Technologies, LTD.

Date: *31-May-01*

CLIENT: Blagg Engineering
Work Order: 0105022
Project: Cross Timbers; P.O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB1** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:

Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1226	0.5									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *31-May-01*

CLIENT: Blagg Engineering
Work Order: 0105022
Project: Cross Timbers; P.O. Pipkin #3E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0105046-22AMS** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:
Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	3307	25	2000	1485	91.1%	70	130				
Ethylbenzene	2010	25	2000	379.4	81.5%	70	130				
m,p-Xylene	3691	50	4000	493	80.0%	70	130				
Methyl tert-Butyl Ether	4418	50	2000	2497	96.0%	70	130				
o-Xylene	1869	25	2000	55.85	90.7%	70	130				
Toluene	1904	25	2000	50.74	92.6%	70	130				

Sample ID: **0105046-22AMSD** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:
Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38389**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	3315	25	2000	1485	91.5%	70	130	3307	0.3%	8	
Ethylbenzene	1970	25	2000	379.4	79.5%	70	130	2010	2.0%	7	
m,p-Xylene	3583	50	4000	493	77.2%	70	130	3691	3.0%	7	
Methyl tert-Butyl Ether	4510	50	2000	2497	100.7%	70	130	4418	2.1%	6	
o-Xylene	1846	25	2000	55.85	89.5%	70	130	1869	1.3%	6	
Toluene	1871	25	2000	50.74	91.0%	70	130	1904	1.7%	6	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *31-May-01*

CLIENT: Blagg Engineering
Work Order: 0105022
Project: Cross Timbers; P.O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:

Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38386**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.07	0.5	40	0	97.7%	80	120				
Ethylbenzene	39.1	0.5	40	0	97.8%	80	120				
m,p-Xylene	75	1	80	0	93.8%	80	120				
Methyl tert-Butyl Ether	40.74	1	40	0	101.9%	80	120				
o-Xylene	38.59	0.5	40	0	96.5%	80	120				
Toluene	38.58	0.5	40	0.1226	96.2%	80	120				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *31-May-01*

CLIENT: Blagg Engineering
Work Order: 0105022
Project: Cross Timbers; P.O. Pipkin #3E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 BTEX_0105** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:

Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.01	0.5	20	0	100.0%	85	115				
Ethylbenzene	20.02	0.5	20	0	100.1%	85	115				
m,p-Xylene	38.51	1	40	0	96.3%	85	115				
Methyl tert-Butyl Ether	20.81	1	20	0	104.0%	85	115				
o-Xylene	19.68	0.5	20	0	98.4%	85	115				
Toluene	19.74	0.5	20	0	98.7%	85	115				
1,4-Difluorobenzene	75.57	0	80	0	94.5%	70	130				
4-Bromochlorobenzene	81.98	0	80	0	102.5%	70	130				
Fluorobenzene	76.25	0	80	0	95.3%	70	130				

Sample ID: **CCV2 BTEX_0105** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:

Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38384**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.46	0.5	40	0	98.6%	85	115				
Ethylbenzene	39.46	0.5	40	0	98.7%	85	115				
m,p-Xylene	75.89	1	80	0	94.9%	85	115				
Methyl tert-Butyl Ether	42.02	1	40	0	105.0%	85	115				
o-Xylene	39.02	0.5	40	0	97.5%	85	115				
Toluene	39.1	0.5	40	0	97.8%	85	115				
1,4-Difluorobenzene	74.46	0	80	0	93.1%	70	130				
4-Bromochlorobenzene	79.65	0	80	0	99.6%	70	130				
Fluorobenzene	76.07	0	80	0	95.1%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0105022
Project: Cross Timbers; P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 BTEX_0105** Batch ID: **GC-1_010525** Test Code: **SW8021B** Units: **µg/L** Analysis Date **5/25/2001** Prep Date:

Client ID: **0105022** Run ID: **GC-1_010525A** SeqNo: **38385**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.78	0.5	20	0	98.9%	85	115				
Ethylbenzene	19.68	0.5	20	0	98.4%	85	115				
m,p-Xylene	37.77	1	40	0	94.4%	85	115				
Methyl tert-Butyl Ether	20.7	1	20	0	103.5%	85	115				
o-Xylene	19.38	0.5	20	0	96.9%	85	115				
Toluene	19.43	0.5	20	0	97.1%	85	115				
1,4-Difluorobenzene	75.02	0	80	0	93.8%	70	130				
4-Bromochlorobenzene	83	0	80	0	103.8%	70	130				
Fluorobenzene	76.55	0	80	0	95.7%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 31-May-01

CLIENT: Blagg Engineering
Work Order: 0105022
Project: Cross Timbers; P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0105019-19A	93.8	101	94.7
0105019-20A	94.8	98.7	96.1
0105019-21A	94.5	98.9	95.8
0105019-22A	95	101	96
0105021-01A	92.3	97.7	94.3
0105021-02A	89.4	98.9	92.3
0105022-01A	91.3	98.2	93.1
0105022-02A	93.2	100	94.3
0105023-02A	85.7	102	96.4
0105024-01A	92.4	101	94.3
0105046-07A	94.3	100	95.6
0105046-18A	93.2	97.6	96
0105046-20A	91.5	95.2	92.6
0105046-21A	93.8	96.5	95.2
0105046-22A	94.1	101	96.4
0105046-22AMS	93.4	115	94.9
0105046-22AMSD	93	106	95.1
0105046-31A	95.3	102	96.1
0105046-32A	94.3	100	95.6
CCV1 BTEX_01052	94.5	102	95.3
CCV2 BTEX_01052	93.1	99.6	95.1
CCV3 BTEX_01052	93.8	104	95.7
LCS WATER	93.8	102	95.4
MB1	93.9	102	96

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : **XTO ENERGY , INC.** CHAIN-OF-CUSTODY # : 11784

LOCATION : **P.O. PIPKIN # 3E** LABORATORY (S) USED : ON - SITE TECH.

Date : June 26, 2002 SAMPLER : N J V

Filename : 06-26-02.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	101.77		DRY	33.00	-	-	-	-	-
2	101.64	76.00	25.64	33.00	0700	8.01	4,100	1.75	-
3			23.58	30.50	0650	8.13	6,600	3.50	-
4	101.02	76.14	24.88	30.00	-	-	-	-	-
5	101.01	76.46	24.55	30.00	-	-	-	-	-

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 ".

Collected BTEX samples from MW 's 2 & 3 only . Poor recovery in MW # 2 , bailed to TD , then collected sample after water level recovery to approx. 25.82 ft. . Excellent recovery in MW # 3 . MW # 1 potentially tampered with . MW # 3 top of casing cut off ; probably during installation of pump jack at well head .

OFF: (505) 325-5667
FAX: (505) 327-1496

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TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *10-Jul-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - P.O. Pipkin #3E
Work Order:	0206050	**Client Sample ID:**	MW #2
Lab ID:	0206050-01A **Matrix:** AQUEOUS	**Collection Date:**	06/26/2002 7:00:00 AM
Project:	XTO - P.O. Pipkin #3E	**COC Record:**	11784

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	52	0.5		µg/L	1	06/28/2002
Toluene	0.6	0.5		µg/L	1	06/28/2002
Ethylbenzene	7.5	0.5		µg/L	1	06/28/2002
m,p-Xylene	5.6	1		µg/L	1	06/28/2002
o-Xylene	1.8	0.5		µg/L	1	06/28/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above quantitation range
Surr: - Surrogate

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ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: *10-Jul-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - P.O. Pipkin #3E
Work Order:	0206050	**Client Sample ID:**	MW #3
Lab ID:	0206050-02A **Matrix:** AQUEOUS	**Collection Date:**	06/26/2002 6:50:00 AM
Project:	XTO - P.O. Pipkin #3E	**COC Record:**	11784

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	1.4	0.5		µg/L	1	06/27/2002
Toluene	ND	0.5		µg/L	1	06/27/2002
Ethylbenzene	1	0.5		µg/L	1	06/27/2002
m,p-Xylene	ND	1		µg/L	1	06/27/2002
o-Xylene	ND	0.5		µg/L	1	06/27/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above quantitation range
Surr: - Surrogate

