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REPORTS

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Oil Conservation Division
Environmental Bureau

XTO ENERGY INC.

ANNUAL GROUNDWATER REMEDIATION REPORT

2005

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

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

JANUARY 2006

PREPARED BY:
BLAGG ENGINEERING, INC.

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

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

Pit Closure Date: 2/17/94

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

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

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

Historical Information:

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

General Site History:

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

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

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

Groundwater Monitor Well Sampling Procedures:

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

Water Quality and Gradient Information:

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

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

Summary:

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

TABLE 1

Summary Analytical Test Results for 2002 Remediation

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

TABLE 1 (continued)

Summary Analytical Test Results for 2002 Remediation

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

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

TABLE 2

Summary Soil Analytical Test Results for 2002 Remediation

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

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

TABLE 3

Summary Groundwater PAH/General Chemistry for 2002 Remediation

DATE	TIME	SAMPLE ID	PAH (ppb)	DATE	TIME	SAMPLE ID	pH	TDS (mg/L)	CHLORIDE (mg/L)	SULFATE (mg/L)	NITRATE (mg/L)	FLUORIDE (mg/L)
[illegible]0/02	1157	TH3 @ GW (5.5')	72.0	6/14/02	1330	C-EX @ GW (5.5')	7.76	2,960	48.0	1,700	1.9	1.51
6/14/02	0900	N-EX @ GW (5')	60.0									
6/17/02	1525	D.T.H. @ GW (8')	6.0									

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

TABLE 4

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

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

REVISED DATE: AUGUST 28, 2000

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

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

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

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

TABLE 5

GENERAL WATER QUALITY

CROSS TIMBERS OIL COMPANY

STATE GC BS # 1

SAMPLE DATE : May 13 , 1999

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

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

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

TABLE 6

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

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

REVISED DATE: JANUARY 19, 2006

FILENAME: (STAT3Q04.WK4) NJV

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

TABLE 6 (continued)

XTO ENERGY INC. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

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

REVISED DATE: JANUARY 19, 2006

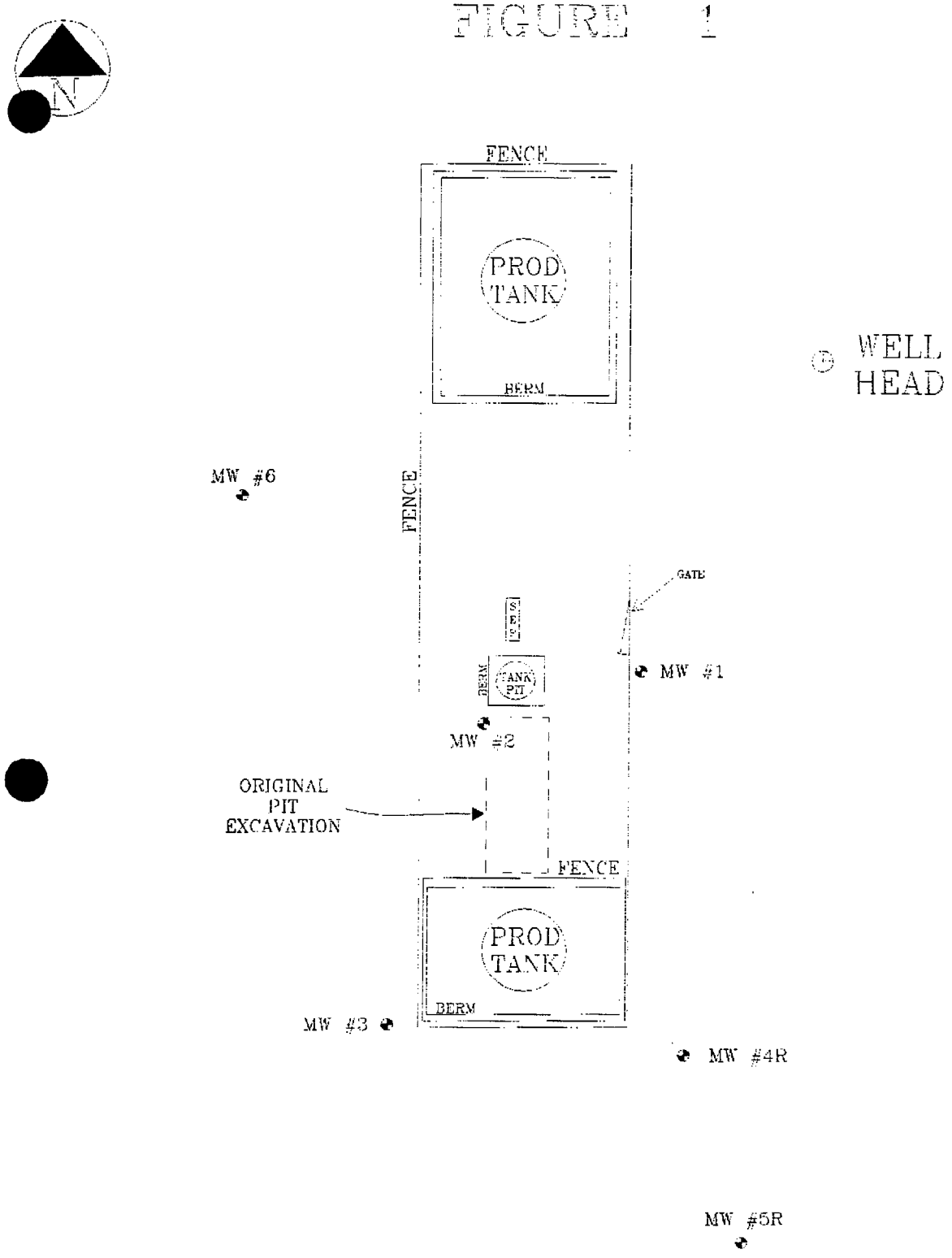
FILENAME: (STAT3Q04.WK4) NJV

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

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

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

FIGURE 1



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

ONE INCH = 50 FEET

0 50 100 FT.

AMOCO PRODUCTION COMPANY

STATE GC BS 1

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

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632 1199

PROJECT: MW INSTALL

DRAWN BY: MJV

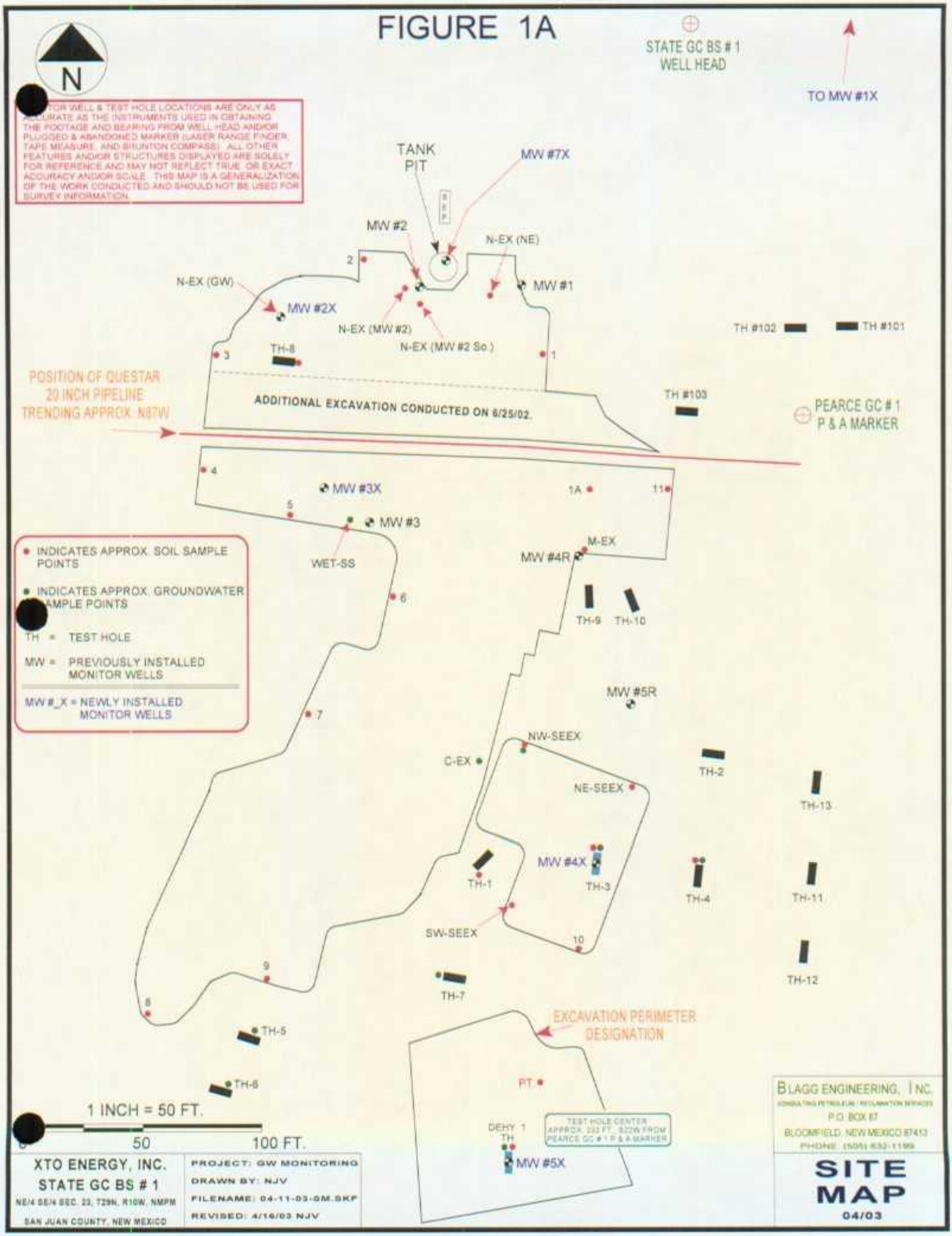
FILENAME: 08-PS-SM.MCD

REVISED: 4/04/01 MJV

SITE MAP

08/00

FIGURE 1A



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

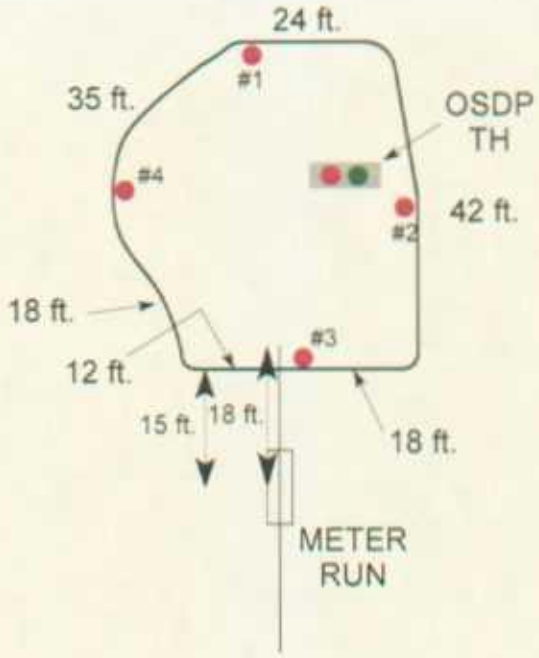
PROJECT: GW MONITORING
DRAWN BY: NJV
FILENAME: 04-11-03-GM.SKF
REVISED: 4/16/03 NJV

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

SITE MAP
04/03

FIGURE 1B

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



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

STATE GC BS # 1
WELL HEAD

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

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

1 INCH = 25 FT.

0 25 50 FT.

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

TH = TEST HOLE

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

XTO ENERGY, INC.

STATE GC BS # 1

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

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: REMEDIAL ACTION

DRAWN BY: NJV

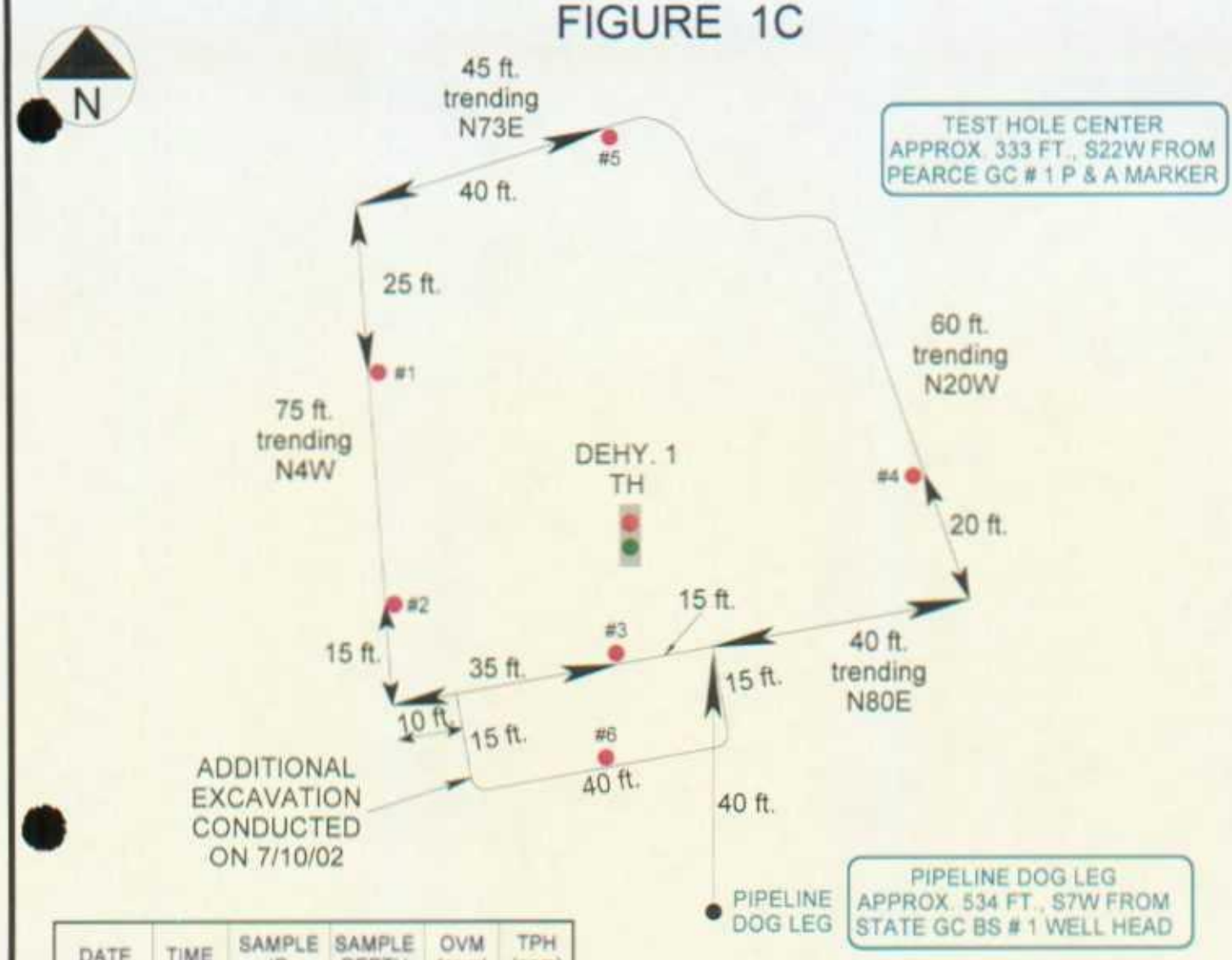
FILENAME: 0SDP-SM.SKF

DRAWN: 7/23/02 NJV

ON SITE DEHYDRATOR PIT EXCAVATION SITE MAP

07/02

FIGURE 1C



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

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

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

TH = TEST HOLE

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

1 INCH = 25 FT.

0 25 50 FT.

XTO ENERGY, INC.

STATE GC BS # 1

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

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: REMEDIAL ACTION

DRAWN BY: NJV

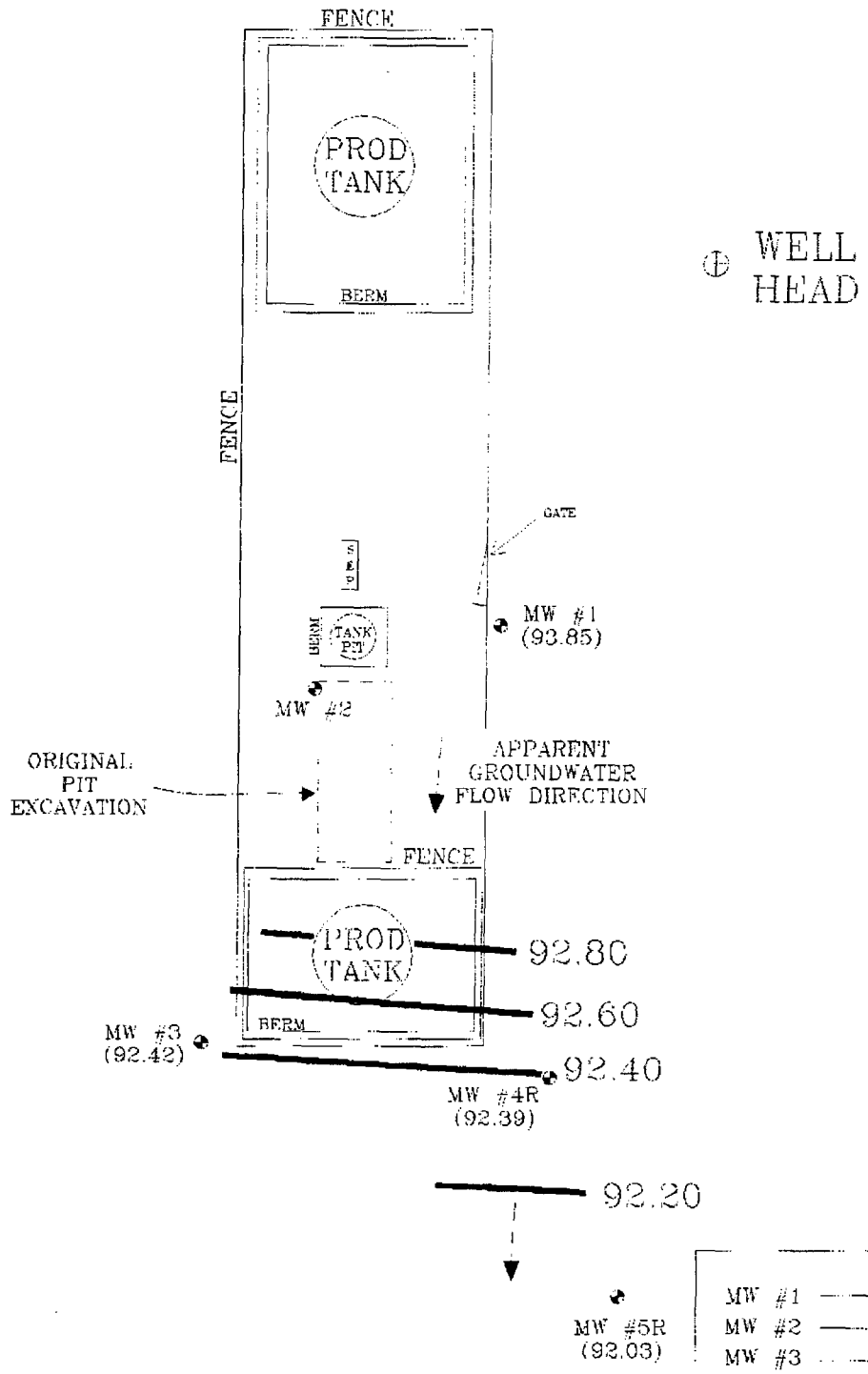
FILENAME: EPNG-DP-SM.SKF

DRAWN: 7/23/02 NJV

EPNG DEHYDRATOR PIT EXCAVATION SITE MAP

07/02

FIGURE 2
(2nd 1/4, 2000)



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.

AMOCO PRODUCTION COMPANY

STATE GC BS 1

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

SAN JUAN COUNTY, NEW MEXICO

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

PROJECT: MW Sampling

DRAWN BY: NJV

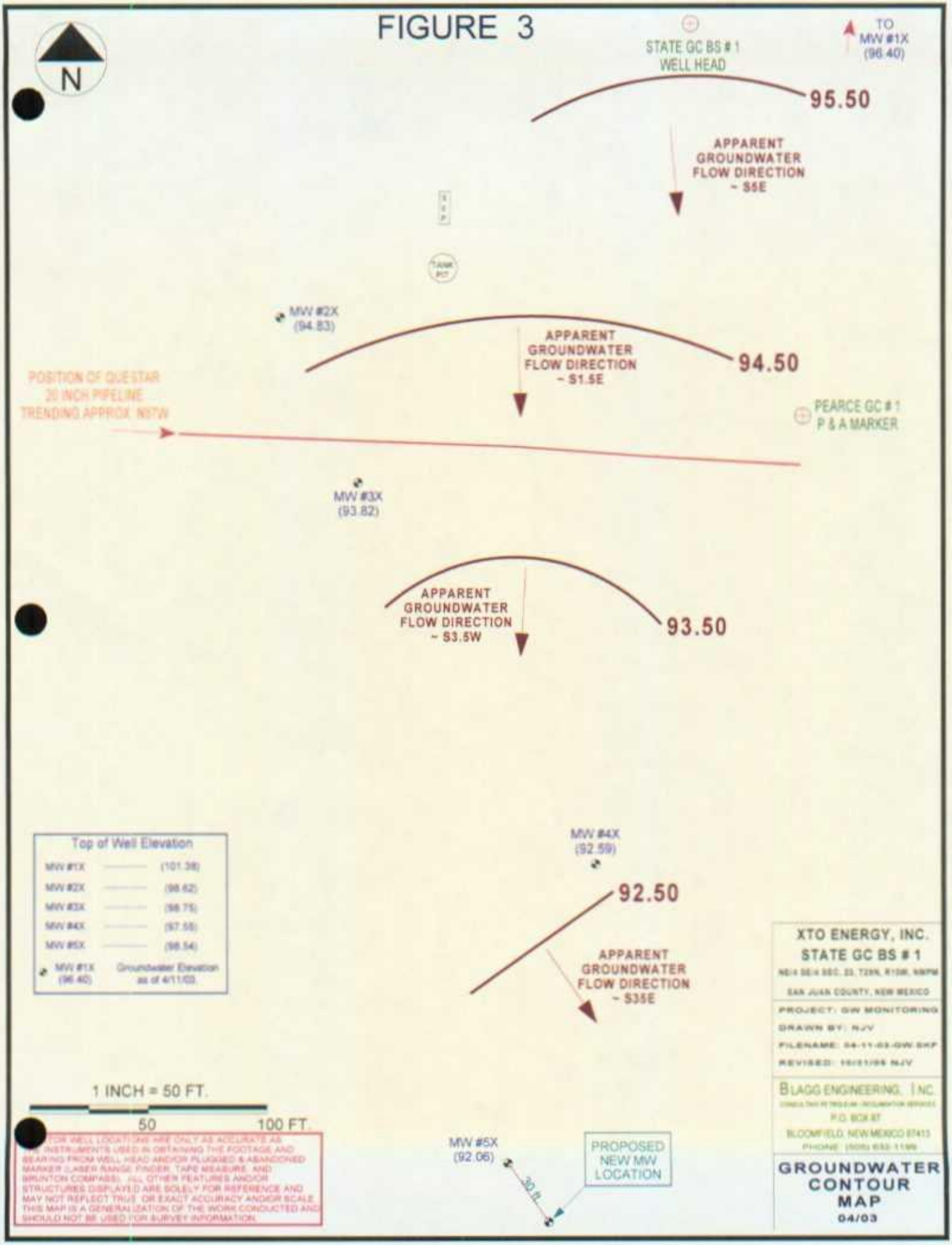
FILENAME: 06-29-GW.SKD

REVISED: 4/4/01 NJV

GROUNDWATER GRADIENT MAP

06/00

FIGURE 3



Top of Well Elevation	
MW #1X	(101.38)
MW #2X	(98.62)
MW #3X	(98.75)
MW #4X	(97.55)
MW #5X	(98.54)
MW #1X (96.40)	Groundwater Elevation as of 4/11/03

1 INCH = 50 FT.

50 100 FT.