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- Technology Blending Industry with the Environment -

11784

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 6/26/02

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

PROJECT LOCATION:

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION	SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Rush | 24-48 Hours | 10 Working Days | By Date

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52887**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1054	0.5									J
1,4-Difluorobenzene	107.6	0									
4-Bromochlorobenzene	118.6	0									
Fluorobenzene	109.7	0									

Sample ID: **MB_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.1684	0.5									J
1,4-Difluorobenzene	109	0									
4-Bromochlorobenzene	121.8	0									
Fluorobenzene	112.8	0									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0206041-01AMS** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52888**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1171	5	400	769.1	100.6%	70	130				
Ethylbenzene	763.9	5	400	352.2	102.9%	70	130				
m,p-Xylene	1554	10	800	774.5	97.4%	70	130				
Methyl tert-Butyl Ether	601.3	10	400	205	99.1%	70	130				
o-Xylene	474.6	5	400	88.25	96.6%	70	130				
Toluene	597.6	5	400	204.9	98.2%	70	130				
1,4-Difluorobenzene	1065	0	1100	0	96.8%	70	130				
4-Bromochlorobenzene	1210	0	1100	0	110.0%	70	130				
Fluorobenzene	1087	0	1100	0	98.8%	70	130				

Sample ID: **0206041-01AMSD** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1127	5	400	769.1	89.6%	70	130	1171	3.8%	15	
Ethylbenzene	735.7	5	400	352.2	95.9%	70	130	763.9	3.8%	15	
m,p-Xylene	1498	10	800	774.5	90.5%	70	130	1554	3.6%	15	
Methyl tert-Butyl Ether	591.9	10	400	205	96.7%	70	130	601.3	1.6%	15	
o-Xylene	460.1	5	400	88.25	93.0%	70	130	474.6	3.1%	15	
Toluene	574.8	5	400	204.9	92.5%	70	130	597.6	3.9%	15	
1,4-Difluorobenzene	1054	0	1100	0	95.9%	70	130	0	0.0%	0	
4-Bromochlorobenzene	1208	0	1100	0	109.8%	70	130	0	0.0%	0	
Fluorobenzene	1084	0	1100	0	98.5%	70	130	0	0.0%	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0206039-02AMS** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52914**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	512.8	2.5	200	312.6	100.1%	70	130				
Ethylbenzene	483.4	2.5	200	295.9	93.8%	70	130				
m,p-Xylene	897.1	5	400	517.3	94.9%	70	130				
Methyl tert-Butyl Ether	202.2	5	200	0	101.1%	70	130				
o-Xylene	221.4	2.5	200	30.64	95.4%	70	130				
Toluene	212.8	2.5	200	0.7775	106.0%	70	130				
1,4-Difluorobenzene	538.8	0	550	0	98.0%	70	130				
4-Bromochlorobenzene	614	0	550	0	111.6%	70	130				
Fluorobenzene	553.7	0	550	0	100.7%	70	130				

Sample ID: **0206039-02AMSD** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	495.9	2.5	200	312.6	91.6%	70	130	512.8	3.3%	15	
Ethylbenzene	466.3	2.5	200	295.9	85.2%	70	130	483.4	3.6%	15	
m,p-Xylene	866.1	5	400	517.3	87.2%	70	130	897.1	3.5%	15	
Methyl tert-Butyl Ether	197.8	5	200	0	98.9%	70	130	202.2	2.2%	15	
o-Xylene	216.8	2.5	200	30.64	93.1%	70	130	221.4	2.1%	15	
Toluene	206.5	2.5	200	0.7775	102.9%	70	130	212.8	3.0%	15	
1,4-Difluorobenzene	529.2	0	550	0	96.2%	70	130	0	0.0%	0	
4-Bromochlorobenzene	603	0	550	0	109.6%	70	130	0	0.0%	0	
Fluorobenzene	545.4	0	550	0	99.2%	70	130	0	0.0%	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.85	0.5	40	0	97.1%	80	120				
Ethylbenzene	39.46	0.5	40	0	98.7%	80	120				
m,p-Xylene	78.4	1	80	0	98.0%	80	120				
Methyl tert-Butyl Ether	39.58	1	40	0	99.0%	80	120				
o-Xylene	38.05	0.5	40	0	95.1%	80	120				
Toluene	37.88	0.5	40	0.1054	94.4%	80	120				
1,4-Difluorobenzene	106.6	0	110	0	97.0%	70	130				
4-Bromochlorobenzene	120.1	0	110	0	109.2%	70	130				
Fluorobenzene	108.9	0	110	0	99.0%	70	130				

Sample ID: **LCS_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52912**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.44	0.5	40	0	98.6%	80	120				
Ethylbenzene	39.99	0.5	40	0	100.0%	80	120				
m,p-Xylene	79.19	1	80	0	99.0%	80	120				
Methyl tert-Butyl Ether	38.46	1	40	0	96.1%	80	120				
o-Xylene	38.22	0.5	40	0	95.6%	80	120				
Toluene	38.31	0.5	40	0.1684	95.4%	80	120				
1,4-Difluorobenzene	108.3	0	110	0	98.4%	70	130				
4-Bromochlorobenzene	122	0	110	0	110.9%	70	130				
Fluorobenzene	111.3	0	110	0	101.2%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: *10-Jul-02*

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52883**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.08	0.5	20	0	100.4%	85	115				
Ethylbenzene	20.33	0.5	20	0	101.6%	85	115				
m,p-Xylene	40.7	1	40	0	101.7%	85	115				
Methyl tert-Butyl Ether	19.9	1	20	0	99.5%	85	115				
o-Xylene	19.56	0.5	20	0	97.8%	85	115				
Toluene	19.51	0.5	20	0	97.5%	85	115				
1,4-Difluorobenzene	106.7	0	110	0	97.0%	70	130				
4-Bromochlorobenzene	117.7	0	110	0	107.0%	70	130				
Fluorobenzene	109.6	0	110	0	99.6%	70	130				

Sample ID: **CCV2_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.17	0.5	20	0	95.9%	85	115				
Ethylbenzene	19.37	0.5	20	0	96.9%	85	115				
m,p-Xylene	38.18	1	40	0	95.4%	85	115				
Methyl tert-Butyl Ether	18.95	1	20	0	94.7%	85	115				
o-Xylene	18.69	0.5	20	0	93.5%	85	115				
Toluene	18.54	0.5	20	0	92.7%	85	115				
1,4-Difluorobenzene	109.1	0	110	0	99.2%	70	130				
4-Bromochlorobenzene	123.6	0	110	0	112.4%	70	130				
Fluorobenzene	111.7	0	110	0	101.6%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020627** Batch ID: **GC-1_020627** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/27/2002** Prep Date: **06/27/2002**
Client ID: **0206050** Run ID: **GC-1_020627A** SeqNo: **52885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.74	0.5	40	0	96.8%	85	115				
Ethylbenzene	38.89	0.5	40	0	97.2%	85	115				
m,p-Xylene	76.38	1	80	0	95.5%	85	115				
Methyl tert-Butyl Ether	38.49	1	40	0	96.2%	85	115				
o-Xylene	37.42	0.5	40	0	93.5%	85	115				
Toluene	37.56	0.5	40	0	93.9%	85	115				
1,4-Difluorobenzene	107.9	0	110	0	98.1%	70	130				
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130				
Fluorobenzene	111.5	0	110	0	101.4%	70	130				