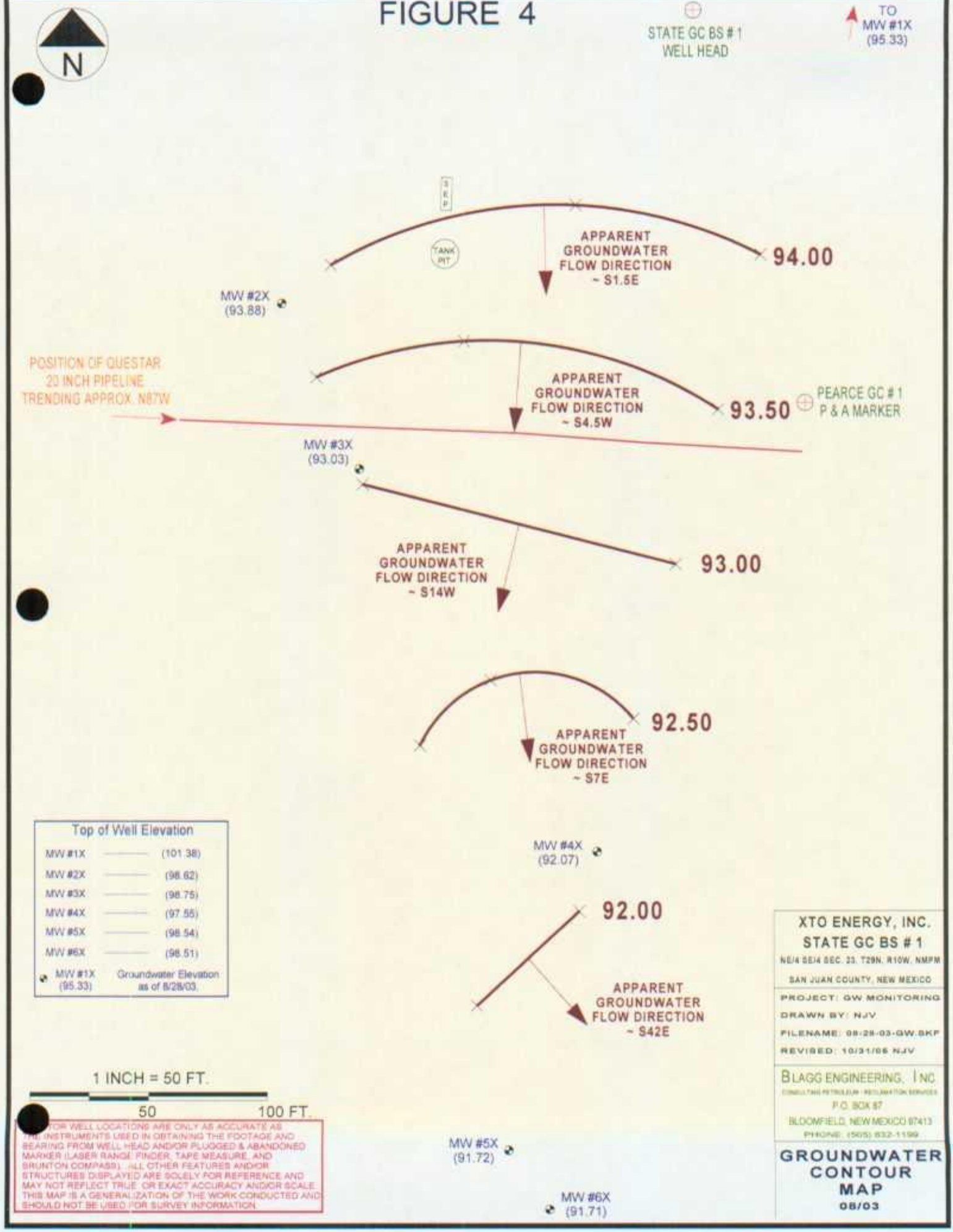
WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE,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

XTO ENERGY, INC.
STATE GC BS # 1
NE/4 SE/4 SEC. 33, T29N, R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO
PROJECT: GW MONITORING
DRAWN BY: NJV
FILENAME: 04-11-03-GW.SKF
REVISED: 10/31/05 NJV

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

GROUNDWATER CONTOUR MAP
04/03

FIGURE 4



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

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

1 INCH = 50 FT.

50 100 FT.

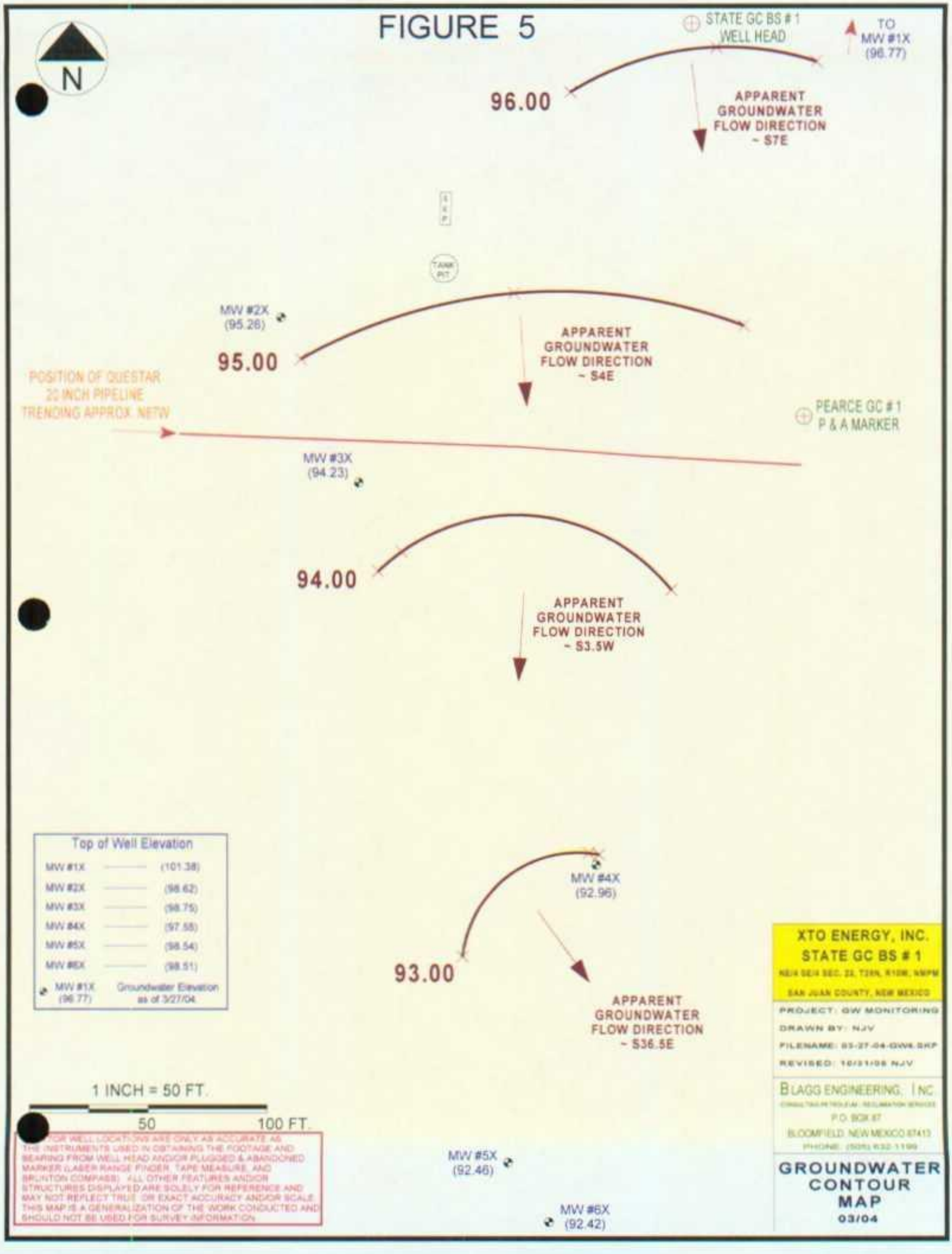
FOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE,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

XTO ENERGY, INC.
STATE GC BS # 1
NE/4 SE/4 SEC. 23, T29N, R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO
PROJECT: GW MONITORING
DRAWN BY: NJV
FILENAME: 08-28-03-GW.SKF
REVISED: 10/31/05 NJV

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

GROUNDWATER CONTOUR MAP
08/03

FIGURE 5


N
STATE GC BS # 1
WELL HEAD
TO
MW #1X
(96.77)
96.00
APPARENT
GROUNDWATER
FLOW DIRECTION
~ S7E
T
A
N
K
TANK
PIT
MW #2X
(95.26)
95.00
APPARENT
GROUNDWATER
FLOW DIRECTION
~ S4E
POSITION OF QUESTAR
22 INCH PIPELINE
TRENDING APPROX. NE/W
PEARCE GC # 1
P & A MARKER
MW #3X
(94.23)
94.00
APPARENT
GROUNDWATER
FLOW DIRECTION
~ S3.5W
Top of Well Elevation
MW #1X (101.38)
MW #2X (98.62)
MW #3X (98.75)
MW #4X (97.55)
MW #5X (98.54)
MW #6X (98.51)
MW #1X (96.77) Groundwater Elevation as of 3/27/04
MW #4X
(92.96)
93.00
APPARENT
GROUNDWATER
FLOW DIRECTION
~ S36.5E
1 INCH = 50 FT.
50
100 FT.
FOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM WELL HEAD AND/OR PLUGGED & ABANDONED MARKER (LASER RANGE FINDER, TAPE MEASURE, AND BRUNTON COMPASS). ALL OTHER FEATURES AND/OR STRUCTURES DISPLAYED ARE SOLELY FOR REFERENCE AND MAY NOT REFLECT TRUE OR EXACT ACCURACY AND/OR SCALE. THIS MAP IS A GENERALIZATION OF THE WORK CONDUCTED AND SHOULD NOT BE USED FOR SURVEY INFORMATION.
MW #5X
(92.46)
MW #6X
(92.42)
XTO ENERGY, INC.
STATE GC BS # 1
NE/4 SE/4 SEC. 22, T29N, R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO
PROJECT: GW MONITORING
DRAWN BY: NJV
FILENAME: 03-27-04-GW6.SKP
REVISED: 10/31/05 NJV
BLAGG ENGINEERING, INC.
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199
GROUNDWATER
CONTOUR
MAP
03/04

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 10608
7025

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

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

Date : June 29, 2000

SAMPLER : N J V

Filename : 06-29-00.WK4

PROJECT MANAGER : N J V

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

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

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

Ideally a minimum of three (3) wellbore volumes:

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

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

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

Comments or note well diameter if not standard 2 ".

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

Collected TDS sample from MW # 3 only.

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 7482

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

LABORATORY (S) USED : ENVIROTECH, INC.

Date : August 25, 2000

SAMPLER : N J V

Filename : 08-25-00.WK4

PROJECT MANAGER : N J V

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

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

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

Ideally a minimum of three (3) wellbore volumes:

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

2 bails per foot - small teflon bailer.

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

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

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

Comments or note well diameter if not standard 2 ".

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

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY, INC.

CHAIN-OF-CUSTODY # : 12164

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

LABORATORY (S) USED : ON - SITE TECH.

Date : **April 11, 2003**

SAMPLER : N J V

Filename : **04-11-03.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)
1X	101.38	96.40	4.98	9.83	1320	6.95	6,900	1.00	-
2X	98.62	94.83	3.79	8.55	1306	6.95	2,200	2.25	-
3X	98.75	93.82	4.93	8.43	1253	6.99	2,700	1.00	-
4X	97.55	92.59	4.96	7.85	1212	6.77	3,300	1.50	-
5X	98.54	92.06	6.48	10.00	1235	6.90	3,300	1.00	-
					INSTRUMENT CALIBRATIONS =	7.01	2,800		
					DATE & TIME =	04/11/03	09:00		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

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

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 28, 2003** **SAMPLER :** N J V

Filename : **08-28-03.WK4** **PROJECT MANAGER :** N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.33	6.05	9.83	1045	6.73	7,800	24.6	1.00
2X	98.62	93.88	4.74	8.55	0910	6.81	3,300	24.2	1.75
3X	98.75	93.03	5.72	8.43	0930	6.78	3,600	24.4	0.75
4X	97.55	92.07	5.48	7.85	0945	6.71	4,100	25.7	1.00
5X	98.54	91.72	6.82	10.00	1030	6.75	3,900	22.0	0.75
6X	98.51	91.71	6.80	10.00	1015	6.87	3,700	21.7	3.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	08/28/03	0700		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **November 19, 2003**

Filename : **11-19-03.WK4**

SAMPLER : N J V

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38		-	9.83	-	-	-	-	-
2X	98.62		-	8.55	-	-	-	-	-
3X	98.75		-	8.43	-	-	-	-	-
4X	97.55		-	7.85	-	-	-	-	-
5X	98.54		6.09	10.00	0830	6.95	3,600	12.2	1.00
6X	98.51		6.05	10.00	0845	6.99	3,700	11.7	2.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	11/11/03	0730		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **March 27, 2004**

SAMPLER : N J V

Filename : **03-27-04.WK4**

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	96.77	4.61	9.83	1130	7.10	6,200	12.8	1.25
2X	98.62	95.26	3.36	8.55	1113	6.96	3,500	11.3	2.50
3X	98.75	94.23	4.52	8.43	1109	7.00	3,400	12.0	1.25
4X	97.55	92.96	4.59	7.85	1035	6.91	3,900	11.0	1.50
5X	98.54	92.46	6.08	10.00	1044	7.01	3,700	11.1	1.00
6X	98.51	92.42	6.09	10.00	1023	7.05	3,700	12.4	2.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	03/27/04	0800		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 22, 2004**

SAMPLER : N J V

Filename : **06-22-04.WK4**

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.48	5.90	9.83	0855	6.79	8,000	18.6	1.00
2X	98.62	93.76	4.86	8.55	0835	6.86	3,200	18.1	1.75
3X	98.75	92.94	5.81	8.43	0825	6.95	3,300	18.4	0.75
4X	97.55	91.99	5.56	7.85	0750	6.85	4,200	16.6	1.00
5X	98.54	91.61	6.93	10.00	0800	6.74	4,400	16.0	0.75
6X	98.51	91.59	6.92	10.00	0740	6.91	4,000	14.8	1.50
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/21/04	1220		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **Sept. 24, 2004**

SAMPLER : N J V

Filename : **09-24-04.WK4**

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.58	5.80	9.83	1455	6.65	5,700	23.6	1.00
2X	98.62	94.51	4.11	8.55	1250	6.73	3,100	23.3	2.25
3X	98.75	93.54	5.21	8.43	1330	6.72	3,300	23.7	0.75
4X	97.55	92.59	4.96	7.85	1430	6.60	3,800	23.5	1.50
5X	98.54	92.17	6.37	10.00	1440	6.68	3,700	22.5	1.00
6X	98.51	92.16	6.35	10.00	1420	6.73	3,700	23.7	1.75
7X			5.68	10.00	1310	6.93	4,900	24.5	1.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	09/24/04	1245		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

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

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

CLIENT: XTO

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

LOCATION NO: —
C.O.C. NO: 09094 09093

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

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

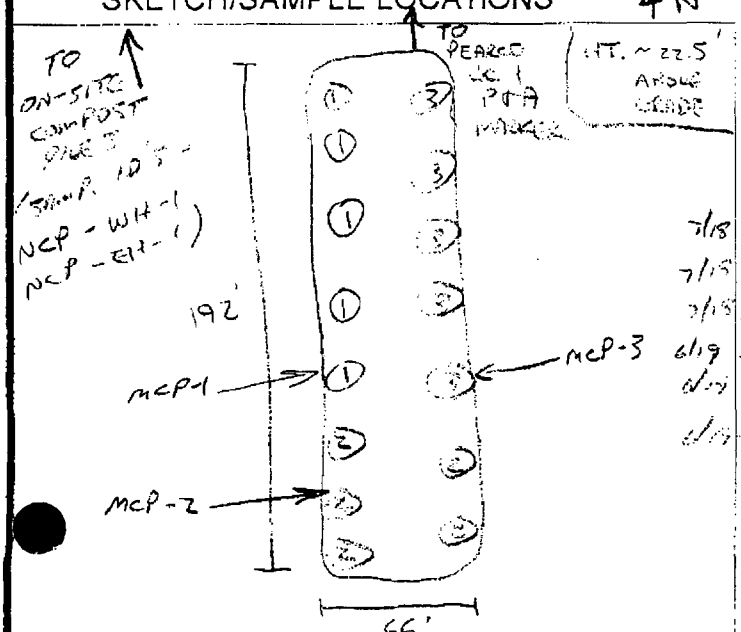
DATE STARTED: 6/19/02
DATE FINISHED: 7/18/02
ENVIRONMENTAL SPECIALIST: NV

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

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

SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / (GRAVEL) / OTHER
SOIL COLOR: OLIVE GRAY TO BLACK
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED
COLORATION/STAINING OBSERVED: (YES) / NO EXPLANATION - VARYING GRAY TO BLACK & ALL
HC ODOR DETECTED: (YES) / NO EXPLANATION -
SAMPLING DEPTHS (LANDFARMS): NA (INCHES)
SAMPLE TYPE: GRAB / (COMPOSITE) - # OF PTS. 5
ADDITIONAL COMMENTS: COLLECTED ON-SITE SAMPLES 6/19/02 & OFF-SITE SAMPLES (SKETCHED BELOW) 7/18/02. PENETRATED PILES USING TRACKHOE. SAMPLE ECP-1 @ SAME LOCALE BELOW THEN ADDITIONAL SOIL & MANURE ADDED PRIOR TO 7/15/02 SAMPLING. ALL BTEX SAMPLES BELOW REG'S.

SKETCH/SAMPLE LOCATIONS



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

OVM CALIB. READ. = 53.3 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 12:20 am/pm DATE: 7/17/02

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE (ppm)	
MCP-1	271	7/18
MCP-2	101	7/15
MCP-3	196	7/15
NCP-WH-1	120.4	6/19
NCP-EH-1	94.6	6/19
ECP-1	303	6/19

LAB SAMPLES

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

SCALE
0 FT

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

revised: 07/16/01 bel1006A.skd

VGL 30045

CLIENT: XTO

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

LOCATION NO: _____
COCR NO: _____

FIELD REPORT: PIT CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: STATE GC M 5 WELL #: 1 TYPE: DEP. IT
QUAD/UNIT: K SEC: 23 TWP: 29N RNG: 11W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/NW CONTRACTOR: MOC (FERNANDO)

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

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

DISPOSAL FACILITY: ENVIROTECH LANDFARM #2 REMEDIATION METHOD: LANDFARM

LAND USE: RANGE LEASE: FEE FORMATION: DK

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

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

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

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

SOIL AND EXCAVATION DESCRIPTION:

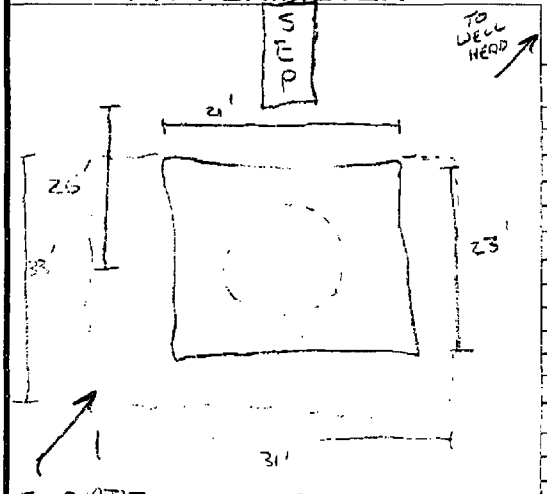
SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / (GRAVEL) / OTHER _____
SOIL COLOR: DK. YELL. ORANGE TO BLACK
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE
PLASTICITY (CLAYS): NON PLASTIC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

FIELD 418.1 CALCULATIONS

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

SCALE 0 FT

PIT PERIMETER



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

OVM READING

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

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE

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

revised: 09/04/02 bei1005C.skf

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address	2. Destination Name:
XTO Energy Inc. **2700 Farmington Ave., Bldg. K, Suite 1** **Farmington, NM 87401**	J.F.J. Landfarm c/o Industrial Ecosystems Inc. 420 CR 3100 Aztec, NM 87410
3. Originating Site (name): STATE GC B5 #1 (PEARCE SC #1E) attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): NE 1/4, SW 1/4 UNIT K, SEC. 23, T29N, R11W
4. Source and Description of Waste: CONDENSATE AND/OR PRODUCED WATER FROM SEPARATOR TANK PIT.	

Nelson Velez
Print Name

representative for :

Blagg Engineering, Inc. c/o XTO Energy Inc.

do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,1988, regulatory determination, the above described waste is: (Check appropriate classification)

✓ EXEMPT oilfield waste

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

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

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

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

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

Name (Original Signature): _____

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

Date: AUGUST 10, 2004

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TH 1 @ 4.5'	Date Reported:	06-11-02
Laboratory Number:	22890	Date Sampled:	06-10-02
Chain of Custody No:	9076	Date Received:	06-11-02
Sample Matrix:	Soil	Date Extracted:	06-11-02
Preservative:	Cool	Date Analyzed:	06-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1 Grab Sample.**

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 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	TH 3 @ 4.5'	Date Reported:	06-11-02
Laboratory Number:	22891	Date Sampled:	06-10-02
Chain of Custody No:	9076	Date Received:	06-11-02
Sample Matrix:	Soil	Date Extracted:	06-11-02
Preservative:	Cool	Date Analyzed:	06-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**160**	**0.2**
Diesel Range (C10 - C28)	**18.7**	**0.1**
Total Petroleum Hydrocarbons	**179**	**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: **Pearce GC #1 Grab Sample.**

Analyst

Review

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

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

ON SITE TECHNOLOGIES, LTD.

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

ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - Pearce GC #1
Work Order:	0206012	**Client Sample ID:**	TH3 @ GW (5.5ft.)
Lab ID:	0206012-01A **Matrix:** AQUEOUS	**Collection Date:**	06/10/2002 11:57:00 AM
Project:	BP - Pearce GC #1	**COC Record:**	11775

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	2.5		µg/L	5	06/12/2002
Toluene	7.4	2.5		µg/L	5	06/12/2002
Ethylbenzene	170	2.5		µg/L	5	06/12/2002
m,p-Xylene	470	5		µg/L	5	06/12/2002
o-Xylene	140	2.5		µg/L	5	06/12/2002

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

P.O. BOX 2606 • FARMINGTON, NM 87499
EMAIL: ONSITE@ONSITELTD.COM
- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Hall Environmental Analysis Laboratory

Date: *03-Jul-02*

CLIENT:	Envirotech	**Client Sample ID:**	22892 TH 3@GW(5.5')
Lab Order:	0206063	**Collection Date:**	6/10/2002 11:57:00 AM
Project:	Blagg/BP Pearce GC #1		
Lab ID:	0206063-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **GT**
Naphthalene	18	2.5		µg/L	1	6/27/2002 10:09:12 PM
1-Methylnaphthalene	25	2.5		µg/L	1	6/27/2002 10:09:12 PM
2-Methylnaphthalene	29	2.5		µg/L	1	6/27/2002 10:09:12 PM
Acenaphthylene	ND	2.5		µg/L	1	6/27/2002 10:09:12 PM
Acenaphthene	ND	2.5		µg/L	1	6/27/2002 10:09:12 PM
Fluorene	2.1	0.80		µg/L	1	6/27/2002 10:09:12 PM
Phenanthrene	2.6	0.60		µg/L	1	6/27/2002 10:09:12 PM
Anthracene	ND	0.60		µg/L	1	6/27/2002 10:09:12 PM
Fluoranthene	ND	0.30		µg/L	1	6/27/2002 10:09:12 PM
Pyrene	ND	0.30		µg/L	1	6/27/2002 10:09:12 PM
Benz(a)anthracene	ND	0.020		µg/L	1	6/27/2002 10:09:12 PM
Chrysene	ND	0.20		µg/L	1	6/27/2002 10:09:12 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	6/27/2002 10:09:12 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	6/27/2002 10:09:12 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	6/27/2002 10:09:12 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	6/27/2002 10:09:12 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	6/27/2002 10:09:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	6/27/2002 10:09:12 PM
Surr: Benzo(e)pyrene	102	58.7-110		%REC	1	6/27/2002 10:09:12 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation 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

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

ON SITE TECHNOLOGIES, LTD.