Sample ID: **CCV1_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.37	0.5	20	0	101.9%	85	115				
Ethylbenzene	20.56	0.5	20	0	102.8%	85	115				
m,p-Xylene	40.47	1	40	0	101.2%	85	115				
Methyl tert-Butyl Ether	19.98	1	20	0	99.9%	85	115				
o-Xylene	19.67	0.5	20	0	98.4%	85	115				
Toluene	19.69	0.5	20	0	98.5%	85	115				
1,4-Difluorobenzene	108.4	0	110	0	98.5%	70	130				
4-Bromochlorobenzene	121.5	0	110	0	110.4%	70	130				
Fluorobenzene	111.6	0	110	0	101.5%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52909**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.06	0.5	20	0	100.3%	85	115				
Ethylbenzene	20.13	0.5	20	0	100.6%	85	115				
m,p-Xylene	39.24	1	40	0	98.1%	85	115				
Methyl tert-Butyl Ether	20.31	1	20	0	101.5%	85	115				
o-Xylene	19.37	0.5	20	0	96.8%	85	115				
Toluene	19.38	0.5	20	0	96.9%	85	115				
1,4-Difluorobenzene	108.7	0	110	0	98.8%	70	130				
4-Bromochlorobenzene	118.9	0	110	0	108.1%	70	130				
Fluorobenzene	111.8	0	110	0	101.7%	70	130				

Sample ID: **CCV3_020628** Batch ID: **GC-1_020628** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/28/2002** Prep Date: **06/28/2002**
Client ID: **0206050** Run ID: **GC-1_020628A** SeqNo: **52910**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.19	0.5	40	0	95.5%	85	115				
Ethylbenzene	38.83	0.5	40	0	97.1%	85	115				
m,p-Xylene	75.68	1	80	0	94.6%	85	115				
Methyl tert-Butyl Ether	38.62	1	40	0	96.5%	85	115				
o-Xylene	37.34	0.5	40	0	93.4%	85	115				
Toluene	37.3	0.5	40	0	93.2%	85	115				
1,4-Difluorobenzene	108.5	0	110	0	98.6%	70	130				
4-Bromochlorobenzene	116.4	0	110	0	105.8%	70	130				
Fluorobenzene	112.3	0	110	0	102.1%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 10-Jul-02

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206028-01A	88	100	105
0206029-01A	99.2	109	102
0206030-01A	90.1	103	102
0206030-02A	99.4	111	102
0206030-03A	96.5	111	100
0206031-01A	99.4	110	102
0206031-02A	98.4	110	102
0206031-03A	98.2	111	101
0206031-04A	92.1	107	95.5
0206039-01A	91.8	112	95.2
0206039-02A	96.5	108	99.6
0206039-02AMS	98	112	101
0206039-02AMSD	96.2	110	99.2
0206041-01A	96.6	110	99
0206041-01AMS	96.8	110	98.8
0206041-01AMSD	95.8	110	98.5
[illegible]06041-02A	98.1	112	101
[illegible]06048-01A	97.7	109	101
0206049-01A	97.6	106	100
0206049-02A	95.9	107	99.7
0206050-01A	95.5	109	98.7
0206050-02A	99.5	113	102
0206051-01A	99.2	111	102
0206052-01A	96.3	106	100
0206054-02A	101	100	96.8
0206054-03A	95.5	109	98.3
0206054-04A	95.4	109	98.2

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits

CLIENT: Blagg Engineering
Work Order: 0206050
Project: XTO - P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206057-01A	99.5	107	102
0206057-02A	99.2	106	103
0206057-03A	99.6	106	103
0206057-04A	99.7	106	103
0206057-05A	99.4	105	103
0206057-06A	99.1	106	103
0206057-07A	99.3	108	102
0206057-08A	99.3	108	103
0206061-01A	95.4	100	102
CCV1_020627	97	107	99.6
CCV1_020628	98.5	110	102
CCV2_020627	99.2	112	102
CCV2_020628	98.8	108	102
CCV3_020627	98.1	108	101
CCV3_020628	98.6	106	102
LCS_020627	97	109	99
LCS_020628	98.4	111	101
MB_020627	97.8	108	99.8
[redacted]_020628	99.1	111	102

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : XTO ENERGY , INC. **CHAIN-OF-CUSTODY # :** 12146

LOCATION : P.O. PIPKIN # 3E **LABORATORY (S) USED :** ON - SITE TECH.

Date : August 28, 2002 **SAMPLER :** N J V

Filename : 08-28-02.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	101.77		DRY	33.00	-	-	-	-	-
2	101.64	75.90	25.74	33.00	-	-	-	-	-
3			23.82	30.50	0740	7.70	4,600	3.25	-
4	101.02	76.07	24.95	30.00	-	-	-	-	-
5	101.01	76.37	24.64	30.00	-	-	-	-	-

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 ".

Excellent recovery in MW # 3 . Collected BTEX samples from MW # 3 only . MW # 1 potentially tampered with . MW # 3 top of casing cut off ; probably during installation of pump jack at well head .

612 E. Murray Drive
Farmington, NM 87401

Off: (505) 327-1072

iiná bá

P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

ANALYTICAL REPORT

Date: *30-Aug-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - P.O. Pipkin #3E
Work Order:	0208020	**Client Sample ID:**	MW #3
Lab ID:	0208020-01A **Matrix:** AQUEOUS	**Collection Date:**	08/28/2002 7:40:00 AM
Project:	XTO - P.O. Pipkin #3E	**COC Record:**	12146

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HNR**
Benzene	ND	0.5		µg/L	1	08/28/2002
Toluene	ND	0.5		µg/L	1	08/28/2002
Ethylbenzene	ND	0.5		µg/L	1	08/28/2002
m,p-Xylene	ND	1		µg/L	1	08/28/2002
o-Xylene	ND	0.5		µg/L	1	08/28/2002

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above quantitation range
Surr: - Surrogate

12146

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 7/28/02

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

PROJECT LOCATION:

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	SAMPLE PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Rush / 24-48 Hours / 10 Working Days / By Date	

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

iiná bá, Ltd.

Date: *30-Aug-02*

CLIENT: Blagg Engineering
Work Order: 0208020
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020828** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**

Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57449**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.1393	0.5									J
Ethylbenzene	ND	0.5									
m,p-Xylene	.1102	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.2127	0.5									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

iiná bá, Ltd.

Date: *30-Aug-02*

CLIENT: Blagg Engineering
Work Order: 0208020
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0208021-01AMS** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**
Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57450**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	171.6	2.5	200	0.5	85.5%	70	130				
Ethylbenzene	195.5	2.5	200	15	90.2%	70	130				
m,p-Xylene	722.5	5	400	420	75.6%	70	130				
Methyl tert-Butyl Ether	177.3	5	200	0	88.7%	70	130				
o-Xylene	180.3	2.5	200	0	90.2%	70	130				
Toluene	192.7	2.5	200	0	96.4%	70	130				

Sample ID: **0208021-01AMSD** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**
Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	174.5	2.5	200	0.5	87.0%	70	130	171.6	1.7%	15	
Ethylbenzene	195.1	2.5	200	15	90.1%	70	130	195.5	0.2%	15	
m,p-Xylene	717.6	5	400	420	74.4%	70	130	722.5	0.7%	15	
Methyl tert-Butyl Ether	176	5	200	0	88.0%	70	130	177.3	0.8%	15	
o-Xylene	175.3	2.5	200	0	87.6%	70	130	180.3	2.8%	15	
Toluene	196.9	2.5	200	0	98.5%	70	130	192.7	2.2%	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

iiná bá, Ltd.

Date: *30-Aug-02*

CLIENT: Blagg Engineering
Work Order: 0208020
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020828** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**

Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57448**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.56	0.5	40	0.1393	98.6%	80	120				
Ethylbenzene	38.77	0.5	40	0	96.9%	80	120				
m,p-Xylene	77.39	1	80	0.1102	96.6%	80	120				
Methyl tert-Butyl Ether	37.04	1	40	0	92.6%	80	120				
o-Xylene	37.02	0.5	40	0	92.5%	80	120				
Toluene	37.18	0.5	40	0.2127	92.4%	80	120				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

iiná bá, Ltd.