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

ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - Pearce GC #1
Work Order:	0206012	**Client Sample ID:**	TH4 @ GW (5.5ft.)
Lab ID:	0206012-03A **Matrix:** AQUEOUS	**Collection Date:**	06/10/2002 2:30:00 PM
Project:	BP - Pearce GC #1	**COC Record:**	11775

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/11/2002
Toluene	ND	0.5		µg/L	1	06/11/2002
Ethylbenzene	ND	0.5		µg/L	1	06/11/2002
m,p-Xylene	ND	1		µg/L	1	06/11/2002
o-Xylene	ND	0.5		µg/L	1	06/11/2002

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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ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - Pearce GC #1
Work Order:	0206014	**Client Sample ID:**	TH5 @ GW (5.5ft.)
Lab ID:	0206014-01A **Matrix:** AQUEOUS	**Collection Date:**	06/11/2002 2:30:00 PM
Project:	BP - Pearce GC #1	**COC Record:**	11777

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/12/2002
Toluene	ND	0.5		µg/L	1	06/12/2002
Ethylbenzene	2.6	0.5		µg/L	1	06/12/2002
m,p-Xylene	5.9	1		µg/L	1	06/12/2002
o-Xylene	1	0.5		µg/L	1	06/12/2002

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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ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - Pearce GC #1
Work Order:	0206014	**Client Sample ID:**	TH6 @ GW (5.5ft.)
Lab ID:	0206014-02A **Matrix:** AQUEOUS	**Collection Date:**	06/11/2002 2:40:00 PM
Project:	BP - Pearce GC #1	**COC Record:**	11777

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/12/2002
Toluene	ND	0.5		µg/L	1	06/12/2002
Ethylbenzene	1.2	0.5		µg/L	1	06/12/2002
m,p-Xylene	2.2	1		µg/L	1	06/12/2002
o-Xylene	ND	0.5		µg/L	1	06/12/2002

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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ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - Pearce GC #1
Work Order:	0206014	**Client Sample ID:**	TH7 @ GW (5ft.)
Lab ID:	0206014-03A **Matrix:** AQUEOUS	**Collection Date:**	06/11/2002 3:00:00 PM
Project:	BP - Pearce GC #1	**COC Record:**	11777

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/12/2002
Toluene	ND	0.5		µg/L	1	06/12/2002
Ethylbenzene	ND	0.5		µg/L	1	06/12/2002
m,p-Xylene	ND	1		µg/L	1	06/12/2002
o-Xylene	ND	0.5		µg/L	1	06/12/2002

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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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	TH 8 @ 2.5'	Date Reported:	06-17-02
Laboratory Number:	23057	Date Sampled:	06-14-02
Chain of Custody No:	9081	Date Received:	06-14-02
Sample Matrix:	Soil	Date Extracted:	06-17-02
Preservative:	Cool	Date Analyzed:	06-17-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**589**	**0.2**
Diesel Range (C10 - C28)	**239**	**0.1**
Total Petroleum Hydrocarbons	**828**	**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: **Pearce GC #1E Grab Sample.**

Analyst

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ENVIROTECH LABS

ENVIRONMENTAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	TH 8 @ 2.5'	Date Reported:	06-17-02
Laboratory Number:	23057	Date Sampled:	06-14-02
Chain of Custody:	9081	Date Received:	06-14-02
Sample Matrix:	Soil	Date Analyzed:	06-17-02
Preservative:	Cool	Date Extracted:	06-17-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**17.1**	**1.8**
Toluene	**186**	**1.7**
Ethylbenzene	**159**	**1.5**
p,m-Xylene	**738**	**2.2**
o-Xylene	**292**	**1.0**
Total BTEX	**1,390**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**99 %**
	1,4-difluorobenzene	**99 %**
	Bromochlorobenzene	**99 %**

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: **Pearce GC #1E Grab Sample.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	TH #101 @ 4'	Date Reported:	07-15-02
Laboratory Number:	23282	Date Sampled:	07-12-02
Chain of Custody No:	10067	Date Received:	07-12-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-15-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	TH #102 @ 4'	Date Reported:	07-15-02
Laboratory Number:	23283	Date Sampled:	07-12-02
Chain of Custody No:	10067	Date Received:	07-12-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-15-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	TH #103 @ 4'	Date Reported:	07-15-02
Laboratory Number:	23284	Date Sampled:	07-12-02
Chain of Custody No:	10067	Date Received:	07-12-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-15-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1.**

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ANALYTICAL REPORT

Date: *26-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - Pearce GC #1E
Work Order:	0206023	**Client Sample ID:**	N- EX @ GW (5ft.)
Lab ID:	0206023-01A **Matrix:** AQUEOUS	**Collection Date:**	06/14/2002 9:00:00 AM
Project:	XTO - Pearce GC #1E	**COC Record:**	11778

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	89	5		µg/L	10	06/17/2002
Toluene	520	5		µg/L	10	06/17/2002
Ethylbenzene	160	5		µg/L	10	06/17/2002
m,p-Xylene	1200	10		µg/L	10	06/17/2002
o-Xylene	240	5		µg/L	10	06/17/2002

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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Hall Environmental Analysis Laboratory

Date: *08-Jul-02*

CLIENT: Envirotech
Lab Order: 0206104
Project: Blagg/XTO Pearce GC #1E
Lab ID: 0206104-01

Client Sample ID: 23058 N-EX@GW(5')
Collection Date: 6/14/2002 9:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **GT**
Naphthalene	20	2.5		µg/L	1	7/3/2002 11:02:39 AM
1-Methylnaphthalene	17	2.5		µg/L	1	7/3/2002 11:02:39 AM
2-Methylnaphthalene	23	2.5		µg/L	1	7/3/2002 11:02:39 AM
Acenaphthylene	ND	2.5		µg/L	1	7/3/2002 11:02:39 AM
Acenaphthene	ND	2.5		µg/L	1	7/3/2002 11:02:39 AM
Fluorene	1.5	0.80		µg/L	1	7/3/2002 11:02:39 AM
Phenanthrene	1.4	0.60		µg/L	1	7/3/2002 11:02:39 AM
Anthracene	ND	0.60		µg/L	1	7/3/2002 11:02:39 AM
Fluoranthene	ND	0.30		µg/L	1	7/3/2002 11:02:39 AM
Pyrene	ND	0.30		µg/L	1	7/3/2002 11:02:39 AM
Benz(a)anthracene	ND	0.020		µg/L	1	7/3/2002 11:02:39 AM
Chrysene	ND	0.20		µg/L	1	7/3/2002 11:02:39 AM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	7/3/2002 11:02:39 AM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	7/3/2002 11:02:39 AM
Benzo(a)pyrene	ND	0.020		µg/L	1	7/3/2002 11:02:39 AM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	7/3/2002 11:02:39 AM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	7/3/2002 11:02:39 AM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	7/3/2002 11:02:39 AM
Surr: Benzo(e)pyrene	89.8	58.7-110		%REC	1	7/3/2002 11:02:39 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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

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ANALYTICAL REPORT

Date: *26-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - Pearce GC #1E
Work Order:	0206023	**Client Sample ID:**	C -EX @ GW (5.5ft.)
Lab ID:	0206023-02A **Matrix:** AQUEOUS	**Collection Date:**	06/14/2002 1:30:00 PM
Project:	XTO - Pearce GC #1E	**COC Record:**	11778

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/17/2002
Toluene	0.9	0.5		µg/L	1	06/17/2002
Ethylbenzene	ND	0.5		µg/L	1	06/17/2002
m,p-Xylene	1.2	1		µg/L	1	06/17/2002
o-Xylene	ND	0.5		µg/L	1	06/17/2002

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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CATION / ANION ANALYSIS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	C-EX @ GW (5.5')	Date Reported:	06-17-02
Laboratory Number:	23059	Date Sampled:	06-14-02
Chain of Custody:	9081	Date Received:	06-14-02
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	06-17-02
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**7.76**	s.u.		
Conductivity @ 25° C	**5,930**	umhos/cm		
Total Dissolved Solids @ 180C	**2,960**	mg/L		
Total Dissolved Solids (Calc)	**2,900**	mg/L		
SAR	**5.1**	ratio		
Total Alkalinity as CaCO3	**412**	mg/L		
Total Hardness as CaCO3	**1,270**	mg/L		
Bicarbonate as HCO3	**412**	mg/L	6.75	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	**1.9**	mg/L	0.03	meq/L
Nitrite Nitrogen	**0.114**	mg/L	0.00	meq/L
Chloride	**48.0**	mg/L	1.35	meq/L
Fluoride	**1.51**	mg/L	0.08	meq/L
Phosphate	**<0.1**	mg/L	0.00	meq/L
Sulfate	**1,700**	mg/L	35.39	meq/L
Iron	**0.003**	mg/L	0.00	meq/L
Calcium	**432**	mg/L	21.56	meq/L
Magnesium	**46.9**	mg/L	3.86	meq/L
Potassium	**6.2**	mg/L	0.16	meq/L
Sodium	**415**	mg/L	18.05	meq/L
Cations			43.63	meq/L
Anions			43.61	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: **Pearce GC #1E Grab Sample.**

Analyst

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ANALYTICAL REPORT

Date: *26-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - Pearce GC #1E
Work Order:	0206023	**Client Sample ID:**	WET - SS @ GW (5ft.)
Lab ID:	0206023-03A **Matrix:** AQUEOUS	**Collection Date:**	06/14/2002 1:40:00 PM
Project:	XTO - Pearce GC #1E	**COC Record:**	11778

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	0.6	0.5		µg/L	1	06/17/2002
Toluene	0.9	0.5		µg/L	1	06/17/2002
Ethylbenzene	0.8	0.5		µg/L	1	06/17/2002
m,p-Xylene	3.7	1		µg/L	1	06/17/2002
o-Xylene	0.8	0.5		µg/L	1	06/17/2002

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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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	N-EX @ 5' (MW 2)	Date Reported:	06-18-02
Laboratory Number:	23070	Date Sampled:	06-17-02
Chain of Custody No:	9082	Date Received:	06-18-02
Sample Matrix:	Soil	Date Extracted:	06-18-02
Preservative:	Cool	Date Analyzed:	06-18-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1E Grab Sample.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	N-EX @ 4' (NE)	Date Reported:	06-18-02
Laboratory Number:	23071	Date Sampled:	06-17-02
Chain of Custody No:	9082	Date Received:	06-18-02
Sample Matrix:	Soil	Date Extracted:	06-18-02
Preservative:	Cool	Date Analyzed:	06-18-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**65.9**	**0.2**
Diesel Range (C10 - C28)	**12.2**	**0.1**
Total Petroleum Hydrocarbons	**78.1**	**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: **Pearce GC #1E Grab Sample.**

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ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	1A @ 4'	Date Reported:	06-11-02
Laboratory Number:	22893	Date Sampled:	06-10-02
Chain of Custody No:	9076	Date Received:	06-11-02
Sample Matrix:	Soil	Date Extracted:	06-11-02
Preservative:	Cool	Date Analyzed:	06-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**18.2**	**0.2**
Diesel Range (C10 - C28)	**4.2**	**0.1**
Total Petroleum Hydrocarbons	**22.4**	**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: **Pearce GC #1 Grab Sample.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	M-EX @ 4' (MW 4R)	Date Reported:	06-18-02
Laboratory Number:	23072	Date Sampled:	06-17-02
Chain of Custody No:	9082	Date Received:	06-18-02
Sample Matrix:	Soil	Date Extracted:	06-18-02
Preservative:	Cool	Date Analyzed:	06-18-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1E Grab Sample.**

Analyst

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ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	BP - Pearce GC #1
Work Order:	0206012	**Client Sample ID:**	MW #4R
Lab ID:	0206012-02A **Matrix:** AQUEOUS	**Collection Date:**	06/10/2002 3:10:00 PM
Project:	BP - Pearce GC #1	**COC Record:**	11775

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/11/2002
Toluene	ND	0.5		µg/L	1	06/11/2002
Ethylbenzene	1.4	0.5		µg/L	1	06/11/2002
m,p-Xylene	1.8	1		µg/L	1	06/11/2002
o-Xylene	ND	0.5		µg/L	1	06/11/2002

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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ANALYTICAL REPORT

Date: *18-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	Unknown
Work Order:	0206013	**Client Sample ID:**	MW #X
Lab ID:	0206013-01A **Matrix:** AQUEOUS	**Collection Date:**	
Project:	Unknown	**COC Record:**	11776

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	ND	0.5		µg/L	1	06/12/2002
Toluene	ND	0.5		µg/L	1	06/12/2002
Ethylbenzene	1.5	0.5		µg/L	1	06/12/2002
m,p-Xylene	1.9	1		µg/L	1	06/12/2002
o-Xylene	ND	0.5		µg/L	1	06/12/2002

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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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	NW-SEEX @ 4.5'	Date Reported:	06-20-02
Laboratory Number:	23098	Date Sampled:	06-19-02
Chain of Custody No:	9083	Date Received:	06-19-02
Sample Matrix:	Soil	Date Extracted:	06-20-02
Preservative:	Cool	Date Analyzed:	06-20-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**0.8**	**0.1**
Total Petroleum Hydrocarbons	**0.8**	**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: **Pearce GC #1E Grab Sample.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	NW-SEEX @ 4.5'	Date Reported:	06-20-02
Laboratory Number:	23098	Date Sampled:	06-19-02
Chain of Custody:	9083	Date Received:	06-19-02
Sample Matrix:	Soil	Date Analyzed:	06-20-02
Preservative:	Cool	Date Extracted:	06-20-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**1.8**
Toluene	**ND**	**1.7**
Ethylbenzene	**ND**	**1.5**
p,m-Xylene	**ND**	**2.2**
o-Xylene	**ND**	**1.0**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**95 %**
	1,4-difluorobenzene	**95 %**
	Bromochlorobenzene	**95 %**

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: **Pearce GC #1E Grab Sample.**

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ANALYTICAL REPORT

Date: *26-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - Pearce GC #1E
Work Order:	0206026	**Client Sample ID:**	NW - SEEX @ GW(5.5ft.)
Lab ID:	0206026-02A **Matrix:** AQUEOUS	**Collection Date:**	06/19/2002 8:58:00 AM
Project:	XTO -PEARCE GC #1E	**COC Record:**	11779

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HNR**
Benzene	ND	0.5		µg/L	1	06/19/2002
Toluene	11	0.5		µg/L	1	06/19/2002
Ethylbenzene	9.9	0.5		µg/L	1	06/19/2002
m,p-Xylene	190	1		µg/L	1	06/19/2002
o-Xylene	66	0.5		µg/L	1	06/19/2002

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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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#1 @ 4'	Date Reported:	07-12-02
Laboratory Number:	23275	Date Sampled:	07-11-02
Chain of Custody No:	10065	Date Received:	07-11-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-12-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **State GC BS #1 - Dehy Pit.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#2 @ 4'	Date Reported:	07-12-02
Laboratory Number:	23276	Date Sampled:	07-11-02
Chain of Custody No:	10065	Date Received:	07-11-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-12-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **State GC BS #1 - Dehy Pit.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#3 @ 4'	Date Reported:	07-12-02
Laboratory Number:	23277	Date Sampled:	07-11-02
Chain of Custody No:	10065	Date Received:	07-11-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-12-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **State GC BS #1 - Dehy Pit.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#4 @ 4'	Date Reported:	07-12-02
Laboratory Number:	23278	Date Sampled:	07-11-02
Chain of Custody No:	10065	Date Received:	07-11-02
Sample Matrix:	Soil	Date Extracted:	07-12-02
Preservative:	Cool	Date Analyzed:	07-12-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **State GC BS #1 - Dehy Pit.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	OSDP @ 2'	Date Reported:	07-01-02
Laboratory Number:	23203	Date Sampled:	06-28-02
Chain of Custody No:	9090	Date Received:	06-28-02
Sample Matrix:	Soil	Date Extracted:	07-01-02
Preservative:	Cool	Date Analyzed:	07-01-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1E Grab Sample.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	OSDP @ 2'	Date Reported:	07-01-02
Laboratory Number:	23203	Date Sampled:	06-28-02
Chain of Custody:	9090	Date Received:	06-28-02
Sample Matrix:	Soil	Date Analyzed:	07-01-02
Preservative:	Cool	Date Extracted:	07-01-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**1.8**
Toluene	**ND**	**1.7**
Ethylbenzene	**ND**	**1.5**
p,m-Xylene	**ND**	**2.2**
o-Xylene	**ND**	**1.0**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**99 %**
	1,4-difluorobenzene	**99 %**
	Bromochlorobenzene	**99 %**

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: **Pearce GC #1E Grab Sample.**

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ANALYTICAL REPORT

Date: *10-Jul-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - Pearce GC #1E
Work Order:	0206061	**Client Sample ID:**	OSDP @ GW (7ft.)
Lab ID:	0206061-01A **Matrix:** AQUEOUS	**Collection Date:**	06/28/2002 11:20:00 AM
Project:	XTO - Pearce GC #1E	**COC Record:**	11996

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DWC**
Benzene	6.6	0.5		µg/L	1	06/28/2002
Toluene	76	0.5		µg/L	1	06/28/2002
Ethylbenzene	36	0.5		µg/L	1	06/28/2002
m,p-Xylene	190	1		µg/L	1	06/28/2002
o-Xylene	53	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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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	Dehy. 1 @ 3.5'	Date Reported:	06-18-02
Laboratory Number:	23073	Date Sampled:	06-17-02
Chain of Custody No:	9082	Date Received:	06-18-02
Sample Matrix:	Soil	Date Extracted:	06-18-02
Preservative:	Cool	Date Analyzed:	06-18-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**111**	**0.2**
Diesel Range (C10 - C28)	**0.6**	**0.1**
Total Petroleum Hydrocarbons	**112**	**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: **Pearce GC #1E Grab Sample.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	Dehy. 1 @ 3.5'	Date Reported:	06-18-02
Laboratory Number:	23073	Date Sampled:	06-17-02
Chain of Custody:	9082	Date Received:	06-18-02
Sample Matrix:	Soil	Date Analyzed:	06-18-02
Preservative:	Cool	Date Extracted:	06-18-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**5.7**	**1.8**
Toluene	**113**	**1.7**
Ethylbenzene	**20.3**	**1.5**
p,m-Xylene	**223**	**2.2**
o-Xylene	**75.7**	**1.0**
Total BTEX	**438**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**94 %**
	1,4-difluorobenzene	**94 %**
	Bromochlorobenzene	**94 %**

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: **Pearce GC #1E Grab Sample.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#1 @ 3.5'	Date Reported:	07-11-02
Laboratory Number:	23261	Date Sampled:	07-09-02
Chain of Custody No:	10060	Date Received:	07-09-02
Sample Matrix:	Soil	Date Extracted:	07-10-02
Preservative:	Cool	Date Analyzed:	07-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1 EPNG Pit.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#2 @ 5'	Date Reported:	07-11-02
Laboratory Number:	23262	Date Sampled:	07-09-02
Chain of Custody No:	10060	Date Received:	07-09-02
Sample Matrix:	Soil	Date Extracted:	07-10-02
Preservative:	Cool	Date Analyzed:	07-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1 EPNG Pit.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#3 @ 3.5'	Date Reported:	07-11-02
Laboratory Number:	23263	Date Sampled:	07-09-02
Chain of Custody No:	10060	Date Received:	07-09-02
Sample Matrix:	Soil	Date Extracted:	07-10-02
Preservative:	Cool	Date Analyzed:	07-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**4.1**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**4.1**	**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: **Pearce GC #1 EPNG Pit.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#3 @ 3.5'	Date Reported:	07-11-02
Laboratory Number:	23263	Date Sampled:	07-09-02
Chain of Custody:	10060	Date Received:	07-09-02
Sample Matrix:	Soil	Date Analyzed:	07-11-02
Preservative:	Cool	Date Extracted:	07-10-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**4.0**	**1.8**
Toluene	**26.9**	**1.7**
Ethylbenzene	**9.9**	**1.5**
p,m-Xylene	**88.3**	**2.2**
o-Xylene	**18.1**	**1.0**
Total BTEX	**147**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	Bromochlorobenzene	**97 %**

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: **Pearce GC #1 EPNG Pit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#4 @ 4'	Date Reported:	07-11-02
Laboratory Number:	23264	Date Sampled:	07-09-02
Chain of Custody No:	10060	Date Received:	07-09-02
Sample Matrix:	Soil	Date Extracted:	07-10-02
Preservative:	Cool	Date Analyzed:	07-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1 EPNG Pit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	#5 @ 4'	Date Reported:	07-11-02
Laboratory Number:	23265	Date Sampled:	07-09-02
Chain of Custody No:	10060	Date Received:	07-09-02
Sample Matrix:	Soil	Date Extracted:	07-10-02
Preservative:	Cool	Date Analyzed:	07-11-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1 EPNG Pit.**

Analyst

Review

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

ANALYTICAL REPORT

Date: *26-Jun-02*

Client:	Blagg Engineering	**Client Sample Info:**	XTO - Pearce GC #1E
Work Order:	0206026	**Client Sample ID:**	D.T.H.@ GW (8ft.)
Lab ID:	0206026-01A **Matrix:** AQUEOUS	**Collection Date:**	06/17/2002 3:25:00 PM
Project:	XTO -PEARCE GC #1E	**COC Record:**	11779

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **HNR**
Benzene	13	2.5		µg/L	5	06/19/2002
Toluene	320	2.5		µg/L	5	06/19/2002
Ethylbenzene	72	2.5		µg/L	5	06/19/2002
m,p-Xylene	680	5		µg/L	5	06/19/2002
o-Xylene	120	2.5		µg/L	5	06/19/2002

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

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

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO.

CHAIN-OF-CUSTODY # : 10608

7025

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

LABORATORY (S) USED : ON - SITE TECH.

ENVIROTECH, INC.

Date : June 29, 2000

SAMPLER : N J V

Filename : 06-29-00.WK4

PROJECT MANAGER : N J V

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

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

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

Ideally a minimum of three (3) wellbore volumes:

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

2 bails per foot - small teflon bailer.

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

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

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

Comments or note well diameter if not standard 2 ".

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

Collected TDS sample from MW # 3 only .

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

ANALYTICAL REPORT

Date: *18-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	State GC BS #1
Work Order:	0006069	**Client Sample ID:**	MW #3
Lab ID:	0006069-01A **Matrix:** AQUEOUS	**Collection Date:**	6/29/2000 11:25:00 AM
Project:	Cross Timbers - State GC BS #1	**COC Record:**	10608

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DC**
Benzene	ND	0.5		µg/L	1	7/12/2000
Toluene	ND	0.5		µg/L	1	7/12/2000
Ethylbenzene	ND	0.5		µg/L	1	7/12/2000
m,p-Xylene	ND	1		µg/L	1	7/12/2000
o-Xylene	ND	0.5		µg/L	1	7/12/2000

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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ANALYTICAL REPORT

Date: *18-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	State GC BS #1
Work Order:	0006069	**Client Sample ID:**	MW #4R
Lab ID:	0006069-02A **Matrix:** AQUEOUS	**Collection Date:**	6/29/2000 10:55:00 AM
Project:	Cross Timbers - State GC BS #1	**COC Record:**	10608

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	ND	0.5		µg/L	1	7/11/2000
Toluene	ND	0.5		µg/L	1	7/11/2000
Ethylbenzene	ND	0.5		µg/L	1	7/11/2000
m,p-Xylene	ND	1		µg/L	1	7/11/2000
o-Xylene	ND	0.5		µg/L	1	7/11/2000

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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ANALYTICAL REPORT

Date: *18-Jul-00*

Client:	Blagg Engineering	**Client Sample Info:**	State GC BS #1
Work Order:	0006069	**Client Sample ID:**	MW #5R
Lab ID:	0006069-03A **Matrix:** AQUEOUS	**Collection Date:**	6/29/2000 11:05:00 AM
Project:	Cross Timbers - State GC BS #1	**COC Record:**	10608

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **DM**
Benzene	ND	0.5		µg/L	1	7/11/2000
Toluene	ND	0.5		µg/L	1	7/11/2000
Ethylbenzene	ND	0.5		µg/L	1	7/11/2000
m,p-Xylene	ND	1		µg/L	1	7/11/2000
o-Xylene	ND	0.5		µg/L	1	7/11/2000

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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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Water Analysis

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 3	Date Reported:	06-30-00
Laboratory Number:	H632	Date Sampled:	06-29-00
Sample Matrix:	Water	Date Received:	06-29-00
Preservative:	Cool	Date Analyzed:	06-30-00
Condition:	Cool & Intact	Chain of Custody:	7025

Parameter	Analytical Result	Units
Total Dissolved Solids @ 180C	**5,180**	mg/L
Chloride	**23.0**	mg/L

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: **State GC BS #1.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Water Analysis

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 4R	Date Reported:	06-30-00
Laboratory Number:	H633	Date Sampled:	06-29-00
Sample Matrix:	Water	Date Received:	06-29-00
Preservative:	Cool	Date Analyzed:	06-30-00
Condition:	Cool & Intact	Chain of Custody:	7025

Parameter	Analytical Result	Units
Chloride	**11.0**	mg/L

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: **State GC BS #1.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Water Analysis

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW # 5R	Date Reported:	06-30-00
Laboratory Number:	H634	Date Sampled:	06-29-00
Sample Matrix:	Water	Date Received:	06-29-00
Preservative:	Cool	Date Analyzed:	06-30-00
Condition:	Cool & Intact	Chain of Custody:	7025

Parameter	Analytical Result	Units
Chloride	**12.9**	mg/L

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: **State GC BS #1.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

10608

ON SITE TECHNOLOGIES, LTD.