Date: *30-Aug-02*

CLIENT: Blagg Engineering
Work Order: 0208020
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020828** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**
Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.75	0.5	40	0	96.9%	85	115				
Ethylbenzene	38.46	0.5	40	0	96.1%	85	115				
m,p-Xylene	76.89	1	80	0	96.1%	85	115				
Methyl tert-Butyl Ether	38.29	1	40	0	95.7%	85	115				
o-Xylene	36.62	0.5	40	0	91.6%	85	115				
Toluene	36.86	0.5	40	0	92.1%	85	115				
1,4-Difluorobenzene	107.9	0	110	0	98.1%	70	130				
4-Bromochlorobenzene	126	0	110	0	114.6%	70	130				
Fluorobenzene	105.7	0	110	0	96.1%	70	130				

Sample ID: **CCV2_020828** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**
Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.06	0.5	40	0	92.6%	85	115				
Ethylbenzene	37.84	0.5	40	0	94.6%	85	115				
m,p-Xylene	76.89	1	80	0	96.1%	85	115				
Methyl tert-Butyl Ether	37.71	1	40	0	94.3%	85	115				
o-Xylene	36.64	0.5	40	0	91.6%	85	115				
Toluene	36.28	0.5	40	0	90.7%	85	115				
1,4-Difluorobenzene	106.3	0	110	0	96.6%	70	130				
4-Bromochlorobenzene	124.8	0	110	0	113.5%	70	130				
Fluorobenzene	103.8	0	110	0	94.3%	70	130				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0208020
Project: XTO - P.O. Pipkin #3E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020828** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**
Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57446**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.35	0.5	40	0	93.4%	85	115				
Ethylbenzene	39.34	0.5	40	0	98.3%	85	115				
m,p-Xylene	78.68	1	80	0	98.3%	85	115				
Methyl tert-Butyl Ether	36.67	1	40	0	91.7%	85	115				
o-Xylene	37.64	0.5	40	0	94.1%	85	115				
Toluene	37.48	0.5	40	0	93.7%	85	115				
1,4-Difluorobenzene	104.8	0	110	0	95.3%	70	130				
4-Bromochlorobenzene	125.6	0	110	0	114.1%	70	130				
Fluorobenzene	102.5	0	110	0	93.2%	70	130				

Sample ID: **CCV4_020828** Batch ID: **GC-1_020828** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **08/28/2002** Prep Date: **08/28/2002**
Client ID: **0208020** Run ID: **GC-1_020828A** SeqNo: **57447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	35.72	0.5	40	0	89.3%	85	115				
Ethylbenzene	37.14	0.5	40	0	92.8%	85	115				
m,p-Xylene	74.08	1	80	0	92.6%	85	115				
Methyl tert-Butyl Ether	37.36	1	40	0	93.4%	85	115				
o-Xylene	35.72	0.5	40	0	89.3%	85	115				
Toluene	35.44	0.5	40	0	88.6%	85	115				
1,4-Difluorobenzene	105.3	0	110	0	95.7%	70	130				
4-Bromochlorobenzene	130.9	0	110	0	119.0%	70	130				
Fluorobenzene	101.8	0	110	0	92.5%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

iina ba, Ltd.

Date: 30-Aug-02

CLIENT: Blagg Engineering
Work Order: 0208020
Project: XTO - P.O. Pipkin #3E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0208015-01A	96.2	113	93.4
0208016-01A	96.7	119	95.9
0208016-02A	96.4	112	94.3
0208016-03A	96.8	115	95.4
0208018-01A	93	113	91
0208018-02A	96.4	117	98.2
0208020-01A	96.5	115	95.2
0208021-01A	95.4	116	94.4
0208021-01AMS	89.2	112	87.6
0208021-01AMSD	89.1	107	86.9
0208022-01A	97	116	95.2
CCV1_020828	98.1	114	96.1
CCV2_020828	96.6	113	94.3
CCV3_020828	95.3	114	93.2
CCV4_020828	95.7	119	92.5
LCS_020828	95.5	114	96.7
[illegible]_020828	97.4	114	96

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC.

CHAIN-OF-CUSTODY # : 12150

LOCATION : P.O. PIPKIN # 3E

LABORATORY (S) USED : ON - SITE TECH.

Date : December 9, 2002

SAMPLER : N J V

Filename : 12-09-02.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	101.77		DRY	33.00	-	-	-	-	-
2	101.64	75.93	25.71	33.00	-	-	-	-	-
3			23.12	29.89	1420	7.97	4,400	3.25	-
4	101.02	76.10	24.92	30.00	-	-	-	-	-
5	101.01	76.39	24.62	30.00	-	-	-	-	-

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 ".

Excellent recovery in MW # 3 . Collected BTEX samples from MW # 3 only . MW # 1 potentially tampered with . MW # 3 top of casing cut off ; probably during installation of pump jack at well head . Cut off an additional 0.61 ft. from MW # 3 after witnessing casing damage near its top .

612 E. Murray Drive
Farmington, NM 87401

Off: (505) 327-1072

iiná bá

P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

Date: *18-Dec-02*

CLIENT:	Blagg Engineering	**Client Sample Info:**	XTO - P.O. Pipkin #3E
Work Order:	0212008	**Client Sample ID:**	MW #3
Project:	XTO - P.O. Pipkin #3E	**Collection Date:**	12/9/2002 2:20:00 PM
Lab ID:	0212008-001A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **JEM**
Benzene	ND	0.5		µg/L	1	12/11/2002
Ethylbenzene	ND	0.5		µg/L	1	12/11/2002
m,p-Xylene	ND	1.0		µg/L	1	12/11/2002
o-Xylene	ND	0.5		µg/L	1	12/11/2002
Toluene	ND	0.5		µg/L	1	12/11/2002

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted precision limits

E - Value above Upper Quantitation Limit - UQL

12150

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 12/9/02

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name Nelson Velez	Title
Company Blagg Engineering Inc.	Dept.	Company SPC	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. 632-1199	Telefax No. 324-9905

PROJECT LOCATION:

SAMPLER'S SIGNATURE: Nelson Velez

SAMPLE IDENTIFICATION	SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	BTEX (8021)	LAB ID
	12/9/02	1420	water	HCl	2	1	0212008-001A

ANALYSIS REQUESTED

Relinquished by: Nelson Velez	Date/Time 12/9/02	Received by: O Moore	Date/Time 12/10/02 1431
Relinquished by:	Date/Time 1451	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Rush | 24-48 Hours | 10 Working Days | By Date

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

CLIENT: Blagg Engineering
Work Order: 0212008
Project: XTO - P.O. Pipkin #3E

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID 0212007-001AMSD	SampType: MSD	TestCode: BTEX_W	Units: µg/L	Prep Date: 12/11/2002	Run ID: GC-1_021211A
Client ID: ZZZZZ	Batch ID: R4145	TestNo: SW8021B		Analysis Date: 12/11/2002	SeqNo: 60791

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	174.6	2.5	200	1.288	86.6	80	106	179.7	2.90	5	
Ethylbenzene	204.4	2.5	200	28.81	87.8	82	108	210.4	2.90	5	
m,p-Xylene	1375	5.0	400	1090	71.2	80	113	1414	2.80	5	S
o-Xylene	181.3	2.5	200	3.442	89	82	105	184.2	1.56	4	
Toluene	196.6	2.5	200	8.288	94.2	83	105	204.9	4.13	5	

Sample ID CCV1_021211	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 12/11/2002	Run ID: GC-1_021211A
Client ID: ZZZZZ	Batch ID: R4145	TestNo: SW8021B		Analysis Date: 12/11/2002	SeqNo: 60785

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.25	0.50	20	0	96.2	85	115	0	0		
Ethylbenzene	19.48	0.50	20	0	97.4	85	115	0	0		
m,p-Xylene	38.72	1.0	40	0	96.8	85	115	0	0		
o-Xylene	19.26	0.50	20	0	96.3	85	115	0	0		
Toluene	19.27	0.50	20	0	96.4	85	115	0	0		

Sample ID CCV2_021211	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 12/11/2002	Run ID: GC-1_021211A
Client ID: ZZZZZ	Batch ID: R4145	TestNo: SW8021B		Analysis Date: 12/11/2002	SeqNo: 60786

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.14	0.50	40	0	95.3	85	115	0	0		
Ethylbenzene	38.97	0.50	40	0	97.4	85	115	0	0		
m,p-Xylene	77.45	1.0	80	0	96.8	85	115	0	0		
o-Xylene	38.31	0.50	40	0	95.8	85	115	0	0		
Toluene	38.35	0.50	40	0	95.9	85	115	0	0		

Sample ID CCV3_021211	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 12/11/2002	Run ID: GC-1_021211A
Client ID: ZZZZZ	Batch ID: R4145	TestNo: SW8021B		Analysis Date: 12/11/2002	SeqNo: 60787

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.39	0.50	20	0	96.9	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0212008
Project: XTO - P.O. Pipkin #3E

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID	CCV3_021211	SampType:	CCV	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	12/11/2002	Run ID:	GC-1_021211A
Client ID:	ZZZZZ	Batch ID:	R4145	TestNo:	SW8021B			Analysis Date:	12/11/2002	SeqNo:	60787

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	19.64	0.50	20	0	98.2	85	115	0	0		
m,p-Xylene	37.63	1.0	40	0	94.1	85	115	0	0		
o-Xylene	19.16	0.50	20	0	95.8	85	115	0	0		
Toluene	19.23	0.50	20	0	96.2	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

iina ba, Ltd.

Date: *18-Dec-02*

CLIENT: Blagg Engineering
Work Order: 0212008
Project: XTO - P.O. Pipkin #3E

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID	MB_021211	SampType:	MBLK	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	12/11/2002	Run ID:	GC-1_021211A
Client ID:	ZZZZZ	Batch ID:	R4145	TestNo:	SW8021B			Analysis Date:	12/11/2002	SeqNo:	60789

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.1207	0.50									J
Ethylbenzene	0.1336	0.50									J
m,p-Xylene	0.522	1.0									J
o-Xylene	0.1323	0.50									J
Toluene	0.1878	0.50									J

Sample ID	LCS_021211	SampType:	LCS	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	12/11/2002	Run ID:	GC-1_021211A
Client ID:	ZZZZZ	Batch ID:	R4145	TestNo:	SW8021B			Analysis Date:	12/11/2002	SeqNo:	60788

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.12	0.50	40	0.1207	92.5	88	110	0	0		
Ethylbenzene	37.6	0.50	40	0.1336	93.7	90	110	0	0		
m,p-Xylene	74.94	1.0	80	0.522	93	86	110	0	0		
o-Xylene	37.35	0.50	40	0.1323	93	89	110	0	0		
Toluene	37.18	0.50	40	0.1878	92.5	87	110	0	0		

Sample ID	0212007-001AMS	SampType:	MS	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	12/11/2002	Run ID:	GC-1_021211A
Client ID:	ZZZZZ	Batch ID:	R4145	TestNo:	SW8021B			Analysis Date:	12/11/2002	SeqNo:	60790

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	179.7	2.5	200	1.288	89.2	84	106	0	0		
Ethylbenzene	210.4	2.5	200	28.81	90.8	84	111	0	0		
m,p-Xylene	1414	5.0	400	1090	81	80	118	0	0		
o-Xylene	184.2	2.5	200	3.442	90.4	83	108	0	0		
Toluene	204.9	2.5	200	8.288	98.3	86	105	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accep[illegible]covery limits
B - Analyte detected in the associated Method Blank

iina ba, Ltd.

Date: 18-Dec-02

CLIENT: Blagg Engineering
ork Order: 0212008
Project: XTO - P.O. Pipkin #3E
Test No: SW8021B **Matrix:** W

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	14FBZ	4BCBZ	FLBZ
0212007-001AMS	98.5	111	94.7
0212007-001AMSD	97.7	109	95.3
0212008-001A	101	112	98.1
CCV1_021211	100	112	97.2
CCV2_021211	101	112	97.4
CCV3_021211	102	110	98.5
LCS_021211	99.9	113	96.0
MB_021211	100	116	96.8

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

iina ba, Ltd.

Sample Receipt Checklist

Client Name: **BLA1002** Date and Time Received: **12/10/2002**

Work Order Number: **0212008** Received by: JEM

Checklist completed by: Q. Moore 12/10/02 (Signature / Date) Reviewed by: JL 12/11/02 (Initials / Date)

Matrix: Carrier name: Courier

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

Adjusted? NO Checked by: JEM

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC. **CHAIN-OF-CUSTODY # :** 12161

LOCATION : P.O. PIPKIN # 3E **LABORATORY (S) USED :** ON - SITE TECH.

Date : March 14, 2003 **SAMPLER :** N J V

Filename : 03-14-03.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)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	75.89	25.73	33.00	-	-	-	-	-
3	101.44	75.76	25.68	32.59	1000	8.06	3,700	3.50	-
4	101.01	76.08	24.93	30.00	-	-	-	-	-
5	101.01	76.34	24.67	30.00	-	-	-	-	-

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 ".

Excellent recovery in MW # 3 . Collected BTEX samples from MW # 3 only .

MW # 3 - TOC ~ 2.15 ft. AGS .

612 E. Murray Drive
Farmington, NM 87401

Off: (505) 327-1072

iiná bá

P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

ANALYTICAL REPORT

Date: *26-Mar-03*

CLIENT:	Blagg Engineering	**Client Sample Info:**	XTO - P.O. Pipkin #3E
Work Order:	0303015	**Client Sample ID:**	MW #3
Project:	XTO - P.O. Pipkin #3E	**Collection Date:**	3/14/2003 10:00:00 AM
Lab ID:	0303015-001A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **JEM**
Benzene	0.9	0.5		µg/L	1	3/21/2003
Ethylbenzene	ND	0.5		µg/L	1	3/21/2003
m,p-Xylene	ND	1.0		µg/L	1	3/21/2003
o-Xylene	ND	0.5		µg/L	1	3/21/2003
Toluene	ND	0.5		µg/L	1	3/21/2003

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

ON SITE TECHNOLOGIES, LTD.
612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

CHAIN OF CUSTODY RECORD

12161

Date: 3/14/03

Page: 1 of 1

Purchase Order No.:	Project No.
SEND INVOICE TO — Name	JEFF GLAGG
Company	GLAGG ENGR.
Dept.	
Address	
City, State, Zip	
REPORT RESULTS TO — Name	NELSON VELEZ
Title	
Company	SAME
Mailing Address	
City, State, Zip	
Telephone No.	632-1199
Telefax No.	632-7903

PROJECT LOCATION: P.O. PIPKIN #3E

SAMPLER'S SIGNATURE: Nelson V.

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	PRES.	Number of Containers	BTEX (8021B)									LAB ID
MW #3	3/14/03	1000	WATER	HCl & cool	2	✓									0303015-001A

Relinquished by: Nelson V.	Date/Time 3/17/03 0827	Received by: D. Moore	Date/Time 3/17/03 8:26
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:		Rush / 24-48 Hours / 10 Working Days / By Date	

Authorized by: ______________ Date ______________
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

iii[redacted]á, Ltd.

Date: 26-Mar-03

CLIENT: Blagg Engineering
Work Order: 0303015
Project: XTO - P.O. Pipkin #3E

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID	MB_030321	SampType:	MBLK	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	3/21/2003	Run ID:	GC-1_030321A
Client ID:	ZZZZZ	Batch ID:	R4310	TestNo:	SW8021B			Analysis Date:	3/21/2003	SeqNo:	62899

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
o-Xylene	ND	0.50									
Toluene	0.1007	0.50									J

Sample ID	LCS_030321	SampType:	LCS	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	3/21/2003	Run ID:	GC-1_030321A
Client ID:	ZZZZZ	Batch ID:	R4310	TestNo:	SW8021B			Analysis Date:	3/21/2003	SeqNo:	62898

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	36.76	0.50	40	0	91.9	88	110	0	0		
Ethylbenzene	36.81	0.50	40	0	92	90	110	0	0		
m,p-Xylene	75.35	1.0	80	0	94.2	86	110	0	0		
o-Xylene	38.11	0.50	40	0	95.3	89	110	0	0		
Toluene	37.29	0.50	40	0.1007	93	87	110	0	0		

Sample ID	0303010-009AMS	SampType:	MS	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	3/21/2003	Run ID:	GC-1_030321A
Client ID:	ZZZZZ	Batch ID:	R4310	TestNo:	SW8021B			Analysis Date:	3/21/2003	SeqNo:	62900