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LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 6/23/

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
	6/22/	1123			2	✓	
	6/22/	1255	WATER		2	✓	
	6/22/	1105	WATER		2	✓	

Relinquished by:	Date/Time 6/23/ 1413	Received by:	Date/Time 6/23/ 1413
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

CHAIN OF CUSTODY RECORD

7025

Client / Project Name	Project Location
BLAGG/CROSS TIMBERS	STATE EC BS #1
Sampler: NJV	Client No. 403410

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	CHLORIDE	TDS					Remarks
												ALL SAMPLES PRESERV. - COOL
MW # 3	6/29/00	1125	H632	WATER	1	✓	✓					
MW # 4R	6/29/00	1055	H633	WATER	1	✓						
MW # 5R	6/29/00	1105	H634	WATER	1	✓						

ANALYSIS / PARAMETERS

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	6/29/00	1441	Adam L Aplin	6.29.00	1441
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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

On Site Technologies, LTD.

Date: *18-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT
Method Blank

Sample ID: **MB1** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0595	0.5									J
Ethylbenzene	ND	0.5									
m,p-Xylene	ND	1									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	0.5									
Toluene	.0916	0.5									J

Sample ID: **MB1** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29926**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Ethylbenzene	.1388	0.5									J
m,p-Xylene	.4757	1									J
Methyl tert-Butyl Ether	ND	1									
o-Xylene	.1557	0.5									J
Toluene	.2024	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: *18-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0006072-29AMS** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29855**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	10880	100	8000	2621	103.3%	73	126				
Ethylbenzene	9217	100	8000	919.5	103.7%	88	113				
m,p-Xylene	16530	200	16000	844.8	98.1%	83	112				
Methyl tert-Butyl Ether	37240	200	8000	30020	90.2%	81	125				
o-Xylene	8424	100	8000	62.34	104.5%	93	110				
Toluene	8474	100	8000	86.84	104.8%	76	126				

Sample ID: **0006072-29AMSD** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29856**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	10610	100	8000	2621	99.9%	73	126	10880	2.5%	6	
Ethylbenzene	8993	100	8000	919.5	100.9%	88	113	9217	2.5%	5	
m,p-Xylene	16140	200	16000	844.8	95.6%	83	112	16530	2.4%	7	
Methyl tert-Butyl Ether	36330	200	8000	30020	78.8%	81	125	37240	2.5%	9	S
o-Xylene	8255	100	8000	62.34	102.4%	93	110	8424	2.0%	6	
Toluene	8278	100	8000	86.84	102.4%	76	126	8474	2.4%	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: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0006074-03AMS** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:
Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2059	25	2000	46.08	100.7%	88	112				
Ethylbenzene	2805	25	2000	776.7	101.4%	86	113				
m,p-Xylene	9997	50	4000	6132	96.6%	85	108				
Methyl tert-Butyl Ether	2166	50	2000	46.08	106.0%	86	117				
o-Xylene	2352	25	2000	299.2	102.6%	92	110				
Toluene	2130	25	2000	38.93	104.5%	88	116				

Sample ID: **0006074-03AMSD** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:
Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2001	25	2000	46.08	97.8%	88	112	2059	2.9%	6	
Ethylbenzene	2725	25	2000	776.7	97.4%	86	113	2805	2.9%	6	
m,p-Xylene	9715	50	4000	6132	89.6%	85	108	9997	2.9%	6	
Methyl tert-Butyl Ether	2137	50	2000	46.08	104.6%	86	117	2166	1.3%	7	
o-Xylene	2285	25	2000	299.2	99.3%	92	110	2352	2.9%	6	
Toluene	2040	25	2000	38.93	100.1%	88	116	2130	4.3%	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: *18-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS WATER** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.66	0.5	40	0.0595	104.0%	89	112				
Ethylbenzene	41.39	0.5	40	0	103.5%	93	112				
m,p-Xylene	78.06	1	80	0	97.6%	88	108				
Methyl tert-Butyl Ether	41.46	1	40	0	103.7%	87	115				
o-Xylene	41.44	0.5	40	0	103.6%	93	112				
Toluene	41.62	0.5	40	0.0916	103.8%	92	111				

Sample ID: **LCS WATER** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.32	0.5	40	0	100.8%	96	111				
Ethylbenzene	40.29	0.5	40	0.1388	100.4%	96	111				
m,p-Xylene	76.04	1	80	0.4757	94.4%	92	105				
Methyl tert-Butyl Ether	40.39	1	40	0	101.0%	93	113				
o-Xylene	40.55	0.5	40	0.1557	101.0%	97	110				
Toluene	40.52	0.5	40	0.2024	100.8%	97	109				

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: *18-Jul-00*

CLIENT: Blagg Engineering
Work Order: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 BTEX_0007** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29850**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.97	0.5	20	0	109.8%	85	115				
Ethylbenzene	21.8	0.5	20	0	109.0%	85	115				
m,p-Xylene	41.3	1	40	0	103.2%	85	115				
Methyl tert-Butyl Ether	21.84	1	20	0	109.2%	85	115				
o-Xylene	21.96	0.5	20	0	109.8%	85	115				
Toluene	21.9	0.5	20	0	109.5%	85	115				
1,4-Difluorobenzene	89.22	0	100	0	89.2%	80	105				
4-Bromochlorobenzene	85.5	0	100	0	85.5%	78	108				
Fluorobenzene	87.73	0	100	0	87.7%	78	108				

Sample ID: **CCV2 BTEX_0007** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:

Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29851**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.06	0.5	20	0	105.3%	85	115				
Ethylbenzene	20.8	0.5	20	0	104.0%	85	115				
m,p-Xylene	39.43	1	40	0	98.6%	85	115				
Methyl tert-Butyl Ether	21.51	1	20	0	107.5%	85	115				
o-Xylene	21.03	0.5	20	0	105.2%	85	115				
Toluene	21.03	0.5	20	0	105.1%	85	115				
1,4-Difluorobenzene	89.09	0	100	0	89.1%	80	105				
4-Bromochlorobenzene	85.09	0	100	0	85.1%	78	108				
Fluorobenzene	87.47	0	100	0	87.5%	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: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3 BTEX_0007** Batch ID: **GC-1_000711** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/11/2000** Prep Date:
Client ID: **0006069** Run ID: **GC-1_000711A** SeqNo: **29852**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.47	0.5	40	0	103.7%	85	115				
Ethylbenzene	41.06	0.5	40	0	102.7%	85	115				
m,p-Xylene	77.66	1	80	0	97.1%	85	115				
Methyl tert-Butyl Ether	43.51	1	40	0	108.8%	85	115				
o-Xylene	41.46	0.5	40	0	103.6%	85	115				
Toluene	41.6	0.5	40	0	104.0%	85	115				
1,4-Difluorobenzene	88.8	0	100	0	88.8%	80	105				
4-Bromochlorobenzene	84.38	0	100	0	84.4%	78	108				
Fluorobenzene	87.12	0	100	0	87.1%	78	108				

Sample ID: **CCV1 BTEX_0007** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:
Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29922**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.07	0.5	20	0	105.4%	85	115				
Ethylbenzene	21.12	0.5	20	0	105.6%	85	115				
m,p-Xylene	40.04	1	40	0	100.1%	85	115				
Methyl tert-Butyl Ether	20.54	1	20	0	102.7%	85	115				
o-Xylene	21.16	0.5	20	0	105.8%	85	115				
Toluene	21.21	0.5	20	0	106.1%	85	115				
1,4-Difluorobenzene	89.52	0	100	0	89.5%	79	101				
4-Bromochlorobenzene	85.38	0	100	0	85.4%	78	99				
Fluorobenzene	87.65	0	100	0	87.6%	76	103				

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: 0006069
Project: Cross Timbers - State GC BS #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV2 BTEX_0007** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:
Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.82	0.5	20	0	104.1%	85	115				
Ethylbenzene	20.84	0.5	20	0	104.2%	85	115				
m,p-Xylene	39.65	1	40	0	99.1%	85	115				
Methyl tert-Butyl Ether	21.62	1	20	0	108.1%	85	115				
o-Xylene	21.03	0.5	20	0	105.2%	85	115				
Toluene	20.94	0.5	20	0	104.7%	85	115				
1,4-Difluorobenzene	89.55	0	100	0	89.6%	79	101				
4-Bromochlorobenzene	84.58	0	100	0	84.6%	78	99				
Fluorobenzene	87.93	0	100	0	87.9%	76	103				

Sample ID: **CCV3 BTEX_0007** Batch ID: **GC-1_000712** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **7/12/2000** Prep Date:
Client ID: **0006069** Run ID: **GC-1_000712A** SeqNo: **29924**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.54	0.5	40	0	101.3%	85	115				
Ethylbenzene	40.45	0.5	40	0	101.1%	85	115				
m,p-Xylene	77.29	1	80	0	96.6%	85	115				
Methyl tert-Butyl Ether	35.83	1	40	0	89.6%	85	115				
o-Xylene	40.94	0.5	40	0	102.3%	85	115				
Toluene	40.74	0.5	40	0	101.8%	85	115				
1,4-Difluorobenzene	90.08	0	100	0	90.1%	79	101				
4-Bromochlorobenzene	88.66	0	100	0	88.7%	78	99				
Fluorobenzene	88.92	0	100	0	88.9%	76	103				

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: 18-Jul-00

CLIENT: Blagg Engineering
Work Order: 0006069
Project: Cross Timbers - State GC BS #1
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0006066-03A	87.7	83.5	86.2
0006066-04A	87.5	81.9	85.6
0006066-06A	89.8	85.5	88.2
0006066-07A	89.7	84.9	88.1
0006069-01A	90	84.6	88.7
0006069-02A	89.7	85.2	88.1
0006069-03A	89.7	85.4	88.1
0006070-01A	86.4	83.8	85.7
0006070-02A	88.2	83.4	86.8
0006072-29A	89	84.6	87.4
0006072-29AMS	88.1	85.5	86.5
0006072-29AMSD	88.4	86	86.8
0006072-30A	88.6	84.3	86.9
0006072-32A	89.4	85.6	87.9
0006072-34A	88.8	85.6	87
0006073-01A	89.1	84.5	87.9
0006073-02A	90	84.8	88.6
0006074-01A	89.4	84.4	88.2
0006074-02A	89.7	84.9	88.2
0006074-03A	89.8	83.4	88.2
0006074-03AMS	87.5	84.5	86.8
0006074-03AMSD	87.5	85.4	86.6
0006074-04A	89.7	85.4	88.5
0007003-01A	89.9	84.9	88.4
0007005-01A	89.4	84.7	88.5
0007006-01A	90.4	83.9	88.6
0007006-02A	89.9	83.2	88.9

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	80-105
14FBZ	=	1,4-Difluorobenzene	79-101
4BCBZ	=	4-Bromochlorobenzene	78-99
4BCBZ	=	4-Bromochlorobenzene	78-108
FLBZ	=	Fluorobenzene	78-108
FLBZ	=	Fluorobenzene	76-103

*** Surrogate recovery outside acceptance limits**

CLIENT: Blagg Engineering
Work Order: 0006069
Project: Cross Timbers - State GC BS #1
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0007006-03A	90.1	85.1	88.5
0007006-05A	90.4	85.1	88.5
0007006-06A	89.6	85.4	88.8
0007006-07A	89.7	84.8	88.6
0007007-01A	89.3	84.8	88.7
0007007-02A	107 *	86.4	88.8
0007007-03A	90	84.9	88.8
0007007-04A	149 *	85.4	103 *
0007007-05A	89.7	84.6	88.6
0007007-06A	89.8	84.8	88.4
0007007-07A	89.3	85	88.4
CCV1 BTEX_00070	89.5	85.4	87.6
CCV2 BTEX_00070	89.6	84.6	87.9
CCV3 BTEX_00070	90.1	88.7	88.9
LCS WATER	88.9	85.5	87
MB1	89.8	84.3	88.5

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	80-105
14FBZ	=	1,4-Difluorobenzene	79-101
4BCBZ	=	4-Bromochlorobenzene	78-99
4BCBZ	=	4-Bromochlorobenzene	78-108
FLBZ	=	Fluorobenzene	78-108
FLBZ	=	Fluorobenzene	76-103

*** Surrogate recovery outside acceptance limits**

BLAGG ENGINEERING, INC.

MONITOR WELL SAMPLING DATA

CLIENT : CROSS TIMBERS OIL CO. **CHAIN-OF-CUSTODY # :** 7482

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

LABORATORY (S) USED : ENVIROTECH, INC.

Date : August 25, 2000 **SAMPLER :** N J V

Filename : 08-25-00.WK4 **PROJECT MANAGER :** N J V

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

NOTES : Volume of water purged from well prior to sampling: V = pi X r2 X h X 7.48 gal./ft3) X 3 (wellbores).
(i.e. 2" MW r = (1/12) ft. h = 1 ft.) (i.e. 4" MW r = (2/12) ft. h = 1 ft.)

Ideally a minimum of three (3) wellbore volumes:

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

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

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

Comments or note well diameter if not standard 2 ".

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

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Water Analysis

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #6	Date Reported:	08-28-00
Laboratory Number:	I039	Date Sampled:	08-25-00
Sample Matrix:	Water	Date Received:	08-25-00
Preservative:	Cool	Date Analyzed:	08-25-00
Condition:	Cool & Intact	Chain of Custody:	7482

Parameter	Analytical Result	Units
Total Dissolved Solids @ 180C	**8,070**	mg/L

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

Comments: **State GC BS #1.**

Analyst

Review

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

CHAIN OF CUSTODY RECORD

7[illegible]2

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/ CROSS TIMBERS	STATE GC 85 #1	
Sampler: NJV	Client No. 403410	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TDS						Remarks
MW #6	8/25/00	0855	I039	WATER	1	✓						PRESERV. - COOL

	Date	Time		Date	Time
Relinquished by: (Signature) Nelson Velez	8/25/00	0927	Received by: (Signature) [illegible]	8-25-00	927
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	✓		

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY , INC. **CHAIN-OF-CUSTODY # :** 12164

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

LABORATORY (S) USED : ON - SITE TECH.

Date : **April 11, 2003** **SAMPLER :** N J V

Filename : **04-11-03.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)
MW - 1X	101.38	96.40	4.98	9.83	1320	6.95	6,900	1.00	-
MW - 2X	98.62	94.83	3.79	8.55	1306	6.95	2,200	2.25	-
MW - 3X	98.75	93.82	4.93	8.43	1253	6.99	2,700	1.00	-
MW - 4X	97.55	92.59	4.96	7.85	1212	6.77	3,300	1.50	-
MW - 5X	98.54	92.06	6.48	10.00	1235	6.90	3,300	1.00	-

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

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Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: *21-Apr-03*

CLIENT:	Blagg Engineering	**Client Sample Info:**	State GC BS#1
Work Order:	0304016	**Client Sample ID:**	MW #1X
Project:	XTO Energy - State GC BS #1	**Collection Date:**	4/11/2003 1:20:00 PM
Lab ID:	0304016-001A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **JEM**
Benzene	ND	10		µg/L	20	4/16/2003
Ethylbenzene	ND	10		µg/L	20	4/16/2003
m,p-Xylene	ND	20		µg/L	20	4/16/2003
o-Xylene	ND	10		µg/L	20	4/16/2003
Toluene	ND	10		µg/L	20	4/16/2003

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

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ANALYTICAL REPORT

Date: *21-Apr-03*

CLIENT:	Blagg Engineering	**Client Sample Info:**	State GC BS#1
Work Order:	0304016	**Client Sample ID:**	MW #2X
Project:	XTO Energy - State GC BS #1	**Collection Date:**	4/11/2003 1:06:00 PM
Lab ID:	0304016-002A	**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	4/16/2003
Ethylbenzene	ND	0.5		µg/L	1	4/16/2003
m,p-Xylene	ND	1.0		µg/L	1	4/16/2003
o-Xylene	1.9	0.5		µg/L	1	4/16/2003
Toluene	ND	0.5		µg/L	1	4/16/2003

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

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Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: *21-Apr-03*

CLIENT: Blagg Engineering
Work Order: 0304016
Project: XTO Energy - State GC BS #1
Lab ID: 0304016-003A

Client Sample Info: State GC BS#1
Client Sample ID: MW #3X
Collection Date: 4/11/2003 12:53:00 PM
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	4/16/2003
Ethylbenzene	ND	0.5		µg/L	1	4/16/2003
m,p-Xylene	ND	1.0		µg/L	1	4/16/2003
o-Xylene	ND	0.5		µg/L	1	4/16/2003
Toluene	ND	0.5		µg/L	1	4/16/2003

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

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Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: *21-Apr-03*

CLIENT:	Blagg Engineering	**Client Sample Info:**	State GC BS#1
Work Order:	0304016	**Client Sample ID:**	MW #4X
Project:	XTO Energy - State GC BS #1	**Collection Date:**	4/11/2003 12:12:00 PM
Lab ID:	0304016-004A	**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	4/16/2003
Ethylbenzene	1.4	0.5		µg/L	1	4/16/2003
m,p-Xylene	2.5	1.0		µg/L	1	4/16/2003
o-Xylene	ND	0.5		µg/L	1	4/16/2003
Toluene	0.5	0.5		µg/L	1	4/16/2003

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

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ANALYTICAL REPORT

Date: *21-Apr-03*

CLIENT:	Blagg Engineering	**Client Sample Info:**	State GC BS#1
Work Order:	0304016	**Client Sample ID:**	MW #5X
Project:	XTO Energy - State GC BS #1	**Collection Date:**	4/11/2003 12:35:00 PM
Lab ID:	0304016-005A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		**SW8021B**				Analyst: **JEM**
Benzene	11	2.5		µg/L	5	4/16/2003
Ethylbenzene	100	2.5		µg/L	5	4/16/2003
m,p-Xylene	660	5.0		µg/L	5	4/16/2003
o-Xylene	130	2.5		µg/L	5	4/16/2003
Toluene	150	2.5		µg/L	5	4/16/2003

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

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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: 4/

Page: 1 of 1

Purchase Order No.:	Project No.		
SEND INVOICE TO — Name		REPORT RESULTS TO — Name Nelson Velez	Title
Company	Dept.	Company ENSR	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No. 632-1199	Telefax No. 632-3903

PROJECT LOCATION:

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION	SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID
	4/11/03	1320	WATER	HCl & COOL	1	✓	0304016-002A
	4/11/03	1306	WATER	HCl & COOL	1	✓	-002A
	4/11/03	1253	WATER	HCl & COOL	1	✓	-003A
	4/11/03	1212	WATER	HCl & COOL	1	✓	-004A
	4/11/03	1233	WATER	HCl & COOL	1	✓	-005A

Relinquished by:	Date/Time 4/11/03	Received by:	Date/Time 4-11-03 14
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

iina bá, Ltd.

Date: *21-Apr-03*

CLIENT: Blagg Engineering
Work Order: 0304016
Project: XTO Energy - State GC BS #1

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID **MB_030416**	SampType: **MBLK**	TestCode: **BTEX_W**	Units: **µg/L**	Prep Date: **4/16/2003**	Run ID: **GC-1_030416A**
Client ID: **ZZZZZ**	Batch ID: **R4392**	TestNo: **SW8021B**		Analysis Date: **4/16/2003**	SeqNo: **63801**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Ethylbenzene	0.1179	0.50									J
m,p-Xylene	ND	1.0									
o-Xylene	ND	0.50									
Toluene	0.178	0.50									J

Sample ID **LCS_030416**	SampType: **LCS**	TestCode: **BTEX_W**	Units: **µg/L**	Prep Date: **4/16/2003**	Run ID: **GC-1_030416A**
Client ID: **ZZZZZ**	Batch ID: **R4392**	TestNo: **SW8021B**		Analysis Date: **4/16/2003**	SeqNo: **63800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.13	0.50	40	0	95.3	85	110	0	0		
Ethylbenzene	38.14	0.50	40	0.1179	95.1	85	113	0	0		
m,p-Xylene	78.04	1.0	80	0	97.6	86	112	0	0		
o-Xylene	38.97	0.50	40	0	97.4	83	112	0	0		
Toluene	38.36	0.50	40	0.178	95.5	83	110	0	0		

Sample ID **0304016-001AMS**	SampType: **MS**	TestCode: **BTEX_W**	Units: **µg/L**	Prep Date: **4/16/2003**	Run ID: **GC-1_030416A**
Client ID: **MW #1X**	Batch ID: **R4392**	TestNo: **SW8021B**		Analysis Date: **4/16/2003**	SeqNo: **63804**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	778.9	10	800	3.722	96.9	73	124	0	0		
Ethylbenzene	767	10	800	2.054	95.6	83	116	0	0		
m,p-Xylene	1559	20	1600	3.836	97.2	75	121	0	0		
o-Xylene	784.7	10	800	1.716	97.9	81	113	0	0		
Toluene	776.4	10	800	4.218	96.5	84	110	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: 0304016
Project: XTO Energy - State GC BS #1

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID 0304016-001AMSD	SampType: MSD	TestCode: BTEX_W	Units: µg/L	Prep Date: 4/16/2003	Run ID: GC-1_030416A
Client ID: MW #1X	Batch ID: R4392	TestNo: SW8021B		Analysis Date: 4/16/2003	SeqNo: 63805

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	767.9	10	800	3.722	95.5	72	117	778.9	1.41	6.9	
Toluene	766.2	10	800	4.218	95.3	82	110	776.4	1.32	6.2	
Ethylbenzene	757.2	10	800	2.054	94.4	80	111	767	1.28	6.7	
m,p-Xylene	1542	20	1600	3.836	96.1	72	117	1559	1.07	6.6	
o-Xylene	776.9	10	800	1.716	96.9	80	110	784.7	0.997	6.2	

Sample ID CCV1_030416	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 4/16/2003	Run ID: GC-1_030416A
Client ID: ZZZZZ	Batch ID: R4392	TestNo: SW8021B		Analysis Date: 4/16/2003	SeqNo: 63797

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.79	0.50	20	0	99	85	115	0	0		
Ethylbenzene	19.65	0.50	20	0	98.3	85	115	0	0		
m,p-Xylene	40.14	1.0	40	0	100	85	115	0	0		
o-Xylene	20.06	0.50	20	0	100	85	115	0	0		
Toluene	19.95	0.50	20	0	99.7	85	115	0	0		

Sample ID CCV2_030416	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 4/16/2003	Run ID: GC-1_030416A
Client ID: ZZZZZ	Batch ID: R4392	TestNo: SW8021B		Analysis Date: 4/16/2003	SeqNo: 63798

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.42	0.50	40	0	93.5	85	115	0	0		
Ethylbenzene	36.84	0.50	40	0	92.1	85	115	0	0		
m,p-Xylene	75.12	1.0	80	0	93.9	85	115	0	0		
o-Xylene	37.85	0.50	40	0	94.6	85	115	0	0		
Toluene	37.27	0.50	40	0	93.2	85	115	0	0		

Sample ID CCV3_030416	SampType: CCV	TestCode: BTEX_W	Units: µg/L	Prep Date: 4/16/2003	Run ID: GC-1_030416A
Client ID: ZZZZZ	Batch ID: R4392	TestNo: SW8021B		Analysis Date: 4/16/2003	SeqNo: 63799

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.65	0.50	20	0	98.3	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: 0304016
Project: XTO Energy - State GC BS #1

ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX_W

Sample ID	CCV3_030416	SampType:	CCV	TestCode:	BTEX_W	Units:	µg/L	Prep Date:	4/16/2003	Run ID:	GC-1_030416A
Client ID:	ZZZZZ	Batch ID:	R4392	TestNo:	SW8021B			Analysis Date:	4/16/2003	SeqNo:	63799

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	19.43	0.50	20	0	97.1	85	115	0	0		
m,p-Xylene	39.47	1.0	40	0	98.7	85	115	0	0		
o-Xylene	19.91	0.50	20	0	99.5	85	115	0	0		
Toluene	19.71	0.50	20	0	98.6	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: 21-Apr-03

CLIENT: Blagg Engineering
Work Order: 0304016
Project: XTO Energy - State GC BS #1
Test No: SW8021B **Matrix:** W

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	14FBZ	4BCBZ	FLBZ
0304016-001A	101	125	96.7
0304016-001A	101	126	96.4
0304016-001A	104	125	96.0
0304016-001AMS	101	125	96.7
0304016-001AMSD	101	126	96.4
0304016-002A	101	120	95.1
0304016-003A	102	120	95.5
0304016-004A	96.4	122	90.9
0304016-005A	98.3	124	98.3
CCV1_030416	102	117	95.7
CCV2_030416	103	126	95.2
CCV3_030416	103	121	96.0
LCS_030416	103	115	95.6
MB_030416	104	116	95.7

Acronym		Surrogate	QC Limits
14FBZ	=	1,4-Difluorobenzene	90-113
4BCBZ	=	4-Bromochlorobenzene	82-137
FLBZ	=	Fluorobenzene	85-115

*** Surrogate recovery outside acceptance limits**

iiná bá, Ltd.

Sample Receipt Checklist

Client Name: **BLA1002**

Date and Time Received: **4/11/2003**

Work Order Number: **0304016**

Received by: JEM

Checklist completed by: J Moore (Signature) 4/11/03 (Date)

Reviewed by: (Initials) (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	ON ICE Taken same Day
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

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **August 28, 2003** **SAMPLER :** N J V

Filename : **08-28-03.WK4** **PROJECT MANAGER :** N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.33	6.05	9.83	1045	6.73	7,800	24.6	1.00
2X	98.62	93.88	4.74	8.55	0910	6.81	3,300	24.2	1.75
3X	98.75	93.03	5.72	8.43	0930	6.78	3,600	24.4	0.75
4X	97.55	92.07	5.48	7.85	0945	6.71	4,100	25.7	1.00
5X	98.54	91.72	6.82	10.00	1030	6.75	3,900	22.0	0.75
6X	98.51	91.71	6.80	10.00	1015	6.87	3,700	21.7	3.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	08/28/03	0700		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

Sample duplicate collected from MW # 5X (labeled MW # 7X). Excellent recovery in MW # 6X. # 2X & # 4X. Poor recovery in # 3X, # 5X. Very poor recovery in MW # 1X. MW # 1X - yellowish tint in appearance (initial bail). Collected BTEX samples from all MW's listed above + duplicate mentioned above.

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #1X
Lab Order: 0308247
Collection Date: 8/28/2003 10:45:00 AM
Project: State GC BS #1
Lab ID: 0308247-01
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/9/2003 11:49:55 AM
Toluene	ND	0.50		µg/L	1	9/9/2003 11:49:55 AM
Ethylbenzene	0.55	0.50		µg/L	1	9/9/2003 11:49:55 AM
Xylenes, Total	0.56	0.50		µg/L	1	9/9/2003 11:49:55 AM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	1	9/9/2003 11:49:55 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

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #2X
Lab Order: 0308247
Collection Date: 8/28/2003 9:10:00 AM
Project: State GC BS #1
Lab ID: 0308247-02
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/8/2003 11:09:18 PM
Toluene	ND	0.50		µg/L	1	9/8/2003 11:09:18 PM
Ethylbenzene	ND	0.50		µg/L	1	9/8/2003 11:09:18 PM
Xylenes, Total	ND	0.50		µg/L	1	9/8/2003 11:09:18 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	1	9/8/2003 11:09:18 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

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #3X
Lab Order: 0308247
Collection Date: 8/28/2003 9:30:00 AM
Project: State GC BS #1
Lab ID: 0308247-03
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/8/2003 11:40:15 PM
Toluene	ND	0.50		µg/L	1	9/8/2003 11:40:15 PM
Ethylbenzene	ND	0.50		µg/L	1	9/8/2003 11:40:15 PM
Xylenes, Total	ND	0.50		µg/L	1	9/8/2003 11:40:15 PM
Surr: 4-Bromofluorobenzene	104	74-118		%REC	1	9/8/2003 11:40:15 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

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #4X
Lab Order: 0308247
Collection Date: 8/28/2003 9:45:00 AM
Project: State GC BS #1
Lab ID: 0308247-04
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/9/2003 12:11:05 AM
Toluene	ND	0.50		µg/L	1	9/9/2003 12:11:05 AM
Ethylbenzene	1.1	0.50		µg/L	1	9/9/2003 12:11:05 AM
Xylenes, Total	ND	0.50		µg/L	1	9/9/2003 12:11:05 AM
Surr: 4-Bromofluorobenzene	104	74-118		%REC	1	9/9/2003 12:11:05 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

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #5X
Lab Order: 0308247
Collection Date: 8/28/2003 10:30:00 AM
Project: State GC BS #1
Lab ID: 0308247-05
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	2.6	0.50		µg/L	1	9/9/2003 12:41:52 AM
Toluene	4.9	0.50		µg/L	1	9/9/2003 12:41:52 AM
Ethylbenzene	22	0.50		µg/L	1	9/9/2003 12:41:52 AM
Xylenes, Total	100	0.50		µg/L	1	9/9/2003 12:41:52 AM
Surr: 4-Bromofluorobenzene	112	74-118		%REC	1	9/9/2003 12:41:52 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

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #6X
Lab Order: 0308247
Collection Date: 8/28/2003 10:15:00 AM
Project: State GC BS #1
Lab ID: 0308247-06
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/9/2003 1:12:42 AM
Toluene	ND	0.50		µg/L	1	9/9/2003 1:12:42 AM
Ethylbenzene	ND	0.50		µg/L	1	9/9/2003 1:12:42 AM
Xylenes, Total	ND	0.50		µg/L	1	9/9/2003 1:12:42 AM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	1	9/9/2003 1:12:42 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

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Client Sample ID: MW #7X
Lab Order: 0308247
Collection Date: 8/28/2003 10:00:00 AM
Project: State GC BS #1
Lab ID: 0308247-07
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	3.4	0.50		µg/L	1	9/9/2003 1:43:31 AM
Toluene	5.9	0.50		µg/L	1	9/9/2003 1:43:31 AM
Ethylbenzene	30	0.50		µg/L	1	9/9/2003 1:43:31 AM
Xylenes, Total	140	0.50		µg/L	1	9/9/2003 1:43:31 AM
Surr: 4-Bromofluorobenzene	117	74-118		%REC	1	9/9/2003 1:43:31 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

Accreditation App
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 ENER. / XTO ENERGY
Address: P.O. BOX 87
BLOOMFIELD, NM 87413
Phone #: (505) 632-1199
Fax #: (505) 632-3703

Project Name: STATE GC B3 #1
Project #:
Project Manager: JEFF BLAGG
Sampler: NELSON VELEZ
Sample Temperature: 2°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative H_gCl_2	Preservative HNO_3	HEAL No.	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)
8/28/03	1045	WATER	MW #1X	2-40ml	✓		030847-1	✓															
8/28/03	0910	WATER	MW #2X	2-40ml	✓		-2	✓															
8/28/03	0930	WATER	MW #3X	2-40ml	✓		-3	✓															
8/28/03	0945	WATER	MW #4X	2-40ml	✓		-4	✓															
8/28/03	1030	WATER	MW #5X	2-40ml	✓		-5	✓															
8/28/03	1015	WATER	MW #6X	2-40ml	✓		-6	✓															
8/28/03	1000	WATER	MW #7X	2-40ml	✓		-7	✓															

Date: 8/29/03 Time: 0915 Relinquished By: (Signature) Nelson Velez
Remarks: Chris Green 8/29/03 1743

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

Remarks:

Hall Environmental Analysis Laboratory

Date: *10-Sep-03*

CLIENT: Blagg Engineering
Work Order: 0308247
Project: State GC BS #1

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R9482** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/8/2003 7:56:36 AM** Prep Date
Client ID: Run ID: **PIDFID_030908A** SeqNo: **213594**

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	20.18	0	20	0	101	74	118	0			

Sample ID **Reagent Blank 5m** Batch ID: **R9496** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/9/2003 9:36:08 AM** Prep Date
Client ID: Run ID: **PIDFID_030909A** SeqNo: **213940**

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	19.95	0	20	0	99.8	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: *10-Sep-03*

CLIENT: Blagg Engineering
Work Order: 0308247
Project: State GC BS #1

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX STD 100NG** Batch ID: **R9482** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/8/2003 7:02:57 PM** Prep Date
Client ID: Run ID: **PIDFID_030908A** SeqNo: **213640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.6	0.50	20	0	108	81.3	121	0			
Toluene	21.74	0.50	20	0	109	84.9	118	0			
Ethylbenzene	21.1	0.50	20	0	106	53.8	149	0			
Xylenes, Total	64	0.50	60	0	107	83.1	122	0			

Sample ID **BTEX Std 100ng** Batch ID: **R9482** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/8/2003 7:33:56 PM** Prep Date
Client ID: Run ID: **PIDFID_030908A** SeqNo: **213641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.76	0.50	20	0	109	81.3	121	21.6	0.710	27	
Toluene	21.82	0.50	20	0	109	84.9	118	21.74	0.378	19	
Ethylbenzene	20.71	0.50	20	0	104	53.8	149	21.1	1.88	10	
Xylenes, Total	64.4	0.50	60	0	107	83.1	122	64	0.623	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 **8/29/03**

Work Order Number **0308247** Received by **AT**

Checklist completed by Anne Thomas 8/29/03
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? **2°** *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

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

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

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

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38		-	9.83	-	-	-	-	-
2X	98.62		-	8.55	-	-	-	-	-
3X	98.75		-	8.43	-	-	-	-	-
4X	97.55		-	7.85	-	-	-	-	-
5X	98.54		6.09	10.00	0830	6.95	3,600	12.2	1.00
6X	98.51		6.05	10.00	0845	6.99	3,700	11.7	2.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	11/11/03	0730		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

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

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

Hall Environmental Analysis Laboratory

Date: *01-Dec-03*

CLIENT: Blagg Engineering
Project: State GC BS #1

Lab Order: 0311157

Lab ID: 0311157-01 **Collection Date:** 11/20/2003 8:30:00 AM
Client Sample ID: MW #5X **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1.4	1.0		µg/L	2	11/30/2003 8:04:25 PM
Toluene	4.9	1.0		µg/L	2	11/30/2003 8:04:25 PM
Ethylbenzene	17	1.0		µg/L	2	11/30/2003 8:04:25 PM
Xylenes, Total	93	1.0		µg/L	2	11/30/2003 8:04:25 PM
Surr: 4-Bromofluorobenzene	114	74-118		%REC	2	11/30/2003 8:04:25 PM

Lab ID: 0311157-02 **Collection Date:** 11/20/2003 8:45:00 AM
Client Sample ID: MW #6X **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	11/30/2003 9:05:29 PM
Toluene	ND	0.50		µg/L	1	11/30/2003 9:05:29 PM
Ethylbenzene	ND	0.50		µg/L	1	11/30/2003 9:05:29 PM
Xylenes, Total	ND	0.50		µg/L	1	11/30/2003 9:05:29 PM
Surr: 4-Bromofluorobenzene	100	74-118		%REC	1	11/30/2003 9:05:29 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 Ap[proval]: 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 ENER. / XTO ENERGY

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

Phone #: (505) 632-1179

Fax #: (505) 632-3903

Project Name: STATE GC BS #1

Project #:

Project Manager: NJV

Sampler: NJV

Sample Temperature: 1 °C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative H_gCl_2	Preservative HNO_3	Preservative	HEAL No.	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)
11/20/03	0830	WATER	MW #5X	2-40ml	✓			0311157-1	✓																
11/20/03	0845	WATER	MW #6X	2-40ml	✓			-2	✓																

Date:	Time:	Relinquished By: (Signature)	Remarks:
11/20/03	0920	[signature]	[signature] 11/20/03
Date:	Time:	Relinquished By: (Signature)	Remarks:

Remarks:

Hall Environmental Analysis Laboratory

Date: *01-Dec-03*

CLIENT: Blagg Engineering
Work Order: 0311157
Project: State GC BS #1

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R10208** Test Code: **SW8021** Units: **µg/L** Analysis Date **11/30/2003 1:57:24 PM** Prep Date

Client ID: Run ID: **PIDFID_031130A** SeqNo: **229168**

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	19.59	0	20	0	97.9	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: *01-Dec-03*

CLIENT: Blagg Engineering
Work Order: 0311157
Project: State GC BS #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0311157-02aMS** Batch ID: **R10208** Test Code: **SW8021** Units: **µg/L** Analysis Date **11/30/2003 9:36:01 PM** Prep Date
Client ID: **MW #6X** Run ID: **PIDFID_031130A** SeqNo: **229177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.2	0.50	20	0	111	77	122	0			
Toluene	20.7	0.50	20	0	103	81	115	0			
Ethylbenzene	20.04	0.50	20	0	100	84	117	0			
Xylenes, Total	61.24	0.50	60	0	102	84	116	0			

Sample ID **0311157-02aMSD** Batch ID: **R10208** Test Code: **SW8021** Units: **µg/L** Analysis Date **11/30/2003 10:37:05 P** Prep Date
Client ID: **MW #6X** Run ID: **PIDFID_031130A** SeqNo: **229178**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.51	0.50	20	0	108	77	122	22.2	3.19	27	
Toluene	19.95	0.50	20	0	99.7	81	115	20.7	3.70	19	
Ethylbenzene	19.59	0.50	20	0	98.0	84	117	20.04	2.25	10	
Xylenes, Total	59.96	0.50	60	0	99.9	84	116	61.24	2.12	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

1

Hall Environmental Analysis Laboratory

Date: *01-Dec-03*

CLIENT: Blagg Engineering
Work Order: 0311157
Project: State GC BS #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX Std 100ng** Batch ID: **R10208** Test Code: **SW8021** Units: **µg/L** Analysis Date **11/30/2003 2:58:49 PM** Prep Date

Client ID: Run ID: **PIDFID_031130A** SeqNo: **229186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.23	0.50	20	0	111	81.3	121	0			
Toluene	21.34	0.50	20	0	107	84.9	118	0			
Ethylbenzene	20.48	0.50	20	0	102	53.8	149	0			
Xylenes, Total	62.37	0.50	60	0	104	83.1	122	0			

Sample ID **BTEX Std 100ng** Batch ID: **R10208** Test Code: **SW8021** Units: **µg/L** Analysis Date **12/1/2003 1:09:48 AM** Prep Date

Client ID: Run ID: **PIDFID_031130A** SeqNo: **229189**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.38	0.50	20	0	107	81.3	121	22.23	3.91	27	
Toluene	19.81	0.50	20	0	99.0	84.9	118	21.34	7.44	19	
Ethylbenzene	19.28	0.50	20	0	96.4	53.8	149	20.48	6.05	10	
Xylenes, Total	59.67	0.50	60	0	99.5	83.1	122	62.37	4.42	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 Received: 11/20/2003

Work Order Number 0311157 | Received by AT

Checklist completed by Signature 11/20/03 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 ☐			
Water - pH acceptable upon receipt?		Yes ☐	No ☐	N/A ☑			

Container/Temp Blank temperature? **1°** *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

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **March 27, 2004** **SAMPLER :** N J V

Filename : **03-27-04.WK4** **PROJECT MANAGER :** N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	96.77	4.61	9.83	1130	7.10	6,200	12.8	1.25
2X	98.62	95.26	3.36	8.55	1113	6.96	3,500	11.3	2.50
3X	98.75	94.23	4.52	8.43	1109	7.00	3,400	12.0	1.25
4X	97.55	92.96	4.59	7.85	1035	6.91	3,900	11.0	1.50
5X	98.54	92.46	6.08	10.00	1044	7.01	3,700	11.1	1.00
6X	98.51	92.42	6.09	10.00	1023	7.05	3,700	12.4	2.00
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	03/27/04	0800		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

Hall Environmental Analysis Laboratory

Date: *05-Apr-04*

CLIENT: Blagg Engineering
Project: State GC B5 #1
Lab Order: 0403234

Lab ID: 0403234-01 **Collection Date:** 3/27/2004 11:30:00 AM
Client Sample ID: MW #1X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	3/30/2004 1:28:13 PM
Toluene	ND	0.50		µg/L	1	3/30/2004 1:28:13 PM
Ethylbenzene	ND	0.50		µg/L	1	3/30/2004 1:28:13 PM
Xylenes, Total	ND	0.50		µg/L	1	3/30/2004 1:28:13 PM
Surr: 4-Bromofluorobenzene	90.6	74-118		%REC	1	3/30/2004 1:28:13 PM

Lab ID: 0403234-02 **Collection Date:** 3/27/2004 11:13:00 AM
Client Sample ID: MW #2X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	3/30/2004 1:58:36 PM
Toluene	ND	0.50		µg/L	1	3/30/2004 1:58:36 PM
Ethylbenzene	ND	0.50		µg/L	1	3/30/2004 1:58:36 PM
Xylenes, Total	ND	0.50		µg/L	1	3/30/2004 1:58:36 PM
Surr: 4-Bromofluorobenzene	99.5	74-118		%REC	1	3/30/2004 1:58:36 PM

Lab ID: 0403234-03 **Collection Date:** 3/27/2004 11:09:00 AM
Client Sample ID: MW #3X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	3/30/2004 2:29:04 PM
Toluene	ND	0.50		µg/L	1	3/30/2004 2:29:04 PM
Ethylbenzene	ND	0.50		µg/L	1	3/30/2004 2:29:04 PM
Xylenes, Total	ND	0.50		µg/L	1	3/30/2004 2:29:04 PM
Surr: 4-Bromofluorobenzene	99.2	74-118		%REC	1	3/30/2004 2:29:04 PM

Lab ID: 0403234-04 **Collection Date:** 3/27/2004 10:35:00 AM
Client Sample ID: MW #4X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	3/30/2004 2:59:35 PM
Toluene	ND	0.50		µg/L	1	3/30/2004 2:59:35 PM
Ethylbenzene	1.2	0.50		µg/L	1	3/30/2004 2:59:35 PM
Xylenes, Total	ND	0.50		µg/L	1	3/30/2004 2:59:35 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	1	3/30/2004 2:59:35 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

Hall Environmental Analysis Laboratory

Date: *05-Apr-04*

CLIENT: Blagg Engineering
Project: State GC B5 #1
Lab Order: 0403234

Lab ID: 0403234-05
Collection Date: 3/27/2004 10:44:00 AM
Client Sample ID: MW #5X
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1.5	0.50		µg/L	1	3/30/2004 3:29:46 PM
Toluene	ND	0.50		µg/L	1	3/30/2004 3:29:46 PM
Ethylbenzene	5.4	0.50		µg/L	1	3/30/2004 3:29:46 PM
Xylenes, Total	19	0.50		µg/L	1	3/30/2004 3:29:46 PM
Surr: 4-Bromofluorobenzene	118	74-118		%REC	1	3/30/2004 3:29:46 PM

Lab ID: 0403234-06
Collection Date: 3/27/2004 10:23:00 AM
Client Sample ID: MW #6X
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	3/30/2004 4:00:08 PM
Toluene	ND	0.50		µg/L	1	3/30/2004 4:00:08 PM
Ethylbenzene	ND	0.50		µg/L	1	3/30/2004 4:00:08 PM
Xylenes, Total	ND	0.50		µg/L	1	3/30/2004 4:00:08 PM
Surr: 4-Bromofluorobenzene	98.4	74-118		%REC	1	3/30/2004 4:00:08 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

Hall Environmental Analysis Laboratory

Date: *05-Apr-04*

CLIENT: Blagg Engineering
Work Order: 0403234
Project: State GC B5 #1

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R11457** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/30/2004 10:10:48 AM** Prep Date

Client ID: Run ID: **PIDFID_040330A** SeqNo: **262658**

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	19.7	0	20	0	98.5	74	118	0			

3 / 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

1

Hall Environmental Analysis Laboratory

Date: *05-Apr-04*

CLIENT: Blagg Engineering
Work Order: 0403234
Project: State GC B5 #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0403234-03aMS** Batch ID: **R11457** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/30/2004 8:01:55 PM** Prep Date
Client ID: **MW #3X** Run ID: **PIDFID_040330A** SeqNo: **262677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.93	0.50	20	0	105	77	122	0			
Toluene	20.43	0.50	20	0	102	81	115	0			
Ethylbenzene	20.39	0.50	20	0	102	84	117	0			
Xylenes, Total	63.74	0.50	60	0.2186	106	84	116	0			

Sample ID **0403234-03aMSD** Batch ID: **R11457** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/30/2004 8:32:05 PM** Prep Date
Client ID: **MW #3X** Run ID: **PIDFID_040330A** SeqNo: **262678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.84	0.50	20	0	104	77	122	20.93	0.450	27	
Toluene	20.19	0.50	20	0	101	81	115	20.43	1.17	19	
Ethylbenzene	20.31	0.50	20	0	102	84	117	20.39	0.385	10	
Xylenes, Total	63.11	0.50	60	0.2186	105	84	116	63.74	0.990	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

J

CLIENT: Blagg Engineering
Work Order: 0403234
Project: State GC B5 #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX STD 100ng** Batch ID: **R11457** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/31/2004 12:32:41 AM** Prep Date

Client ID: Run ID: **PIDFID_040330A** SeqNo: **262679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.32	0.50	20	0	107	81.3	121	0			
Toluene	20.72	0.50	20	0	104	84.9	118	0			
Ethylbenzene	20.76	0.50	20	0	104	53.8	149	0			
Xylenes, Total	64.43	0.50	60	0	107	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

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG | Date and Time Received: 3/29/2004

Work Order Number 0403234 | Received by AT

Checklist completed by _____ 3/29/04
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 ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **5°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

Accreditation Applicable: NELAC ☐ USAGE ☐ Other: _____

Client: BLAGG ENER. / XTO ENERGY

Project Name: STATE GC B5 #1

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

Project #: 96

Project Manager: NJV

Phone #: 505-632-1199

Sampler: NJV

Fax #: 505-632-3903

Sample Temperature: 5.0

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 $HgCl_2$	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)
3/27/04	1130	WATER	MW #1X	2-40ml	✓		0304234-1	✓																
3/27/04	1113	WATER	MW #2X	2-40ml	✓		-2	✓																
3/27/04	1109	WATER	MW #3X	2-40ml	✓		-3	✓																
3/27/04	1035	WATER	MW #4X	2-40ml	✓		-4	✓																
3/27/04	1044	WATER	MW #5X	2-40ml	✓		-5	✓																
3/27/04	1023	WATER	MW #6X	2-40ml	✓		-6	✓																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	Remarks:
3/29/04	0730		3/29/04 1110	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **June 22, 2004**

SAMPLER : N J V

Filename : **06-22-04.WK4**

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING TIME	pH	CONDUCT (umhos)	TEMP. (celcius)	VOLUME PURGED (gal.)
1X	101.38	95.48	5.90	9.83	0855	6.79	8,000	18.6	1.00
2X	98.62	93.76	4.86	8.55	0835	6.86	3,200	18.1	1.75
3X	98.75	92.94	5.81	8.43	0825	6.95	3,300	18.4	0.75
4X	97.55	91.99	5.56	7.85	0750	6.85	4,200	16.6	1.00
5X	98.54	91.61	6.93	10.00	0800	6.74	4,400	16.0	0.75
6X	98.51	91.59	6.92	10.00	0740	6.91	4,000	14.8	1.50
					INSTRUMENT CALIBRATIONS =	7.00	2,800		
					DATE & TIME =	06/21/04	1220		

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

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

Ideally a minimum of three (3) wellbore volumes:

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

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

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Project: State GC BS #1
Lab Order: 0406216

Lab ID: 0406216-01 **Collection Date:** 6/22/2004 8:55:00 AM
Client Sample ID: MW #1X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.65	0.50		µg/L	1	7/2/2004 3:28:51 PM
Toluene	ND	0.50		µg/L	1	7/2/2004 3:28:51 PM
Ethylbenzene	ND	0.50		µg/L	1	7/2/2004 3:28:51 PM
Xylenes, Total	ND	0.50		µg/L	1	7/2/2004 3:28:51 PM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	1	7/2/2004 3:28:51 PM

Lab ID: 0406216-02 **Collection Date:** 6/22/2004 8:35:00 AM
Client Sample ID: MW #2X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	7/2/2004 4:00:26 PM
Toluene	ND	0.50		µg/L	1	7/2/2004 4:00:26 PM
Ethylbenzene	ND	0.50		µg/L	1	7/2/2004 4:00:26 PM
Xylenes, Total	ND	0.50		µg/L	1	7/2/2004 4:00:26 PM
Surr: 4-Bromofluorobenzene	101	74-118		%REC	1	7/2/2004 4:00:26 PM

Lab ID: 0406216-03 **Collection Date:** 6/22/2004 8:25:00 AM
Client Sample ID: MW #3X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	7/2/2004 4:32:02 PM
Toluene	ND	0.50		µg/L	1	7/2/2004 4:32:02 PM
Ethylbenzene	ND	0.50		µg/L	1	7/2/2004 4:32:02 PM
Xylenes, Total	ND	0.50		µg/L	1	7/2/2004 4:32:02 PM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	1	7/2/2004 4:32:02 PM