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	779.1	10	800	5.968	96.6	84	106	0	0		
Ethylbenzene	866.5	10	800	94.07	96.6	84	111	0	0		
m,p-Xylene	1583	20	1600	7.744	98.5	80	118	0	0		
o-Xylene	794.7	10	800	2.008	99.1	83	108	0	0		
Toluene	787.5	10	800	4.582	97.9	86	105	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0303015
Project: XTO - P.O. Pipkin #3E

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID 0303010-009AMSD	SampType: MSD	TestCode: BTEX_W	Units: µg/L	Prep Date: 3/21/2003	Run ID: GC-1_030321A
Client ID: ZZZZZ	Batch ID: R4310	TestNo: SW8021B		Analysis Date: 3/21/2003	SeqNo: 62901

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	744.8	10	800	5.968	92.4	80	106	779.1	4.50	5	
Ethylbenzene	829.3	10	800	94.07	91.9	82	108	866.5	4.38	5	
m,p-Xylene	1516	20	1600	7.744	94.3	80	113	1583	4.33	5	
o-Xylene	764.1	10	800	2.008	95.3	82	105	794.7	3.93	4	
Toluene	754.1	10	800	4.582	93.7	83	105	787.5	4.34	5	

Sample ID CCV1_030321	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 3/21/2003	Run ID: GC-1_030321A
Client ID: ZZZZZ	Batch ID: R4310	TestNo: SW8021B		Analysis Date: 3/21/2003	SeqNo: 62893

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.91	0.50	20	0	94.6	85	115	0	0		
Ethylbenzene	18.95	0.50	20	0	94.8	85	115	0	0		
m,p-Xylene	38.31	1.0	40	0	95.8	85	115	0	0		
o-Xylene	19.52	0.50	20	0	97.6	85	115	0	0		
Toluene	19.06	0.50	20	0	95.3	85	115	0	0		

Sample ID CCV2_030321	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 3/21/2003	Run ID: GC-1_030321A
Client ID: ZZZZZ	Batch ID: R4310	TestNo: SW8021B		Analysis Date: 3/21/2003	SeqNo: 62894

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.22	0.50	40	0	95.5	85	115	0	0		
Ethylbenzene	37.92	0.50	40	0	94.8	85	115	0	0		
m,p-Xylene	77.23	1.0	80	0	96.5	85	115	0	0		
o-Xylene	38.93	0.50	40	0	97.3	85	115	0	0		
Toluene	38.43	0.50	40	0	96.1	85	115	0	0		

Sample ID CCV3_030321	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 3/21/2003	Run ID: GC-1_030321A
Client ID: ZZZZZ	Batch ID: R4310	TestNo: SW8021B		Analysis Date: 3/21/2003	SeqNo: 62895

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.14	0.50	20	0	90.7	85	115	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
Work Order: 0303015
Project: XTO - P.O. Pipkin #3E

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID	CCV3_030321	SampType:	CCV	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	3/21/2003	Run ID:	GC-1_030321A
Client ID:	ZZZZZ	Batch ID:	R4310	TestNo:	SW8021B			Analysis Date:	3/21/2003	SeqNo:	62895

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	18.26	0.50	20	0	91.3	85	115	0	0		
m,p-Xylene	36.67	1.0	40	0	91.7	85	115	0	0		
o-Xylene	18.66	0.50	20	0	93.3	85	115	0	0		
Toluene	18.17	0.50	20	0	90.9	85	115	0	0		

Sample ID	CCV4_030321	SampType:	CCV	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	3/21/2003	Run ID:	GC-1_030321A
Client ID:	ZZZZZ	Batch ID:	R4310	TestNo:	SW8021B			Analysis Date:	3/21/2003	SeqNo:	62896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.6	0.50	20	0	98	85	115	0	0		
Ethylbenzene	19.9	0.50	20	0	99.5	85	115	0	0		
m,p-Xylene	40.6	1.0	40	0	102	85	115	0	0		
o-Xylene	20.42	0.50	20	0	102	85	115	0	0		
Toluene	19.83	0.50	20	0	99.1	85	115	0	0		

Sample ID	CCV5_030321	SampType:	CCV	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	3/21/2003	Run ID:	GC-1_030321A
Client ID:	ZZZZZ	Batch ID:	R4310	TestNo:	SW8021B			Analysis Date:	3/21/2003	SeqNo:	62897

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.19	0.50	20	0	96	85	115	0	0		
Ethylbenzene	19.86	0.50	20	0	99.3	85	115	0	0		
m,p-Xylene	39.42	1.0	40	0	98.5	85	115	0	0		
o-Xylene	19.78	0.50	20	0	98.9	85	115	0	0		
Toluene	19.29	0.50	20	0	96.5	85	115	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

iiná bá, Ltd.

Date: 26-Mar-03

CLIENT: Blagg Engineering
Work Order: 0303015
Project: XTO - P.O. Pipkin #3E
Test No: SW8021B **Matrix:** W

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	14FBZ	4BCBZ	FLBZ
0303010-009AMS	104	108	105
0303010-009AMSD	105	112	103
0303015-001A	106	106	105
CCV1_030321	106	105	103
CCV2_030321	104	107	104
CCV3_030321	105	116	104
CCV4_030321	106	105	105
CCV5_030321	106	103	103
LCS_030321	106	105	103
MB_030321	105	103	104

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	70-130
4BCBZ	=	4-Bromochlorobenzene	70-130
FLBZ	=	Fluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

iiná bá, Ltd.

Sample Receipt Checklist

Client Name: **BLA1002** Date and Time Received: **3/17/2003**

Work Order Number: **0303015** Received by: JEM

Checklist completed by: J Moore (Signature) 3/17/03 (Date) Reviewed by: DL (Initials) 3/17/03 (Date)

Matrix: Carrier name: Nelson Velez

Shipping container/cooler in good condition?	Yes ✔	No	Not Present
Custody seals intact on shippping container/cooler?	Yes	No	Not Present ✔
Custody seals intact on sample bottles?	Yes	No	Not Present ✔
Chain of custody present?	Yes ✔	No	
Chain of custody signed when relinquished and received?	Yes ✔	No	
Chain of custody agrees with sample labels?	Yes ✔	No	
Samples in proper container/bottle?	Yes ✔	No	
Sample containers intact?	Yes ✔	No	
Sufficient sample volume for indicated test?	Yes ✔	No	
All samples received within holding time?	Yes ✔	No	
Container/Temp Blank temperature in compliance?	Yes ✔	No	
Water - VOA vials have zero headspace?	No VOA vials submitted	Yes ✔	No
Water - pH acceptable upon receipt?	Yes ✔	No	

Adjusted? Checked by:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: Date contacted: Person contacted:

Contacted by: Regarding:

Comments:

Corrective Action:

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 23, 2003** **SAMPLER :** N J V

Filename : **06-23-03.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	75.83	25.79	33.00	1125	7.29	2,700	23.1	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	-	-	30.00	-	-	-	-	-
5	101.01	-	-	30.00	-	-	-	-	-

INSTRUMENT CALIBRATIONS =	7.00	2,800
DATE & TIME =	06/27/03	06:45

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .
MW # 3 top of casing removed / destroyed .