Lab ID: 0406216-04 **Collection Date:** 6/22/2004 7:50:00 AM
Client Sample ID: MW #4X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	7/2/2004 5:03:35 PM
Toluene	ND	0.50		µg/L	1	7/2/2004 5:03:35 PM
Ethylbenzene	0.73	0.50		µg/L	1	7/2/2004 5:03:35 PM
Xylenes, Total	ND	0.50		µg/L	1	7/2/2004 5:03:35 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	1	7/2/2004 5:03:35 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

Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Project: State GC BS #1
Lab Order: 0406216

Lab ID: 0406216-05 **Collection Date:** 6/22/2004 8:00:00 AM
Client Sample ID: MW #5X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	3.3	0.50		µg/L	1	7/2/2004 5:35:16 PM
Toluene	2.5	0.50		µg/L	1	7/2/2004 5:35:16 PM
Ethylbenzene	37	0.50		µg/L	1	7/2/2004 5:35:16 PM
Xylenes, Total	120	0.50		µg/L	1	7/2/2004 5:35:16 PM
Surr: 4-Bromofluorobenzene	132	74-118	S	%REC	1	7/2/2004 5:35:16 PM

Lab ID: 0406216-06 **Collection Date:** 6/22/2004 7:40:00 AM
Client Sample ID: MW #6X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	7/2/2004 6:06:48 PM
Toluene	ND	0.50		µg/L	1	7/2/2004 6:06:48 PM
Ethylbenzene	ND	0.50		µg/L	1	7/2/2004 6:06:48 PM
Xylenes, Total	ND	0.50		µg/L	1	7/2/2004 6:06:48 PM
Surr: 4-Bromofluorobenzene	100	74-118		%REC	1	7/2/2004 6:06:48 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 / XTO

Project Name: STATE GC BS #1

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

Project #: 91-

Project Manager: NJV

Phone #: 505-632-1199

Sampler: NJV

Fax #: 505-632-3903

Sample Temperature: 15

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	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)
6/22/04	0855	WATER	MW #1X	2-40ml	✓			0406216-1	✓																
6/22/04	0835	WATER	MW #2X	2-40ml	✓			-2	✓																
6/22/04	0825	WATER	MW #3X	2-40ml	✓			-3	✓																
6/22/04	0750	WATER	MW #4X	2-40ml	✓			-4	✓																
6/22/04	0800	WATER	MW #5X	2-40ml	✓			-5	✓																
6/22/04	0740	WATER	MW #6X	2-40ml	✓			-6	✓																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
6/22/04	0915	Melissa Vigil		
				6/22 1615
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Work Order: 0406216
Project: State GC BS #1

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R12337** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/2/2004 10:11:05 AM** Prep Date

Client ID: Run ID: **PIDFID_040702A** SeqNo: **283891**

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	19.72	0	20	0	98.6	74	118	0			

4 / 7

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

CLIENT: Blagg Engineering
Work Order: 0406216
Project: State GC BS #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0406216-06a ms** Batch ID: **R12337** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/2/2004 6:38:08 PM** Prep Date

Client ID: **MW #6X** Run ID: **PIDFID_040702A** SeqNo: **283915**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.42	0.5	20	0	107	77	122	0			
Toluene	19.85	0.5	20	0	99.2	81	115	0			
Ethylbenzene	19.06	0.5	20	0	95.3	84	117	0			
Xylenes, Total	57.01	0.5	60	0	95.0	84	116	0			
Surr: 4-Bromofluorobenzene	23.56	0	24	0	98.2	74	118	0			

Sample ID **0406216-06a msd** Batch ID: **R12337** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/2/2004 7:09:22 PM** Prep Date

Client ID: **MW #6X** Run ID: **PIDFID_040702A** SeqNo: **283916**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.06	0.5	20	0	105	77	122	21.42	1.69	27	
Toluene	19.48	0.5	20	0	97.4	81	115	19.85	1.88	19	
Ethylbenzene	19.25	0.5	20	0	96.3	84	117	19.06	0.991	10	
Xylenes, Total	56.4	0.5	60	0	94.0	84	116	57.01	1.07	13	
Surr: 4-Bromofluorobenzene	23.43	0	24	0	97.6	74	118	23.56	0.523	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

1

Hall Environmental Analysis Laboratory

Date: *07-Jul-04*

CLIENT: Blagg Engineering
Work Order: 0406216
Project: State GC BS #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX std 100ng** Batch ID: **R12337** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/2/2004 11:11:40 AM** Prep Date

Client ID: Run ID: **PIDFID_040702A** SeqNo: **283917**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.22	0.5	20	0	101	81.3	121	0			
Toluene	19.3	0.5	20	0	96.5	84.9	118	0			
Ethylbenzene	18.75	0.5	20	0	93.8	53.8	149	0			
Xylenes, Total	55.59	0.5	60	0	92.7	83.1	122	0			

6/7

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: 6/22/2004

Work Order Number 0406216 | Received by GT

Checklist completed by _____ 6/22/04
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 ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **1°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Hall Environmental Analysis Laboratory Date: *07-Jul-04*

CLIENT: Blagg Engineering
Project: State GC BS #1
Lab Order: 0406216

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0406216-05a: High surrogate due to matrix interference.

BLAGG ENGINEERING, INC.

MONITOR WELL DEVELOPMENT & / OR SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : N / A

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

LABORATORY (S) USED : HALL ENVIRONMENTAL

Date : **Sept. 24, 2004**

SAMPLER : N J V

Filename : **09-24-04.WK4**

PROJECT MANAGER : N J V

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

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

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

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

Ideally a minimum of three (3) wellbore volumes:

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

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

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

Comments or note well diameter if not standard 2 ".

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

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

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

(prior to purging - in ft.)

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

(@ time of sampling - in ft.)

Hall Environmental Analysis Laboratory

Date: *01-Oct-04*

CLIENT: Blagg Engineering
Project: State GC BS #1

Lab Order: 0409265

Lab ID: 0409265-01 **Collection Date:** 9/24/2004 2:55:00 PM
Client Sample ID: MW #1X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/29/2004 7:27:05 PM
Toluene	ND	0.50		µg/L	1	9/29/2004 7:27:05 PM
Ethylbenzene	ND	0.50		µg/L	1	9/29/2004 7:27:05 PM
Xylenes, Total	ND	0.50		µg/L	1	9/29/2004 7:27:05 PM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	1	9/29/2004 7:27:05 PM

Lab ID: 0409265-02 **Collection Date:** 9/24/2004 12:50:00 PM
Client Sample ID: MW #2X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/29/2004 7:56:48 PM
Toluene	ND	0.50		µg/L	1	9/29/2004 7:56:48 PM
Ethylbenzene	ND	0.50		µg/L	1	9/29/2004 7:56:48 PM
Xylenes, Total	ND	0.50		µg/L	1	9/29/2004 7:56:48 PM
Surr: 4-Bromofluorobenzene	100	74-118		%REC	1	9/29/2004 7:56:48 PM

Lab ID: 0409265-03 **Collection Date:** 9/24/2004 1:30:00 PM
Client Sample ID: MW #3X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/29/2004 9:55:38 PM
Toluene	ND	0.50		µg/L	1	9/29/2004 9:55:38 PM
Ethylbenzene	ND	0.50		µg/L	1	9/29/2004 9:55:38 PM
Xylenes, Total	ND	0.50		µg/L	1	9/29/2004 9:55:38 PM
Surr: 4-Bromofluorobenzene	98.9	74-118		%REC	1	9/29/2004 9:55:38 PM

Lab ID: 0409265-04 **Collection Date:** 9/24/2004 2:30:00 PM
Client Sample ID: MW #4X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/29/2004 10:25:22 PM
Toluene	ND	0.50		µg/L	1	9/29/2004 10:25:22 PM
Ethylbenzene	0.70	0.50		µg/L	1	9/29/2004 10:25:22 PM
Xylenes, Total	ND	0.50		µg/L	1	9/29/2004 10:25:22 PM
Surr: 4-Bromofluorobenzene	104	74-118		%REC	1	9/29/2004 10:25:22 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

Hall Environmental Analysis Laboratory

Date: *01-Oct-04*

CLIENT: Blagg Engineering
Project: State GC BS #1
Lab Order: 0409265

Lab ID: 0409265-05 **Collection Date:** 9/24/2004 2:40:00 PM
Client Sample ID: MW #5X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/29/2004 10:55:14 PM
Toluene	1.9	0.50		µg/L	1	9/29/2004 10:55:14 PM
Ethylbenzene	9.0	0.50		µg/L	1	9/29/2004 10:55:14 PM
Xylenes, Total	38	0.50		µg/L	1	9/29/2004 10:55:14 PM
Surr: 4-Bromofluorobenzene	110	74-118		%REC	1	9/29/2004 10:55:14 PM

Lab ID: 0409265-06 **Collection Date:** 9/24/2004 2:20:00 PM
Client Sample ID: MW #6X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/29/2004 11:25:04 PM
Toluene	ND	0.50		µg/L	1	9/29/2004 11:25:04 PM
Ethylbenzene	ND	0.50		µg/L	1	9/29/2004 11:25:04 PM
Xylenes, Total	ND	0.50		µg/L	1	9/29/2004 11:25:04 PM
Surr: 4-Bromofluorobenzene	98.4	74-118		%REC	1	9/29/2004 11:25:04 PM

Lab ID: 0409265-07 **Collection Date:** 9/24/2004 1:10:00 PM
Client Sample ID: MW #7X **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	1.3	0.50		µg/L	1	9/29/2004 11:54:52 PM
Toluene	ND	0.50		µg/L	1	9/29/2004 11:54:52 PM
Ethylbenzene	2.9	0.50		µg/L	1	9/29/2004 11:54:52 PM
Xylenes, Total	ND	0.50		µg/L	1	9/29/2004 11:54:52 PM
Surr: 4-Bromofluorobenzene	106	74-118		%REC	1	9/29/2004 11:54:52 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

Accreditation Applied: NELAC ☐ USACE ☐
Other: ____

Client: BLAGG ENGR. / XTO ENERGY

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

Phone #: 505-632-1199

Fax #: 505-632-3903

Project Name: STATE GC BS #1

Project #: NV

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. 0409265	(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)
9/24/04	1455	WATER	MW #1X	2-40ml	✓		0409265-1	✓												
9/24/04	1250	WATER	MW # 2X	2-40ml	✓		-2	✓												
9/24/04	1330	WATER	MW # 3X	2-40ml	✓		-3	✓												
9/24/04	1430	WATER	MW # 4X	2-40ml	✓		-4	✓												
9/24/04	1440	WATER	MW # 5X	2-40ml	✓		-5	✓												
9/24/04	1420	WATER	MW # 6X	2-40ml	✓		-6	✓												
9/24/04	1310	WATER	MW # 7X	2-40ml	✓		-7	✓												

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
9/27/04	0745	Nelson V[illegible]	[illegible] 9/27/04 1511

Remarks:

Hall Environmental Analysis Laboratory

Date: *01-Oct-04*

CLIENT: Blagg Engineering
Work Order: 0409265
Project: State GC BS #1

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID BTEX std 75ng **Batch ID:** R13280 **Test Code:** SW8021 **Units:** µg/L **Analysis Date** 9/29/2004 10:11:29 AM **Prep Date**
Client ID: **Run ID:** PIDFID_040929A **SeqNo:** 308634

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	14.91	0.5	15	0	99.4	81.3	121	0			
Toluene	14.9	0.5	15	0	99.3	84.9	118	0			
Ethylbenzene	14.62	0.5	15	0	97.4	53.8	149	0			
Xylenes, Total	45.09	0.5	45	0	100	83.1	122	0			

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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: *01-Oct-04*

CLIENT: Blagg Engineering
Work Order: 0409265
Project: State GC BS #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0409265-02a ms	Batch ID: R13280	Test Code: SW8021	Units: µg/L	Analysis Date 9/29/2004 8:56:11 PM	Prep Date
Client ID: MW #2X		Run ID: PIDFID_040929A		SeqNo: 308675	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.96	0.5	20	0	99.8	77	122	0			
Toluene	20.56	0.5	20	0	103	81	115	0			
Ethylbenzene	20.02	0.5	20	0	100	84	117	0			
Xylenes, Total	61.24	0.5	60	0	102	84	116	0			
Surr: 4-Bromofluorobenzene	24.01	0	24	0	100	74	118	0			

Sample ID 0409265-02a msd	Batch ID: R13280	Test Code: SW8021	Units: µg/L	Analysis Date 9/29/2004 9:25:54 PM	Prep Date
Client ID: MW #2X		Run ID: PIDFID_040929A		SeqNo: 308676	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.16	0.5	20	0	101	77	122	19.96	1.00	27	
Toluene	20.83	0.5	20	0	103	81	115	20.56	0.347	19	
Ethylbenzene	20.67	0.5	20	0	103	84	117	20.02	3.20	10	
Xylenes, Total	61.73	0.5	60	0	103	84	116	61.24	0.789	13	
Surr: 4-Bromofluorobenzene	24.16	0	24	0	101	74	118	24.01	0.586	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: *01-Oct-04*

CLIENT: Blagg Engineering
Work Order: 0409265
Project: State GC BS #1

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m **Batch ID:** R13280 **Test Code:** SW8021 **Units:** µg/L **Analysis Date** 9/29/2004 9:12:08 AM **Prep Date**
Client ID: **Run ID:** PIDFID_040929A **SeqNo:** 308814

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	19.17	0	20	0	95.9	74	118	0			

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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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name BLAGG Date and Time Received: 9/27/2004

Work Order Number 0409265 Received by AT

Checklist completed by _____ 9/27/04
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 ☐		
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 _____

ENVIROTECH LABS

ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	NCP-WH-1	Date Reported:	06-23-02
Laboratory Number:	23099	Date Sampled:	06-19-02
Chain of Custody No:	9084	Date Received:	06-19-02
Sample Matrix:	Soil	Date Extracted:	06-20-02
Preservative:	Cool	Date Analyzed:	06-23-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**8.9**	**0.2**
Diesel Range (C10 - C28)	**16.4**	**0.1**
Total Petroleum Hydrocarbons	**25.3**	**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: **Pearce GC #1E Compost Piles 5 Pt. Composite.**

Analyst

Review

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ENVIROTECH LABS

ENVIRONMENTAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	NCP-WH-1	Date Reported:	06-23-02
Laboratory Number:	23099	Date Sampled:	06-19-02
Chain of Custody:	9084	Date Received:	06-19-02
Sample Matrix:	Soil	Date Analyzed:	06-23-02
Preservative:	Cool	Date Extracted:	06-20-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**2.6**	**1.8**
Toluene	**5.3**	**1.7**
Ethylbenzene	**3.4**	**1.5**
p,m-Xylene	**85.3**	**2.2**
o-Xylene	**12.1**	**1.0**
Total BTEX	**109**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**98 %**
	1,4-difluorobenzene	**98 %**
	Bromochlorobenzene	**98 %**

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: **Pearce GC #1E Compost Piles 5 Pt. Composite.**

Analyst

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ENVIROTECH LABS

ALL ANALYSIS SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	NCP-EH-1	Date Reported:	06-23-02
Laboratory Number:	23100	Date Sampled:	06-19-02
Chain of Custody No:	9084	Date Received:	06-19-02
Sample Matrix:	Soil	Date Extracted:	06-20-02
Preservative:	Cool	Date Analyzed:	06-23-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**3.9**	**0.2**
Diesel Range (C10 - C28)	**9.8**	**0.1**
Total Petroleum Hydrocarbons	**13.7**	**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: **Pearce GC #1E Compost Piles 5 Pt. Composite.**

Analyst

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ENVIROTECH LABS

ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	ECP-1	Date Reported:	06-23-02
Laboratory Number:	23101	Date Sampled:	06-19-02
Chain of Custody No:	9084	Date Received:	06-19-02
Sample Matrix:	Soil	Date Extracted:	06-20-02
Preservative:	Cool	Date Analyzed:	06-23-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**38.8**	**0.2**
Diesel Range (C10 - C28)	**38.4**	**0.1**
Total Petroleum Hydrocarbons	**77.2**	**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: **Pearce GC #1E Compost Piles 5 Pt. Composite.**

Analyst

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ENVIROTECH LABS

ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	ECP-1	Date Reported:	06-23-02
Laboratory Number:	23101	Date Sampled:	06-19-02
Chain of Custody:	9084	Date Received:	06-19-02
Sample Matrix:	Soil	Date Analyzed:	06-23-02
Preservative:	Cool	Date Extracted:	06-20-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**2.5**	**1.8**
Toluene	**17.7**	**1.7**
Ethylbenzene	**10.0**	**1.5**
p,m-Xylene	**144**	**2.2**
o-Xylene	**27.3**	**1.0**
Total BTEX	**202**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**98 %**
	1,4-difluorobenzene	**98 %**
	Bromochlorobenzene	**98 %**

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: **Pearce GC #1E Compost Piles 5 Pt. Composite.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	MCP - 1	Date Reported:	07-19-02
Laboratory Number:	23311	Date Sampled:	07-18-02
Chain of Custody No:	9093	Date Received:	07-18-02
Sample Matrix:	Soil	Date Extracted:	07-18-02
Preservative:	Cool	Date Analyzed:	07-19-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1E Compost Pile 5 Pt. Composite.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	MCP - 1	Date Reported:	07-19-02
Laboratory Number:	23311	Date Sampled:	07-18-02
Chain of Custody:	9093	Date Received:	07-18-02
Sample Matrix:	Soil	Date Analyzed:	07-19-02
Preservative:	Cool	Date Extracted:	07-18-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**1.8**
Toluene	**6.9**	**1.7**
Ethylbenzene	**5.3**	**1.5**
p,m-Xylene	**50.6**	**2.2**
o-Xylene	**15.4**	**1.0**
Total BTEX	**78.2**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**99 %**
	1,4-difluorobenzene	**99 %**
	Bromochlorobenzene	**99 %**

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: **Pearce GC #1E Compost Pile 5 Pt. Composite.**

Analyst

Review

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ENVIROTECH LABS

ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	MCP - 2	Date Reported:	07-19-02
Laboratory Number:	23312	Date Sampled:	07-18-02
Chain of Custody No:	9093	Date Received:	07-18-02
Sample Matrix:	Soil	Date Extracted:	07-18-02
Preservative:	Cool	Date Analyzed:	07-19-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1E Compost Pile 5 Pt. Composite.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	MCP - 3	Date Reported:	07-19-02
Laboratory Number:	23313	Date Sampled:	07-18-02
Chain of Custody No:	9093	Date Received:	07-18-02
Sample Matrix:	Soil	Date Extracted:	07-18-02
Preservative:	Cool	Date Analyzed:	07-19-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Pearce GC #1E Compost Pile 5 Pt. Composite.**

Analyst

Review

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ENVIROTECH LABS

ENVIRONMENTAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-23-TPH QA/QC	Date Reported:	06-23-02
Laboratory Number:	23099	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-23-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**8.9**	**8.9**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**16.4**	**16.4**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**8.9**	**250**	**258**	**99.8%**	**75 - 125%**
Diesel Range C10 - C28	**16.4**	**250**	**266**	**99.8%**	**75 - 125%**

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: **QA/QC for samples 23099 - 23108.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

09084

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG / XTO	COMPOST PILES PEARCE GC #1E	
Sampler: NJV	Client No. 94034-010	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)	BTEX (8021B)					Remarks
NCP-WH-1	6/19/02	1320	23099	SOIL	1	✓	✓					PRESERVED COOL ALL SAMPLES 5 PT. COMPO[illegible]
NCP-EH-1	6/19/02	1335	23100	SOIL	1	✓						
ECP-1	6/19/02	1402	23101	SOIL	1	✓	✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6/19/02	1436	[signature]	6-19-02	1436
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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

CHAIN OF CUSTODY RECORD

09097

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG / XTO	COMPOST PILE PEARCE GC #1E	

Sampler:	Client No.
NJV	94034-010

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)	BTEX (8021B)	Remarks
								PRESERVED COOL
								ALL SAMPLES -
MCP-1	7/18/02	0825	23311	SOIL	1	✓	✓	5 PT. COMPOSITE
				~~SOIL~~ AIR				
MCP-2	7/18/02	0845	23312	SOIL	1	✓		
MCP-3	7/18/02	0900	23313	SOIL	1	✓		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	7/18/02	1017	Glenn E. Spencer	7-18-02	1017
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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(505) 632-0615

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

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-19-TPH QA/QC	Date Reported:	07-19-02
Laboratory Number:	23309	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-19-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**56.4**	**56.2**	**0.4%**	**0 - 30%**
Diesel Range C10 - C28	**574**	**572**	**0.3%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**56.4**	**250**	**306**	**99.8%**	**75 - 125%**
Diesel Range C10 - C28	**574**	**250**	**822**	**99.8%**	**75 - 125%**

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: **QA/QC for samples 23309 - 23313.**

Analyst

Review

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ENVIROTECH LABS

ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	06-23-BTEX QA/QC	Date Reported:	06-23-02
Laboratory Number:	23099	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-23-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.6	2.6	0.0%	0 - 30%	1.8
Toluene	5.3	5.3	0.0%	0 - 30%	1.7
Ethylbenzene	3.4	3.3	2.9%	0 - 30%	1.5
p,m-Xylene	85.3	85.0	0.4%	0 - 30%	2.2
o-Xylene	12.1	12.1	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2.6	50.0	52.5	99.8%	39 - 150
Toluene	5.3	50.0	55.2	99.8%	46 - 148
Ethylbenzene	3.4	50.0	53.3	99.8%	32 - 160
p,m-Xylene	85.3	100	185	99.9%	46 - 148
o-Xylene	12.1	50.0	62.0	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23099, 23101 - 23102, 23104 - 23107.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-19-BTEX QA/QC	Date Reported:	07-19-02
Laboratory Number:	23309	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-19-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	52.7	51.7	1.9%	0 - 30%	1.7
Ethylbenzene	23.2	22.7	2.2%	0 - 30%	1.5
p,m-Xylene	244	251	2.8%	0 - 30%	2.2
o-Xylene	74.6	76.7	2.8%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	52.7	50.0	102	98.9%	46 - 148
Ethylbenzene	23.2	50.0	73.1	99.9%	32 - 160
p,m-Xylene	244	100	343	99.7%	46 - 148
o-Xylene	74.6	50.0	124	99.1%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23309 and 23311.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

0907

Client / Project Name: BLAGG / BP

Project Location: PEARCE GC #1

Sampler: NJV

Client No.: 94034-010

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)		PAH (8310)				Remarks
												PRESERVED COOL
												GRAB SAMPLES
TH1 @ 4.5'	6/10/02	1120	22890	SOIL	1	✓						
TH3 @ 4.5'	6/10/02	1147	22891	SOIL	1	✓						
TH3 @ GW (5.5')	6/10/02	1157	22892	WATER	1			✓				
(1A) @ 4'	6/10/02	1440	22893	SOIL	1	✓						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6/11/02	7:50	[signature]	6-11-02	7:30

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

CHAIN OF CUSTODY RECORD

0908

Client / Project Name	Project Location
BLAGG / XTO	PEARCE EC #1E
Sampler: NJV	**Client No.** 94034-010

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)	BTEX (8021B)		PAH (8310)	Anion/ Cation		Remarks
												PRESERVED COOL
												GRAB SAMPLES
TH8 @ 2.5'	6/14/02	0830	23057	SOIL	1	✓	✓					
N-EX@GW (5')	6/14/02	0900	23058	WATER	1				✓			
C-EX@GW (3.5')	6/14/02	1330	23059	WATER	1					✓		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	6/14/02	1415	[signature]	6-14-02	1415
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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

CHAIN OF CUSTODY RECORD

0908[illegible]

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG / XTO	PEARCE GC #1E	
Sampler: NJV	Client No. 94034-010	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)	BTEX (8021B)		PAH (8310)			Remarks
												PRESERVED COOL
												GRAB SAMPLES
N-EX @ 5' (MW 2)	6/17/02	0655	23070	SOIL	1	✓						
N-EX @ 4' (NE)	6/17/02	1100	23071	SOIL	1	✓						
M-EX @ 4' (MW 4R)	6/17/02	1308	23072	SOIL	1	✓						
DEHY. ① @ 3.5'	6/17/02	1515	23073	SOIL	1	✓	✓					
D.T.H. @ GW (8')	6/17/02	1525	23074	WATER	1				✓			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6/18/02	0718	[signature]	6-18-02	0718
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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

CHAIN OF CUSTODY RECORD

09089

Client / Project Name	Project Location
BLAGG / XTO	PEARCE GC #1E
Sampler: NJV	**Client No.** 94034-010