MW #	DTW	(prior to purging - in ft.)
2	25.79	

MW #	DTW	(@ time of sampling - in ft.)
2	27.00	

Hall Environmental Analysis Laboratory

Date: *26-Jun-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Lab Order: 0306163
Collection Date: 6/23/2003 11:25:00 AM
Project: P. O. Pipkin #3E
Lab ID: 0306163-01
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	5.2	0.50		µg/L	1	6/25/2003 2:05:28 PM
Toluene	1.5	0.50		µg/L	1	6/25/2003 2:05:28 PM
Ethylbenzene	0.99	0.50		µg/L	1	6/25/2003 2:05:28 PM
Xylenes, Total	1.6	0.50		µg/L	1	6/25/2003 2:05:28 PM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	1	6/25/2003 2:05:28 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345-3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG ENER. / XTO ENERGY

Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: 505-632-1199

Fax #: 505-632-3903

Project Name: P.O. PIPKIN #3E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

Samples Cold? 6° ☒ Yes ☐ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HCl	Preservative	HEAL No.
6/23/03	1125	WATER	MW #2	2-40ml	✓			0306163-1

ANALYSIS REQUEST

(BTEX + ~~MTBE + TMB's~~ (8021B))	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA)	8270 (Semi-VOA)			Air Bubbles or Headspace (Y or N)
✓																

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
6/24/03	0711	Nelson Velez		6/24/03
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	1645

Remarks:

Hall Environmental Analysis Laboratory

Date: *26-Jun-03*

CLIENT: Blagg Engineering
Work Order: 0306163
Project: P. O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R8664** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/25/2003 10:12:55 AM** *Prep Date*

Client ID: Run ID: **PIDFID_030625A** SeqNo: **195818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 4-Bromofluorobenzene	19.8	0	20	0	99.0	74	118	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *26-Jun-03*

CLIENT: Blagg Engineering
Work Order: 0306163
Project: P. O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX Std 100ng** Batch ID: **R8664** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/25/2003 6:25:44 PM** Prep Date

Client ID: Run ID: **PIDFID_030625A** SeqNo: **195854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.44	0.50	20	0	107	81.3	121	0			
Toluene	20.47	0.50	20	0	102	84.9	118	0			
Ethylbenzene	21.07	0.50	20	0	105	53.8	149	0			
Xylenes, Total	63.11	0.50	60	0	105	83.1	122	0			

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **BLAGG** Date and Time Receive **6/24/03**

Work Order Number **0306163** Received by AT

Checklist completed by _____ 6/24/03
Signature Date

Matrix: Carrier name: Greyhound

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

Container/Temp Blank temperature? **6°** *4° C ± 2 Acceptable*

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 26, 2003**

SAMPLER : N J V

Filename : **08-26-03.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	76.13	25.49	33.00	0940	7.04	3,300	20.4	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	-	-	30.00	-	-	-	-	-
5	101.01	-	-	30.00	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	08/25/03	0910		

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .

MW #	DTW	(prior to purging - in ft.)
2	25.49	

MW #	DTW	(@ time of sampling - in ft.)
2	26.40	

Hall Environmental Analysis Laboratory

Date: *05-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW#2
Lab Order: 0308215
Collection Date: 8/26/2003 9:40:00 AM
Project: P. O. Pipkin #3E
Lab ID: 0308215-01
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	160	0.50		µg/L	1	8/30/2003 12:49:14 AM
Toluene	ND	0.50		µg/L	1	8/30/2003 12:49:14 AM
Ethylbenzene	14	0.50		µg/L	1	8/30/2003 12:49:14 AM
Xylenes, Total	140	0.50		µg/L	1	8/30/2003 12:49:14 AM
Surr: 4-Bromofluorobenzene	106	74-118		%REC	1	8/30/2003 12:49:14 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Client: BLAGG ENGR. / XTO ENERGY

Address: P.O. BOX 87
BLOOMFIELD, NM 87413

Phone #: (505) 632-1199

Fax #: (505) 632-3903

Accreditation [illegible]d: NELAC ☐ USACE ☐

Other: ____

Project Name: P.O. PIPKIN #3E

Project #:

Project Manager: NELSON VELEZ

Sampler: NELSON VELEZ

Sample Temperature: 4.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative H_gCl_2	Preservative HNO_3	Preservative	HEAL No. 0308215	BTEX + MTBE + TMB's (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA)	8270 (Semi-VOA)				Air Bubbles or Headspace (Y or N)
8/26/03	0940	WATER	MW #2	2-40ml	✓			1	✓																

Date: 8/27/03 Time: 0645 Relinquished By: (Signature) [signature]

Remarks: [signature] 8/27/03 1714

Date: Time: Relinquished By: (Signature)

Remarks:

Remarks:

Hall Environmental Analysis Laboratory

Date: *05-Sep-03*

CLIENT: Blagg Engineering
Work Order: 0308215
Project: P. O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID: **Reagent Blank 5m** Batch ID: **R9418** Test Code: **SW8021** Units: **µg/L** Analysis Date: **8/29/2003 10:39:46 AM** Prep Date:

Client ID: Run ID: **PIDFID_030829A** SeqNo: **212264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 4-Bromofluorobenzene	19.29	0	20	0	96.5	74	118	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *05-Sep-03*

CLIENT: Blagg Engineering
Work Order: 0308215
Project: P. O. Pipkin #3E

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **BTEX Std 100ng** Batch ID: **R9418** Test Code: **SW8021** Units: **µg/L** Analysis Date: **8/29/2003 9:12:57 PM** Prep Date:
Client ID: Run ID: **PIDFID_030829A** SeqNo: **212317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.73	0.50	20	0	109	81.3	121	0			
Toluene	21.76	0.50	20	0	109	84.9	118	0			
Ethylbenzene	21.52	0.50	20	0	108	53.8	149	0			
Xylenes, Total	65.57	0.50	60	0	109	83.1	122	0			

Sample ID: **BTEX Std 100ng** Batch ID: **R9418** Test Code: **SW8021** Units: **µg/L** Analysis Date: **8/30/2003 3:54:48 AM** Prep Date:
Client ID: Run ID: **PIDFID_030829A** SeqNo: **212320**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.05	0.50	20	0	105	81.3	121	21.73	3.19	27	
Toluene	21.57	0.50	20	0	108	84.9	118	21.76	0.894	19	
Ethylbenzene	19.99	0.50	20	0	99.9	53.8	149	21.52	7.37	10	
Xylenes, Total	62.66	0.50	60	0	104	83.1	122	65.57	4.53	13	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **BLAGG** Date and Time Receive

Work Order Number **0308215** Received by AMG

Checklist completed by A Gonzales 8/27/03
Signature Date

Matrix: Carrier name: Greyhound

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

Container/Temp Blank temperature? **4°** *4° C ± 2 Acceptable*

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 16, 2004**

SAMPLER : N J V

Filename : **06-16-04.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	76.52	25.10	33.00	0920	7.23	3,200	21.6	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	76.74	24.27	30.00	-	-	-	-	-
5	101.01	77.05	23.96	30.00	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/16/04	0750		

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .

MW #	DTW	(prior to purging - in ft.)
2	24.27	

MW #	DTW	(@ time of sampling - in ft.)
2	25.90	

Hall Environmental Analysis Laboratory

Date: *29-Jun-04*

CLIENT: Blagg Engineering
Lab Order: 0406177
Project: P. O. Pipkin #3E
Lab ID: 0406177-01

Client Sample ID: MW #2
Collection Date: 6/16/2004 9:20:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	110	2.5		µg/L	5	6/25/2004 3:01:40 PM
Toluene	ND	2.5		µg/L	5	6/25/2004 3:01:40 PM
Ethylbenzene	12	2.5		µg/L	5	6/25/2004 3:01:40 PM
Xylenes, Total	24	2.5		µg/L	5	6/25/2004 3:01:40 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	5	6/25/2004 3:01:40 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG ENGR. / XTO ENERGY
Address: P.O. BOX 87, BLFD, NM 87413
Phone #: 505-632-1199
Fax #: 505-632-3903

Project Name: P.O. PIPKIN #3E
Project #:
Project Manager: NJV
Sampler: NJV
Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	(BTEX + ~~MTBE + TMB's~~ (8021B)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
6/16/04	0920	WATER	MW #2	2-40ml	✓			0406177-1	✓															

Date: 6/17/04 Time: 0700 Relinquished By: (Signature) Nelson VM
Received By: (Signature) 6/17/04 1721

Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks:

Hall Environmental Analysis Laboratory

Date: *29-Jun-04*

CLIENT: Blagg Engineering
Work Order: 0406177
Project: P. O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R12276** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/25/2004 8:13:54 AM** Prep Date
Client ID: Run ID: **PIDFID_040625A** SeqNo: **282684**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.13	0	20	0	101	74	118	0			

2 / 4

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Blagg Engineering
Work Order: 0406177
Project: P. O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX std 100ng** Batch ID: **R12276** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/25/2004 9:15:51 AM** Prep Date

Client ID: Run ID: **PIDFID_040625A** SeqNo: **282714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.97	0.5	20	0	105	81.3	121	0			
Toluene	20.98	0.5	20	0	105	84.9	118	0			
Ethylbenzene	21.03	0.5	20	0	105	53.8	149	0			
Xylenes, Total	64.11	0.5	60	0	107	83.1	122	0			

3 / 4

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 6/17/2004

Work Order Number 0406177 | Received by AT

Checklist completed by _____ 6/17/04
Signature Date

Matrix | Carrier name Client drop-off

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

Container/Temp Blank temperature? **4°** *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 28, 2005**

SAMPLER : N J V

Filename : **06-28-05.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.)
1	101.77	-	DRY	33.00	-	-	-	-	-
2	101.62	76.18	25.44	33.00	0750	7.12	3,000	18.8	2.00
3	101.44	-	-	30.50	-	-	-	-	-
4	101.01	76.37	24.64	30.00	-	-	-	-	-
5	101.01	76.66	24.35	30.00	-	-	-	-	-
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/28/05	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:

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

Comments or note well diameter if not standard 2 ".