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)	BTEX (8021B)					Remarks
												PRESERVED COOL
												GRAB SAMPLE
NW-SEEXC 4.5'	6/19/02	~~0801~~ 0815	23098	SOIL	1	✓	✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6/19/02	1040	[signature]	6-19-02	1040
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Sample Receipt

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

CHAIN OF CUSTODY RECORD

09098

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/XTO	PEARCE GC #1E	
Sampler: NJV	Client No. 94034-010	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015B)	BTEX (8021B)				Remarks
											PRESERVED COOL
											GRAB SAMPLE
OSDP @ 2'	6/23/02	1112	23203	SOIL	1	✓	✓				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6/28/02	1323	[signature]	6-28-02	1323
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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

CHAIN OF CUSTODY RECORD

100

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG / XTO	PEARCE GC #1 EPNG PIT	
Sampler: J-C. Blagg	Client No. 94034-010	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015	BTEX 8021					Remarks
#1 @ 3.5'	7/9/02	1549	23261	SOIL	1	X						
#2 @ 5'	"	1554	23262	"	1	X						
#3 @ 3.5'	"	1603	23263	"	1	X	X					
#4 @ 4'	"	1606	23264	"	1	X						
#5 @ 4'	"	1613	23265	"	1	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
J-C. Blagg	7/9/02	1704	[signature]	7.9	17:04
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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

CHAIN OF CUSTODY RECORD

10065

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG / XTO	STATE GC BS #1 - DEHY PIT	

Sampler:	Client No.
J.C. Blagg	94034-010

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015						Remarks
#1 @ 4'	7/11/02	0740	23275	SOIL	1	X						
#2 @ 4'	"	0742	23276	"	1	X						
#3 @ 4'	"	0746	23277	"	1	X						
#4 @ 4'	"	0748	23278	"	1	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
J.C. Blagg	7/11/02	0845	Brian L. Alexander	7-11-02	0845
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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(505) 632-0615

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

1006

CHAIN OF CUSTODY RECORD

Client / Project Name	Project Location
BLAGG/XTO	PEARCE GC #1
Sampler: J-C. Blagg	Client No. 94034-010

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015						Remarks
TH #101 @ 4'	7/12/2	0706	23282	SOIL	1	X						
TH #102 @ 4'	"	0710	23283	"	1	X						
TH #103 @ 4'	"	0722	23284	"	1	X						

ANALYSIS / PARAMETERS

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
J-C. Blagg	7/12/2	0932	[signature]	7-12-02	0832
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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

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: _____

Page: _____ of _____

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

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

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

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LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: _____

Page: _____ of _____

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

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

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: _____

Page: ____ of ____

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	BTEX (8021)	LAB ID
TH 5 @ GW (7.5')	6/16/92	1420	WATER	ICE/COOL	2	/	
TH 6 @ GW (7.5')	6/16/92	1440	WATER	ICE/COOL	2	/	
TH 7 @ GW (7.5')	6/16/92	1500	WATER	ICE/COOL	2	/	

ANALYSIS REQUESTED

Relinquished by:	Date/Time 6/16/92	Received by:	Date/Time 6/16/92 0845
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

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Date: _____

Page: _____ of _____

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 [X] | 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

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Date: _____

Page: _____ of _____

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 [X] 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

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LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: _____

Page: _____ of _____

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 [X] 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

CHAIN-OF-CUSTODY RECORD

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

Client: Envirotech	Project Name: Blass / XTO Pearce GC #1E
Address: 5796 US Hwy 64 Farmington, NM 87401	Project #: 94034-010 / E3548
	Project Manager: D Alexander
Phone #: 505-632-0615	Sampler: N. Valez
Fax #: 505-632-1865	Samples Cold?: ☐ Yes ☐ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HCl	Preservative	HEAL No.
6/4/02	0900	H2O	23058 N-EXCGW(5')	1 L				02060104

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	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)
							X									

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
6/17/02	830		6/17/02 1055
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

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

Client: Envirotech Inc

Address: 5796 US Hwy 64
Farmington, NM
87401 ~~87410~~

Phone #: 505-632-0615

Fax #: 505-632-1865

Project Name: Blagg / XTO

Project #: 94034-010

Project Manager: Denis Ajemen

Sampler: NJV

Samples Cold?: ☑ Yes ☐ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HCl	Preservative	HEAL No.
6/17/02	15:25	Water	23074	1 Amber				~~0206114~~ 0206114-1

ANALYSIS REQUEST

Sample I.D. No.	BTEX + MTBE + TMB's (8021)	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)
23074								✓									

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
6/18/02	8:30	Mistie Walters	[signature] 6/19/02 0940
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Ref PO# E3549

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-11-TPH QA/QC	Date Reported:	06-11-02
Laboratory Number:	22890	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-11-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

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: **QA/QC for samples 22890 - 22891, 22893.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-17-TPH QA/QC	Date Reported:	06-17-02
Laboratory Number:	23053	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-17-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

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: **QA/QC for samples 23053 - 23054, 23056 - 23057.**

Analyst

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EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-18-TPH QA/QC	Date Reported:	06-18-02
Laboratory Number:	23068	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-18-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

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: **QA/QC for samples 23068 - 23073.**

Analyst

Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-20-TPH QA/QC	Date Reported:	06-20-02
Laboratory Number:	23083	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-20-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

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: **QA/QC for samples 23083 - 23090, 23098.**

Analyst

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EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-01-TPH QA/QC	Date Reported:	07-01-02
Laboratory Number:	23181	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-01-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**771**	**768**	**0.4%**	**0 - 30%**
Diesel Range C10 - C28	**202**	**202**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**771**	**250**	**1,020**	**99.9%**	**75 - 125%**
Diesel Range C10 - C28	**202**	**250**	**451**	**99.8%**	**75 - 125%**

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: **QA/QC for samples 23181 - 23183, 23186, 23203 - 23206, 23145.**

Analyst

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EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-11-TPH QA/QC	Date Reported:	07-11-02
Laboratory Number:	23261	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

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: **QA/QC for samples 23261 - 23269.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-12-TPH QA/QC	Date Reported:	07-12-02
Laboratory Number:	23275	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-12-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

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: **QA/QC for samples 23275 - 23278.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-15-TPH QA/QC	Date Reported:	07-15-02
Laboratory Number:	23279	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-15-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**30.2**	**30.1**	**0.3%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**30.2**	**250**	**280**	**99.8%**	**75 - 125%**

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: **QA/QC for samples 23279 - 23284.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	06-17-BTEX QA/QC	Date Reported:	06-17-02
Laboratory Number:	23053	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-17-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	2.4	2.4	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	7.2	7.2	0.0%	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0%	0 - 30%	2.2
o-Xylene	ND	ND	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	2.4	50.0	52.3	99.8%	39 - 150
Toluene	ND	50.0	49.9	99.8%	46 - 148
Ethylbenzene	7.2	50.0	57.1	99.8%	32 - 160
p,m-Xylene	ND	100	99.8	99.8%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23053 - 23054, 23056 - 23057.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	06-18-BTEX QA/QC	Date Reported:	06-18-02
Laboratory Number:	23068	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-18-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	3.1	3.2	3.2%	0 - 30%	1.8
Toluene	2.3	2.4	4.3%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0%	0 - 30%	2.2
o-Xylene	ND	ND	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	3.1	50.0	53.0	99.8%	39 - 150
Toluene	2.3	50.0	52.2	99.8%	46 - 148
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160
p,m-Xylene	ND	100	99.8	99.8%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23068 - 23069, 23073.**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	06-20-BTEX QA/QC	Date Reported:	06-20-02
Laboratory Number:	23083	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-20-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0%	0 - 30%	2.2
o-Xylene	ND	ND	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	49.9	99.8%	46 - 148
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160
p,m-Xylene	ND	100	99.8	99.8%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23083 - 23090, 23098.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-01-BTEX QA/QC	Date Reported:	07-01-02
Laboratory Number:	23181	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-01-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	20.4	20.5	0.5%	0 - 30%	1.8
Toluene	106	106	0.0%	0 - 30%	1.7
Ethylbenzene	116	117	0.5%	0 - 30%	1.5
p,m-Xylene	558	562	0.6%	0 - 30%	2.2
o-Xylene	109	110	1.1%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	20.4	50.0	70.3	99.9%	39 - 150
Toluene	106	50.0	156	100.0%	46 - 148
Ethylbenzene	116	50.0	166	100.0%	32 - 160
p,m-Xylene	558	100	658	100.0%	46 - 148
o-Xylene	109	50.0	159	100.0%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23181 - 23183, 23186, 23203.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-11-BTEX QA/QC	Date Reported:	07-11-02
Laboratory Number:	23263	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6995E-002	0.3%	ND	0.2
Toluene	3.3709E-002	3.3777E-002	0.2%	ND	0.2
Ethylbenzene	5.8262E-002	5.8438E-002	0.3%	ND	0.2
p,m-Xylene	7.1891E-002	7.2107E-002	0.3%	ND	0.2
o-Xylene	5.4522E-002	5.4631E-002	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	4.0	4.0	0.0%	0 - 30%	1.8
Toluene	26.9	26.8	0.4%	0 - 30%	1.7
Ethylbenzene	9.9	9.8	1.0%	0 - 30%	1.5
p,m-Xylene	88.3	88.1	0.2%	0 - 30%	2.2
o-Xylene	18.1	18.1	0.0%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	4.0	50.0	53.9	99.8%	39 - 150
Toluene	26.9	50.0	76.8	99.9%	46 - 148
Ethylbenzene	9.9	50.0	59.8	99.8%	32 - 160
p,m-Xylene	88.3	100	188	99.9%	46 - 148
o-Xylene	18.1	50.0	68.0	99.9%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 23263, 23266 - 23269.**

Analyst

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On Site Technologies, LTD.

Date: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206013
Project: *Unknown*

QC SUMMARY REPORT

Method Blank

Sample ID: **MB_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51629**

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	.1219	1									J
o-Xylene	.0438	0.5									J
Toluene	.1198	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: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206013
Project: Unknown

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0206002-01AMS** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	224.3	2.5	200	32.2	96.1%	70	130				
Ethylbenzene	198.9	2.5	200	2.346	98.3%	70	130				
m,p-Xylene	413.5	5	400	24	97.4%	70	130				
o-Xylene	197.2	2.5	200	5.974	95.6%	70	130				
Toluene	209.4	2.5	200	18.41	95.5%	70	130				

Sample ID: **0206002-01AMSD** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	221.4	2.5	200	32.2	94.6%	70	130	224.3	1.3%	15	
Ethylbenzene	196	2.5	200	2.346	96.8%	70	130	198.9	1.5%	15	
m,p-Xylene	407.2	5	400	24	95.8%	70	130	413.5	1.5%	15	
o-Xylene	194.9	2.5	200	5.974	94.5%	70	130	197.2	1.2%	15	
Toluene	206.3	2.5	200	18.41	93.9%	70	130	209.4	1.5%	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

On Site Technologies, LTD.

Date: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206013
Project: Unknown

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.31	0.5	40	0	93.3%	80	120				
Ethylbenzene	38.48	0.5	40	0	96.2%	80	120				
m,p-Xylene	76.48	1	80	0.1219	95.4%	80	120				
o-Xylene	37.39	0.5	40	0.0438	93.4%	80	120				
Toluene	37.02	0.5	40	0.1198	92.2%	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: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206013
Project: Unknown

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51622**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.82	0.5	20	0	94.1%	85	115				
Ethylbenzene	19.6	0.5	20	0	98.0%	85	115				
m,p-Xylene	38.8	1	40	0	97.0%	85	115				
o-Xylene	18.88	0.5	20	0	94.4%	85	115				
Toluene	18.74	0.5	20	0	93.7%	85	115				
1,4-Difluorobenzene	106.6	0	110	0	96.9%	70	130				
4-Bromochlorobenzene	108.7	0	110	0	98.9%	70	130				
Fluorobenzene	108	0	110	0	98.2%	70	130				

Sample ID: **CCV2_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51623**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.1	0.5	20	0	95.5%	85	115				
Ethylbenzene	19.58	0.5	20	0	97.9%	85	115				
m,p-Xylene	39.22	1	40	0	98.1%	85	115				
o-Xylene	19.06	0.5	20	0	95.3%	85	115				
Toluene	18.9	0.5	20	0	94.5%	85	115				
1,4-Difluorobenzene	107.1	0	110	0	97.4%	70	130				
4-Bromochlorobenzene	122.2	0	110	0	111.1%	70	130				
Fluorobenzene	108.6	0	110	0	98.8%	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: 0206013
Project: Unknown

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV3_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51624**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.56	0.5	40	0	96.4%	85	115				
Ethylbenzene	39.34	0.5	40	0	98.3%	85	115				
m,p-Xylene	77.76	1	80	0	97.2%	85	115				
o-Xylene	38.17	0.5	40	0	95.4%	85	115				
Toluene	38.04	0.5	40	0	95.1%	85	115				
1,4-Difluorobenzene	106.2	0	110	0	96.6%	70	130				
4-Bromochlorobenzene	117.2	0	110	0	106.6%	70	130				
Fluorobenzene	107.8	0	110	0	98.0%	70	130				

Sample ID: **CCV4_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/12/2002** Prep Date: **06/12/2002**

Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.76	0.5	20	0	93.8%	85	115				
Ethylbenzene	19.45	0.5	20	0	97.3%	85	115				
m,p-Xylene	38.91	1	40	0	97.3%	85	115				
o-Xylene	18.83	0.5	20	0	94.2%	85	115				
Toluene	18.61	0.5	20	0	93.0%	85	115				
1,4-Difluorobenzene	107.8	0	110	0	98.0%	70	130				
4-Bromochlorobenzene	108.9	0	110	0	99.0%	70	130				
Fluorobenzene	109.3	0	110	0	99.4%	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: 0206013
Project: Unknown

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV5_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/12/2002** Prep Date: **06/12/2002**

Client ID: **0206013** Run ID: **GC-1_020610A** SeqNo: **51626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.63	0.5	20	0	93.2%	85	115				
Ethylbenzene	18.96	0.5	20	0	94.8%	85	115				
m,p-Xylene	37.88	1	40	0	94.7%	85	115				
o-Xylene	18.32	0.5	20	0	91.6%	85	115				
Toluene	18.22	0.5	20	0	91.1%	85	115				
1,4-Difluorobenzene	107.4	0	110	0	97.7%	70	130				
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130				
Fluorobenzene	109.6	0	110	0	99.6%	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: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0206013
Project: Unknown
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0205047-01A	97.8	108	99.6
0205047-02A	95.9	111	98
0205047-03A	97.2	110	99
0205049-01A	98	117	99.7
0205049-02A	96.9	105	99.1
0206001-01A	95.7	105	97.5
0206002-01A	96.4	105	98.4
0206002-01AMS	95.8	115	97.7
0206002-01AMSD	95.9	112	97.4
0206012-01A	96	103	98.4
0206012-02A	97.8	102	99.7
0206012-03A	97.8	107	100
0206013-01A	97.8	106	99
0206014-01A	96.7	106	98.6
0206014-02A	97.1	106	99.9
0206014-03A	98.2	107	101
CCV1_020611	96.9	98.8	98.2
CCV2_020611	97.4	111	98.8
CCV3_020611	96.6	106	98
CCV4_020611	98	99	99.4
CCV5_020611	97.6	108	99.6
LCS_020611	96.9	103	98.1
MB_020611	98.4	105	99.5

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

*** Surrogate recovery outside acceptance limits**

On Site Technologies, LTD.

Date: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206012
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51629**

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	.1219	1									J
o-Xylene	.0438	0.5									J
Toluene	.1198	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: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206012
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0206002-01AMS** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	224.3	2.5	200	32.2	96.1%	70	130				
Ethylbenzene	198.9	2.5	200	2.346	98.3%	70	130				
m,p-Xylene	413.5	5	400	24	97.4%	70	130				
o-Xylene	197.2	2.5	200	5.974	95.6%	70	130				
Toluene	209.4	2.5	200	18.41	95.5%	70	130				

Sample ID: **0206002-01AMSD** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	221.4	2.5	200	32.2	94.6%	70	130	224.3	1.3%	15	
Ethylbenzene	196	2.5	200	2.346	96.8%	70	130	198.9	1.5%	15	
m,p-Xylene	407.2	5	400	24	95.8%	70	130	413.5	1.5%	15	
o-Xylene	194.9	2.5	200	5.974	94.5%	70	130	197.2	1.2%	15	
Toluene	206.3	2.5	200	18.41	93.9%	70	130	209.4	1.5%	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

On Site Technologies, LTD.

Date: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206012
Project: BP - Pearce GC #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.31	0.5	40	0	93.3%	80	120				
Ethylbenzene	38.48	0.5	40	0	96.2%	80	120				
m,p-Xylene	76.48	1	80	0.1219	95.4%	80	120				
o-Xylene	37.39	0.5	40	0.0438	93.4%	80	120				
Toluene	37.02	0.5	40	0.1198	92.2%	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: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206012
Project: BP - Pearce GC #1

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51622**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.82	0.5	20	0	94.1%	85	115				
Ethylbenzene	19.6	0.5	20	0	98.0%	85	115				
m,p-Xylene	38.8	1	40	0	97.0%	85	115				
o-Xylene	18.88	0.5	20	0	94.4%	85	115				
Toluene	18.74	0.5	20	0	93.7%	85	115				
1,4-Difluorobenzene	106.6	0	110	0	96.9%	70	130				
4-Bromochlorobenzene	108.7	0	110	0	98.9%	70	130				
Fluorobenzene	108	0	110	0	98.2%	70	130				

Sample ID: **CCV2_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51623**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.1	0.5	20	0	95.5%	85	115				
Ethylbenzene	19.58	0.5	20	0	97.9%	85	115				
m,p-Xylene	39.22	1	40	0	98.1%	85	115				
o-Xylene	19.06	0.5	20	0	95.3%	85	115				
Toluene	18.9	0.5	20	0	94.5%	85	115				
1,4-Difluorobenzene	107.1	0	110	0	97.4%	70	130				
4-Bromochlorobenzene	122.2	0	110	0	111.1%	70	130				
Fluorobenzene	108.6	0	110	0	98.8%	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: 0206012
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51624**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.56	0.5	40	0	96.4%	85	115				
Ethylbenzene	39.34	0.5	40	0	98.3%	85	115				
m,p-Xylene	77.76	1	80	0	97.2%	85	115				
o-Xylene	38.17	0.5	40	0	95.4%	85	115				
Toluene	38.04	0.5	40	0	95.1%	85	115				
1,4-Difluorobenzene	106.2	0	110	0	96.6%	70	130				
4-Bromochlorobenzene	117.2	0	110	0	106.6%	70	130				
Fluorobenzene	107.8	0	110	0	98.0%	70	130				

Sample ID: **CCV4_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/12/2002** Prep Date: **06/12/2002**
Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.76	0.5	20	0	93.8%	85	115				
Ethylbenzene	19.45	0.5	20	0	97.3%	85	115				
m,p-Xylene	38.91	1	40	0	97.3%	85	115				
o-Xylene	18.83	0.5	20	0	94.2%	85	115				
Toluene	18.61	0.5	20	0	93.0%	85	115				
1,4-Difluorobenzene	107.8	0	110	0	98.0%	70	130				
4-Bromochlorobenzene	108.9	0	110	0	99.0%	70	130				
Fluorobenzene	109.3	0	110	0	99.4%	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: 0206012
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV5_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/12/2002** Prep Date: **06/12/2002**

Client ID: **0206012** Run ID: **GC-1_020610A** SeqNo: **51626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.63	0.5	20	0	93.2%	85	115				
Ethylbenzene	18.96	0.5	20	0	94.8%	85	115				
m,p-Xylene	37.88	1	40	0	94.7%	85	115				
o-Xylene	18.32	0.5	20	0	91.6%	85	115				
Toluene	18.22	0.5	20	0	91.1%	85	115				
1,4-Difluorobenzene	107.4	0	110	0	97.7%	70	130				
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130				
Fluorobenzene	109.6	0	110	0	99.6%	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: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0206012
Project: BP - Pearce GC #1
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0205047-01A	97.8	108	99.6
0205047-02A	95.9	111	98
0205047-03A	97.2	110	99
0205049-01A	98	117	99.7
0205049-02A	96.9	105	99.1
0206001-01A	95.7	105	97.5
0206002-01A	96.4	105	98.4
0206002-01AMS	95.8	115	97.7
0206002-01AMSD	95.9	112	97.4
0206012-01A	96	103	98.4
0206012-02A	97.8	102	99.7
0206012-03A	97.8	107	100
0206013-01A	97.8	106	99
0206014-01A	96.7	106	98.6
0206014-02A	97.1	106	99.9
0206014-03A	98.2	107	101
CV1_020611	96.9	98.8	98.2
CCV2_020611	97.4	111	98.8
CCV3_020611	96.6	106	98
CCV4_020611	98	99	99.4
CCV5_020611	97.6	108	99.6
LCS_020611	96.9	103	98.1
MB_020611	98.4	105	99.5

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

*** Surrogate recovery outside acceptance limits**

On Site Technologies, LTD.

Date: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206014
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51629**

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	.1219	1									J
o-Xylene	.0438	0.5									J
Toluene	.1198	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: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206014
Project: BP - Pearce GC #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0206002-01AMS** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	224.3	2.5	200	32.2	96.1%	70	130				
Ethylbenzene	198.9	2.5	200	2.346	98.3%	70	130				
m,p-Xylene	413.5	5	400	24	97.4%	70	130				
o-Xylene	197.2	2.5	200	5.974	95.6%	70	130				
Toluene	209.4	2.5	200	18.41	95.5%	70	130				

Sample ID: **0206002-01AMSD** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	221.4	2.5	200	32.2	94.6%	70	130	224.3	1.3%	15	
Ethylbenzene	196	2.5	200	2.346	96.8%	70	130	198.9	1.5%	15	
m,p-Xylene	407.2	5	400	24	95.8%	70	130	413.5	1.5%	15	
o-Xylene	194.9	2.5	200	5.974	94.5%	70	130	197.2	1.2%	15	
Toluene	206.3	2.5	200	18.41	93.9%	70	130	209.4	1.5%	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

On Site Technologies, LTD.

Date: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206014
Project: BP - Pearce GC #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**

Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.31	0.5	40	0	93.3%	80	120				
Ethylbenzene	38.48	0.5	40	0	96.2%	80	120				
m,p-Xylene	76.48	1	80	0.1219	95.4%	80	120				
o-Xylene	37.39	0.5	40	0.0438	93.4%	80	120				
Toluene	37.02	0.5	40	0.1198	92.2%	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: *18-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206014
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV1_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51622**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.82	0.5	20	0	94.1%	85	115				
Ethylbenzene	19.6	0.5	20	0	98.0%	85	115				
m,p-Xylene	38.8	1	40	0	97.0%	85	115				
o-Xylene	18.88	0.5	20	0	94.4%	85	115				
Toluene	18.74	0.5	20	0	93.7%	85	115				
1,4-Difluorobenzene	106.6	0	110	0	96.9%	70	130				
4-Bromochlorobenzene	108.7	0	110	0	98.9%	70	130				
Fluorobenzene	108	0	110	0	98.2%	70	130				

Sample ID: **CCV2_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51623**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.1	0.5	20	0	95.5%	85	115				
Ethylbenzene	19.58	0.5	20	0	97.9%	85	115				
m,p-Xylene	39.22	1	40	0	98.1%	85	115				
o-Xylene	19.06	0.5	20	0	95.3%	85	115				
Toluene	18.9	0.5	20	0	94.5%	85	115				
1,4-Difluorobenzene	107.1	0	110	0	97.4%	70	130				
4-Bromochlorobenzene	122.2	0	110	0	111.1%	70	130				
Fluorobenzene	108.6	0	110	0	98.8%	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: 0206014
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/11/2002** Prep Date: **06/11/2002**
Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51624**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.56	0.5	40	0	96.4%	85	115				
Ethylbenzene	39.34	0.5	40	0	98.3%	85	115				
m,p-Xylene	77.76	1	80	0	97.2%	85	115				
o-Xylene	38.17	0.5	40	0	95.4%	85	115				
Toluene	38.04	0.5	40	0	95.1%	85	115				
1,4-Difluorobenzene	106.2	0	110	0	96.6%	70	130				
4-Bromochlorobenzene	117.2	0	110	0	106.6%	70	130				
Fluorobenzene	107.8	0	110	0	98.0%	70	130				

Sample ID: **CCV4_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/12/2002** Prep Date: **06/12/2002**
Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.76	0.5	20	0	93.8%	85	115				
Ethylbenzene	19.45	0.5	20	0	97.3%	85	115				
m,p-Xylene	38.91	1	40	0	97.3%	85	115				
o-Xylene	18.83	0.5	20	0	94.2%	85	115				
Toluene	18.61	0.5	20	0	93.0%	85	115				
1,4-Difluorobenzene	107.8	0	110	0	98.0%	70	130				
4-Bromochlorobenzene	108.9	0	110	0	99.0%	70	130				
Fluorobenzene	109.3	0	110	0	99.4%	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: 0206014
Project: BP - Pearce GC #1

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV5_020611** Batch ID: **GC-1_020610** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/12/2002** Prep Date: **06/12/2002**

Client ID: **0206014** Run ID: **GC-1_020610A** SeqNo: **51626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.63	0.5	20	0	93.2%	85	115				
Ethylbenzene	18.96	0.5	20	0	94.8%	85	115				
m,p-Xylene	37.88	1	40	0	94.7%	85	115				
o-Xylene	18.32	0.5	20	0	91.6%	85	115				
Toluene	18.22	0.5	20	0	91.1%	85	115				
1,4-Difluorobenzene	107.4	0	110	0	97.7%	70	130				
4-Bromochlorobenzene	119.1	0	110	0	108.3%	70	130				
Fluorobenzene	109.6	0	110	0	99.6%	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: 18-Jun-02

CLIENT: Blagg Engineering
Work Order: 0206014
Project: BP - Pearce GC #1
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0205047-01A	97.8	108	99.6
0205047-02A	95.9	111	98
0205047-03A	97.2	110	99
0205049-01A	98	117	99.7
0205049-02A	96.9	105	99.1
0206001-01A	95.7	105	97.5
0206002-01A	96.4	105	98.4
0206002-01AMS	95.8	115	97.7
0206002-01AMSD	95.9	112	97.4
0206012-01A	96	103	98.4
0206012-02A	97.8	102	99.7
0206012-03A	97.8	107	100
0206013-01A	97.8	106	99
0206014-01A	96.7	106	98.6
0206014-02A	97.1	106	99.9
0206014-03A	98.2	107	101
CCV1_020611	96.9	98.8	98.2
CCV2_020611	97.4	111	98.8
CCV3_020611	96.6	106	98
CCV4_020611	98	99	99.4
CCV5_020611	97.6	108	99.6
LCS_020611	96.9	103	98.1
MB_020611	98.4	105	99.5

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

*** Surrogate recovery outside acceptance limits**

On Site Technologies, LTD.

Date: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206023
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020617** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**

Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52138**

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	.0408	0.5									J
Toluene	.1326	0.5									J
1,4-Difluorobenzene	107.9	0									
4-Bromochlorobenzene	117.4	0									
Fluorobenzene	110	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: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206023
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0206020-03AMS** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**
Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52139**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2453	25	2000	670	89.2%	70	130				
Ethylbenzene	3553	25	2000	1700	92.7%	70	130				
m,p-Xylene	6310	50	4000	2700	90.3%	70	130				
Methyl tert-Butyl Ether	1814	50	2000	0	90.7%	70	130				
o-Xylene	2426	25	2000	610	90.8%	70	130				
Toluene	2850	25	2000	1000	92.5%	70	130				
1,4-Difluorobenzene	5296	0	5500	0	96.3%	70	130				
4-Bromochlorobenzene	5754	0	5500	0	104.6%	70	130				
Fluorobenzene	5408	0	5500	0	98.3%	70	130				

Sample ID: **0206020-03AMSD** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**
Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2387	25	2000	670	85.8%	70	130	2453	2.7%	15	
Ethylbenzene	3458	25	2000	1700	87.9%	70	130	3553	2.7%	15	
m,p-Xylene	6158	50	4000	2700	86.4%	70	130	6310	2.4%	15	
Methyl tert-Butyl Ether	1705	50	2000	0	85.2%	70	130	1814	6.2%	15	
o-Xylene	2372	25	2000	610	88.1%	70	130	2426	2.3%	15	
Toluene	2776	25	2000	1000	88.8%	70	130	2850	2.6%	15	
1,4-Difluorobenzene	5292	0	5500	0	96.2%	70	130	0	0.0%	0	
4-Bromochlorobenzene	5732	0	5500	0	104.2%	70	130	0	0.0%	0	
Fluorobenzene	5409	0	5500	0	98.4%	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: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206023
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS 020617** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**

Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52136**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.29	0.5	40	0	93.2%	80	120				
Ethylbenzene	38.74	0.5	40	0	96.9%	80	120				
m,p-Xylene	76.85	1	80	0	96.1%	80	120				
Methyl tert-Butyl Ether	36.66	1	40	0	91.6%	80	120				
o-Xylene	37.51	0.5	40	0.0408	93.7%	80	120				
Toluene	37.23	0.5	40	0.1326	92.7%	80	120				
1,4-Difluorobenzene	106.5	0	110	0	96.8%	70	130				
4-Bromochlorobenzene	119.2	0	110	0	108.4%	70	130				
Fluorobenzene	108.9	0	110	0	99.0%	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: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206023
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020617** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**
Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.93	0.5	20	0	89.7%	85	115				
Ethylbenzene	18.55	0.5	20	0	92.8%	85	115				
m,p-Xylene	37.22	1	40	0	93.1%	85	115				
Methyl tert-Butyl Ether	17.47	1	20	0	87.3%	85	115				
o-Xylene	17.99	0.5	20	0	90.0%	85	115				
Toluene	17.92	0.5	20	0	89.6%	85	115				
1,4-Difluorobenzene	107.1	0	110	0	97.4%	70	130				
4-Bromochlorobenzene	117.4	0	110	0	106.7%	70	130				
Fluorobenzene	109	0	110	0	99.1%	70	130				

Sample ID: **CCV2_020617** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**
Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52133**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.43	0.5	20	0	87.2%	85	115				
Ethylbenzene	17.95	0.5	20	0	89.8%	85	115				
m,p-Xylene	36.1	1	40	0	90.3%	85	115				
Methyl tert-Butyl Ether	17.31	1	20	0	86.6%	85	115				
o-Xylene	17.48	0.5	20	0	87.4%	85	115				
Toluene	17.38	0.5	20	0	86.9%	85	115				
1,4-Difluorobenzene	107	0	110	0	97.3%	70	130				
4-Bromochlorobenzene	120.6	0	110	0	109.6%	70	130				
Fluorobenzene	109.2	0	110	0	99.3%	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: 0206023
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020617** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**
Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52134**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.96	0.5	20	0	94.8%	85	115				
Ethylbenzene	19.84	0.5	20	0	99.2%	85	115				
m,p-Xylene	39.4	1	40	0	98.5%	85	115				
Methyl tert-Butyl Ether	17.86	1	20	0	89.3%	85	115				
o-Xylene	19.3	0.5	20	0	96.5%	85	115				
Toluene	19.02	0.5	20	0	95.1%	85	115				
1,4-Difluorobenzene	107.5	0	110	0	97.7%	70	130				
4-Bromochlorobenzene	121.5	0	110	0	110.5%	70	130				
Fluorobenzene	109.4	0	110	0	99.4%	70	130				

Sample ID: **CCV4_020617** Batch ID: **GC-1_020617** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/17/2002** Prep Date: **06/17/2002**
Client ID: **0206023** Run ID: **GC-1_020617A** SeqNo: **52135**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.93	0.5	20	0	89.6%	85	115				
Ethylbenzene	18.74	0.5	20	0	93.7%	85	115				
m,p-Xylene	37.66	1	40	0	94.1%	85	115				
Methyl tert-Butyl Ether	17.39	1	20	0	87.0%	85	115				
o-Xylene	18.11	0.5	20	0	90.6%	85	115				
Toluene	18.01	0.5	20	0	90.0%	85	115				
1,4-Difluorobenzene	107.5	0	110	0	97.8%	70	130				
4-Bromochlorobenzene	114.2	0	110	0	103.8%	70	130				
Fluorobenzene	109	0	110	0	99.1%	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

On Site Technologies, LTD.

Date: 26-Jun-02

CLIENT: Blagg Engineering
Work Order: 0206023
Project: XTO - Pearce GC #1E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206020-01A	97.1	106	103
0206020-02A	92	98.1	93.6
0206020-03A	96.9	105	99.1
0206020-03AMS	96.3	105	98.3
0206020-03AMSD	96.2	104	98.4
0206020-04A	98	108	101
0206020-05A	98.6	105	98.9
0206020-07A	97.6	110	100
0206020-08A	97.8	110	100
0206020-09A	98	110	100
0206023-01A	95.7	106	98.5
0206023-02A	97.2	107	99.4
0206023-03A	95.4	107	97
CCV1_020617	97.4	107	99.1
CCV2_020617	97.2	110	99.3
CCV3_020617	97.7	110	99.4
CCV4_020617	97.8	104	99.1
LCS 020617	96.8	108	99
MB_020617	98.1	107	100

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

*** Surrogate recovery outside acceptance limits**

On Site Technologies, LTD.

Date: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206026
Project: XTO -PEARCE GC #1E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB_020619** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**

Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52312**

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	.091	0.5									J
1,4-Difluorobenzene	107.6	0									
4-Bromochlorobenzene	121.8	0									
Fluorobenzene	110.9	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: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206026
Project: XTO -PEARCE GC #1E

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0206020-05AMS** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**
Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52313**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	586.9	5	400	235.7	87.8%	70	130				
Ethylbenzene	809.9	5	400	449.2	90.2%	70	130				
m,p-Xylene	745.9	10	800	38.12	88.5%	70	130				
Methyl tert-Butyl Ether	352.8	10	400	0	88.2%	70	130				
o-Xylene	354.5	5	400	7.019	86.9%	70	130				
Toluene	393.1	5	400	44.38	87.2%	70	130				
1,4-Difluorobenzene	1060	0	1100	0	96.4%	70	130				
4-Bromochlorobenzene	1213	0	1100	0	110.3%	70	130				
Fluorobenzene	1087	0	1100	0	98.8%	70	130				

Sample ID: **0206020-05AMSD** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**
Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52314**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	575.8	5	400	235.7	85.0%	70	130	586.9	1.9%	15	
Ethylbenzene	795.6	5	400	449.2	86.6%	70	130	809.9	1.8%	15	
m,p-Xylene	735	10	800	38.12	87.1%	70	130	745.9	1.5%	15	
Methyl tert-Butyl Ether	353.7	10	400	0	88.4%	70	130	352.8	0.2%	15	
o-Xylene	349.3	5	400	7.019	85.6%	70	130	354.5	1.5%	15	
Toluene	387	5	400	44.38	85.7%	70	130	393.1	1.5%	15	
1,4-Difluorobenzene	1062	0	1100	0	96.6%	70	130	0	0.0%	0	
4-Bromochlorobenzene	1204	0	1100	0	109.5%	70	130	0	0.0%	0	
Fluorobenzene	1087	0	1100	0	98.9%	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: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206026
Project: XTO -PEARCE GC #1E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS_020619** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**

Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	36.58	0.5	40	0	91.4%	80	120				
Ethylbenzene	38.06	0.5	40	0	95.2%	80	120				
m,p-Xylene	75.81	1	80	0	94.8%	80	120				
Methyl tert-Butyl Ether	34.98	1	40	0	87.4%	80	120				
o-Xylene	36.89	0.5	40	0	92.2%	80	120				
Toluene	36.39	0.5	40	0.091	90.8%	80	120				
1,4-Difluorobenzene	106.8	0	110	0	97.1%	70	130				
4-Bromochlorobenzene	123.2	0	110	0	112.0%	70	130				
Fluorobenzene	109.6	0	110	0	99.6%	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: *26-Jun-02*

CLIENT: Blagg Engineering
Work Order: 0206026
Project: XTO -PEARCE GC #1E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1_020619** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**

Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52307**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.97	0.5	20	0	89.8%	85	115				
Ethylbenzene	18.69	0.5	20	0	93.5%	85	115				
m,p-Xylene	36.7	1	40	0	91.8%	85	115				
Methyl tert-Butyl Ether	17.29	1	20	0	86.5%	85	115				
o-Xylene	18.13	0.5	20	0	90.7%	85	115				
Toluene	17.5	0.5	20	0	87.5%	85	115				
1,4-Difluorobenzene	107.7	0	110	0	97.9%	70	130				
4-Bromochlorobenzene	122.8	0	110	0	111.6%	70	130				
Fluorobenzene	110.1	0	110	0	100.1%	70	130				

Sample ID: **CCV2_020619** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**

Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52308**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.39	0.5	20	0	87.0%	85	115				
Ethylbenzene	18.1	0.5	20	0	90.5%	85	115				
m,p-Xylene	35.02	1	40	0	87.5%	85	115				
Methyl tert-Butyl Ether	17.37	1	20	0	86.8%	85	115				
o-Xylene	17.65	0.5	20	0	88.3%	85	115				
Toluene	17.06	0.5	20	0	85.3%	85	115				
1,4-Difluorobenzene	107	0	110	0	97.3%	70	130				
4-Bromochlorobenzene	118.1	0	110	0	107.4%	70	130				
Fluorobenzene	110	0	110	0	100.0%	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: 0206026
Project: XTO -PEARCE GC #1E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

Sample ID: **CCV3_020619** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**
Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52309**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.32	0.5	20	0	96.6%	85	115				
Ethylbenzene	19.52	0.5	20	0	97.6%	85	115				
m,p-Xylene	37.99	1	40	0	95.0%	85	115				
Methyl tert-Butyl Ether	18.36	1	20	0	91.8%	85	115				
o-Xylene	18.75	0.5	20	0	93.8%	85	115				
Toluene	18.75	0.5	20	0	93.7%	85	115				
1,4-Difluorobenzene	107.5	0	110	0	97.7%	70	130				
4-Bromochlorobenzene	116.8	0	110	0	106.2%	70	130				
Fluorobenzene	109.7	0	110	0	99.7%	70	130				

Sample ID: **CCV4_020619** Batch ID: **GC-1_020619** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **06/19/2002** Prep Date: **06/19/2002**
Client ID: **0206026** Run ID: **GC-1_020619A** SeqNo: **52310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.98	0.5	20	0	94.9%	85	115				
Ethylbenzene	19.17	0.5	20	0	95.9%	85	115				
m,p-Xylene	37	1	40	0	92.5%	85	115				
Methyl tert-Butyl Ether	18.48	1	20	0	92.4%	85	115				
o-Xylene	18.54	0.5	20	0	92.7%	85	115				
Toluene	18.42	0.5	20	0	92.1%	85	115				
1,4-Difluorobenzene	107.4	0	110	0	97.7%	70	130				
4-Bromochlorobenzene	119	0	110	0	108.2%	70	130				
Fluorobenzene	109.9	0	110	0	99.9%	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: 26-Jun-02

CLIENT: Blagg Engineering
Work Order: 0206026
Project: XTO -PEARCE GC #1E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206020-01A	98.6	109	102
0206020-05A	96.5	111	99.8
0206020-05AMS	96.4	110	98.8
0206020-05AMSD	96.6	109	98.8
0206020-06A	97.9	113	100
0206026-01A	95.7	93.7	102
0206026-02A	76	82.1	81.3
0206027-01A	98.1	110	101
0206027-02A	98	112	100
0206027-03A	98.2	111	101
0206027-04A	98.6	112	101
CCV1_020619	97.9	112	100
CCV2_020619	97.3	107	100
CCV3_020619	97.7	106	99.7
CCV4_020619	97.6	108	99.9
LCS_020619	97.1	112	99.6
MB_020619	97.8	111	101

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

*** Surrogate recovery outside acceptance limits**

1

Hall Environmental Analysis Laboratory

Date: *03-Jul-02*

CLIENT: Envirotech
Work Order: 0206063
Project: Blagg/BP Pearce GC #1

QC SUMMARY REPORT
Method Blank

Sample ID **MB-2128** Batch ID: **2128** Test Code: **SW8310** Units: **µg/L** Analysis Date **7/2/2002 12:02:18 PM** Prep Date **6/19/2002**

Client ID: Run ID: **HPLC_020702A** SeqNo: **114016**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	0.05	0.30									J
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	0.01	0.020									J
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									
Surr: Benzo(e)pyrene	984.5	0	1000	0	98.5	58.7	110	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: *03-Jul-02*

CLIENT: Envirotech
Work Order: 0206063
Project: Blagg/BP Pearce GC #1

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-2128** Batch ID: **2128** Test Code: **SW8310** Units: **µg/L** Analysis Date **7/2/2002 12:50:39 PM** Prep Date **6/19/2002**

Client ID: Run ID: **HPLC_020702A** SeqNo: **114017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	27.8	2.5	40.3	0	69.0	41.9	88.4	0			
1-Methylnaphthalene	28.2	2.5	40.4	0	69.8	40.1	87.5	0			
2-Methylnaphthalene	27.49	2.5	40	0	68.7	38.1	88.2	0			
Acenaphthylene	28.73	2.5	40.2	0	71.5	49.6	86.7	0			
Acenaphthene	30.07	2.5	40.4	0	74.4	42.9	89.5	0			
Fluorene	3.2	0.80	4.1	0	78.0	44.5	93.6	0			
Phenanthrene	2.79	0.60	3.07	0	90.9	54.7	97.7	0			
Anthracene	2.26	0.60	2.57	0	87.9	64.5	89.1	0			
Fluoranthene	1.71	0.30	1.92	0.05	86.5	70.4	97.6	0			
Pyrene	3.71	0.30	3.85	0	96.4	69.9	97	0			
Benz(a)anthracene	0.41	0.020	0.427	0	96.0	73.7	99.8	0			
Chrysene	3.93	0.20	4.03	0	97.5	73.4	103	0			
Benzo(b)fluoranthene	0.54	0.050	0.495	0	109	77.3	113	0			
Benzo(k)fluoranthene	0.22	0.020	0.226	0.01	92.9	71.1	109	0			
Benzo(a)pyrene	0.24	0.020	0.253	0	94.9	68	105	0			
Dibenz(a,h)anthracene	0.48	0.040	0.506	0	94.9	69.1	111	0			
Benzo(g,h,i)perylene	0.53	0.030	0.553	0	95.8	68.3	114	0			
Indeno(1,2,3-cd)pyrene	0.988	0.080	0.994	0	99.4	69.1	115	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: *08-Jul-02*

CLIENT: Envirotech
Work Order: 0206104
Project: Blagg/XTO Pearce GC #1E

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-2128** Batch ID: **2128** Test Code: **SW8310** Units: **µg/L** Analysis Date: **7/2/2002 12:02:18 PM** Prep Date: **6/19/2002**

Client ID: Run ID: **HPLC_020702A** SeqNo: **114016**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	0.05	0.30									J
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	0.01	0.020									J
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									
Surr: Benzo(e)pyrene	984.5	0	1000	0	98.5	58.7	110	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: *08-Jul-02*

CLIENT: Envirotech
Work Order: 0206104
Project: Blagg/XTO Pearce GC #1E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-2128** Batch ID: **2128** Test Code: **SW8310** Units: **µg/L** Analysis Date: **7/2/2002 12:50:39 PM** Prep Date: **6/19/2002**

Client ID: Run ID: **HPLC_020702A** SeqNo: **114017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	27.8	2.5	40.3	0	69.0	41.9	88.4	0			
1-Methylnaphthalene	28.2	2.5	40.4	0	69.8	40.1	87.5	0			
2-Methylnaphthalene	27.49	2.5	40	0	68.7	38.1	88.2	0			
Acenaphthylene	28.73	2.5	40.2	0	71.5	49.6	86.7	0			
Acenaphthene	30.07	2.5	40.4	0	74.4	42.9	89.5	0			
Fluorene	3.2	0.80	4.1	0	78.0	44.5	93.6	0			
Phenanthrene	2.79	0.60	3.07	0	90.9	54.7	97.7	0			
Anthracene	2.26	0.60	2.57	0	87.9	64.5	89.1	0			
Fluoranthene	1.71	0.30	1.92	0.05	86.5	70.4	97.6	0			
Pyrene	3.71	0.30	3.85	0	96.4	69.9	97	0			
Benz(a)anthracene	0.41	0.020	0.427	0	96.0	73.7	99.8	0			
Chrysene	3.93	0.20	4.03	0	97.5	73.4	103	0			
Benzo(b)fluoranthene	0.54	0.050	0.495	0	109	77.3	113	0			
Benzo(k)fluoranthene	0.22	0.020	0.226	0.01	92.9	71.1	109	0			
Benzo(a)pyrene	0.24	0.020	0.253	0	94.9	68	105	0			
Dibenz(a,h)anthracene	0.48	0.040	0.506	0	94.9	69.1	111	0			
Benzo(g,h,i)perylene	0.53	0.030	0.553	0	95.8	68.3	114	0			
Indeno(1,2,3-cd)pyrene	0.988	0.080	0.994	0	99.4	69.1	115	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

1

Hall Environmental Analysis Laboratory

Date: *08-Jul-02*

CLIENT: Envirotech
Work Order: 0206114
Project: Blagg /XTO

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-2144** Batch ID: **2144** Test Code: **SW8310** Units: **µg/L** Analysis Date: **7/3/2002 1:27:40 PM** Prep Date: **6/21/2002**

Client ID: Run ID: **HPLC_020703A** SeqNo: **114186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	0.04	0.30									J
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									
Surr: Benzo(e)pyrene	938.9	0	1000	0	93.9	58.7	110	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

1

Hall Environmental Analysis Laboratory

Date: *08-Jul-02*

CLIENT: Envirotech
Work Order: 0206114
Project: Blagg /XTO

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-2144** Batch ID: **2144** Test Code: **SW8310** Units: **µg/L** Analysis Date: **7/3/2002 2:15:59 PM** Prep Date: **6/21/2002**

Client ID: Run ID: **HPLC_020703A** SeqNo: **114187**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	27.19	2.5	40.3	0	67.5	41.9	88.4	0			
1-Methylnaphthalene	28.97	2.5	40.4	0	71.7	40.1	87.5	0			
2-Methylnaphthalene	28.1	2.5	40	0	70.3	38.1	88.2	0			
Acenaphthylene	30.37	2.5	40.2	0	75.6	49.6	86.7	0			
Acenaphthene	31.69	2.5	40.4	0	78.4	42.9	89.5	0			
Fluorene	3.2	0.80	4.1	0	78.0	44.5	93.6	0			
Phenanthrene	2.87	0.60	3.07	0	93.5	54.7	97.7	0			
Anthracene	2.313	0.60	2.57	0	90.0	64.5	89.1	0			S
Fluoranthene	1.67	0.30	1.92	0.04	84.9	70.4	97.6	0			
Pyrene	3.93	0.30	3.85	0	102	69.9	97	0			S
Benz(a)anthracene	0.438	0.020	0.427	0	103	73.7	99.8	0			S
Chrysene	4.197	0.20	4.03	0	104	73.4	103	0			S
Benzo(b)fluoranthene	0.56	0.050	0.495	0	113	77.3	113	0			S
Benzo(k)fluoranthene	0.24	0.020	0.226	0	106	71.1	109	0			
Benzo(a)pyrene	0.26	0.020	0.253	0	103	68	105	0			
Dibenz(a,h)anthracene	0.52	0.040	0.506	0	103	69.1	111	0			
Benzo(g,h,i)perylene	0.59	0.030	0.553	0	107	68.3	114	0			
Indeno(1,2,3-cd)pyrene	1.066	0.080	0.994	0	107	69.1	115	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: 0206061
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT
Method Blank

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: **0206061** 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: 0206061
Project: XTO - Pearce GC #1E

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: **0206061** 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: **0206061** 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: 0206061
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT

Laboratory Control Spike - generic

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: **0206061** 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: 0206061
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

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: **0206061** 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				

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: **0206061** 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				

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: 0206061
Project: XTO - Pearce GC #1E

QC SUMMARY REPORT
Continuing Calibration Verification Standard

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: **0206061** 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: 0206061
Project: XTO - Pearce GC #1E
Test No: SW8021B

QC SUMMARY REPORT
SURROGATE RECOVERIES

Aromatic Volatiles by GC/PID

Sample ID	14FBZ	4BCBZ	FLBZ
0206030-02A	99.4	111	102
0206031-01A	99.4	110	102
0206031-03A	98.2	111	101
0206039-02A	96.5	108	99.6
0206039-02AMS	98	112	101
0206039-02AMSD	96.2	110	99.2
0206050-01A	95.5	109	98.7
0206051-01A	99.2	111	102
0206054-02A	101	100	96.8
0206054-03A	95.5	109	98.3
0206054-04A	95.4	109	98.2
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_020628	98.5	110	102
CCV2_020628	98.8	108	102
CCV3_020628	98.6	106	102
LCS_020628	98.4	111	101
MB_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**