Good / fair recovery in MW # 2 . Bailed MW # 2 to total depth , then allowed recovery . Collected BTEX sample from MW # 2 only .

Hall Environmental Analysis Laboratory

Date: *05-Jul-05*

CLIENT: Blagg Engineering
Client Sample ID: MW #2
Lab Order: 0506288
Collection Date: 6/28/2005 7:50:00 AM
Project: P. O. Pipkin #3E
Lab ID: 0506288-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	200	0.50		µg/L	1	6/30/2005 6:35:49 PM
Toluene	2.9	0.50		µg/L	1	6/30/2005 6:35:49 PM
Ethylbenzene	33	0.50		µg/L	1	6/30/2005 6:35:49 PM
Xylenes, Total	73	0.50		µg/L	1	6/30/2005 6:35:49 PM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	1	6/30/2005 6:35:49 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ [illegible] ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: BLAGG ENGR. / XTO ENERGY

Project Name: P.O. PIPKIN #3E

Address: P.O. BOX 87
BLFD., NM 87413

Project #:

Project Manager: NV

Phone #: (505) 632-1199

Sampler: NV

Fax #: (505) 632-3903

Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	(BTEX + MTBE + TMB's (8021B))	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	826DB (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
6/23/05	0750	WATER	MW #2	2-40ml	✓		0506288-1	✓																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
6/29/05	0700	[signature]	[signature] 6/29/05 1753
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

Hall Environmental Analysis Laboratory

Date: *05-Jul-05*

CLIENT: Blagg Engineering
Work Order: 0506288
Project: P. O. Pipkin #3E

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15863** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/30/2005 10:30:22 AM** Prep Date

Client ID: Run ID: **PIDFID_050630A** SeqNo: **376231**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	17.44	0	20	0	87.2	83.3	121	0			

2 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *05-Jul-05*

CLIENT: Blagg Engineering
Work Order: 0506288
Project: P. O. Pipkin #3E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX LCS 100ng** Batch ID: **R15863** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/30/2005 12:03:37 PM** Prep Date

Client ID: Run ID: **PIDFID_050630A** SeqNo: **376239**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.58	0.5	20	0	92.9	88.7	114	0			
Toluene	18.93	0.5	20	0	94.6	89.3	112	0			
Ethylbenzene	18.79	0.5	20	0	93.9	88.6	113	0			
Xylenes, Total	57.41	0.5	60	0	95.7	89.4	112	0			

3 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 6/29/2005

Work Order Number 0506288 | Received by AT

Checklist completed by [signature] 6/29/05
Signature | Date

Matrix | Carrier name Greyhound

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

Container/Temp Blank temperature? 4° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CLIENT: AMOCO

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

LOCATION NO: 80076
C.O.C. NO: _____

FIELD REPORT: PIT CLOSURE VERIFICATION

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

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

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

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 120' FEET SW FROM WELLHEAD.
DEPTH TO GROUNDWATER: 25't NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM

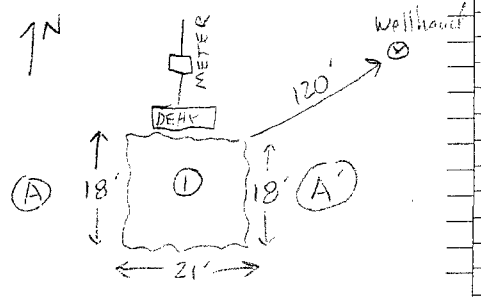
SOIL AND EXCAVATION DESCRIPTION:
SANDY SOIL. PIT WALLS Vertical. BLACK Contaminated Soil EVIDENT ON BASE & N wall against Dehydrator unit. Could not excavate without losing Dehy unit.
Sample ① collected with TRACKHOE
- CONDITIONAL CLOSURE - PIT REPORTED WILL HAVE LINED TANK INSTALLED

FIELD 418.1 CALCULATIONS

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

SCALE
0 FT

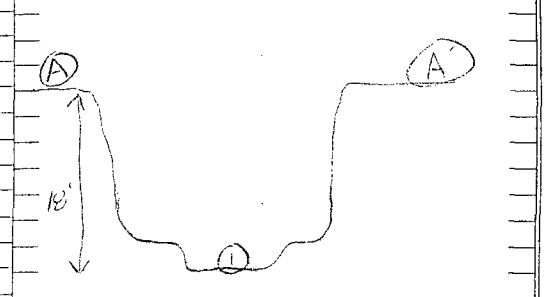
PIT PERIMETER



OVM RESULTS

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

PIT PROFILE



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

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

BORE / TEST HOLE REPORT

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

BORING #.....	BH - 1A
MW #.....	NA
PAGE #.....	1
DATE STARTED	9/13/99
DATE FINISHED	9/13/99
OPERATOR.....	REP
PREPARED BY	NJV

DEPTH FEET	INTERVAL	LITHOLOGY INTERVAL	OVM READINGS (ppm)	FIELD CLASSIFICATION AND REMARKS
				GROUND SURFACE
1–4				MODERATE YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.0 - 18.0 FT. INTERVAL).
5–9				
10–14				
15–18				
19–20			934	DARK GRAY TO BLACK SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG HYDROCARBON ODOR DETECTED (18.0 - 20.0 FT. INTERVAL). LAB SAMPLE 1A @ 20 ft.; TPH = 678 ppm, BENZENE = 1.5 ppm, TOTAL BTEX = 51.18 ppm collected 9/13/99 @ time - 1115.
21–31				

NOTES: - SAND.

- SAND (HYDROCARBON IMPACTED).

OVM - Organic vapor meter or photo ionization detector (PID).

ppm - Parts per million or milligram per kilogram (mg/Kg).

TPH - Total petroleum hydrocarbons - US EPA method 8015B modified.

BTEX - Benzene, toluene, ethylbenzene, & total zylenes.

DRAWING:	PIPKIN-3E-DEHY.SKF	DATE:	9/13/99	DWN BY:	NJV

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	1A @ 20'	Date Reported:	09-14-99
Laboratory Number:	G061	Date Sampled:	09-13-99
Chain of Custody No:	6710	Date Received:	09-13-99
Sample Matrix:	Soil	Date Extracted:	09-14-99
Preservative:	Cool	Date Analyzed:	09-14-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**368**	**0.2**
Diesel Range (C10 - C28)	**310**	**0.1**
Total Petroleum Hydrocarbons	**678**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Pipkin P. O. #3E Dehydrator Pit.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	1A @ 20'	Date Reported:	09-14-99
Laboratory Number:	G061	Date Sampled:	09-13-99
Chain of Custody:	6710	Date Received:	09-13-99
Sample Matrix:	Soil	Date Analyzed:	09-14-99
Preservative:	Cool	Date Extracted:	09-14-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**1,500**	**8.8**
Toluene	**803**	**8.4**
Ethylbenzene	**7,110**	**7.6**
p,m-Xylene	**32,040**	**10.8**
o-Xylene	**9,730**	**5.2**
Total BTEX	**51,180**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**100 %**
	Bromofluorobenzene	**100 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Pipkin P. O. #3E Dehydrator Pit.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865