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XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2007

McDANIEL GAS COM B #1E (F) SECTION 26 – T29N – R10W, NMPM SAN JUAN COUNTY, NEW MEXICO

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

January 2008

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2007 XTO GROUNDWATER REPORT

McDANIEL GAS COM B #1E

	<u>SITE DE</u>	TAILS	
LEGALS - TWN: 29N	RNG: 10W	SEC: 26	UNIT:
NMOCD HAZARD RANK	ING: 40	LAND TYPE: FEE	

PREVIOUS ACTIVITIES

Excavation: Dec-94 (50 CY) Monitoring Wells: Oct-99

Soil Boring: Oct-99

SITE MAP

A site map is presented as Figure 1.

SUMMARY TABLES

A summary of laboratory results from historical and current groundwater monitoring is presented as Table 1. A summary of general water chemistry from 1999 is presented as Table 2. Copies of the laboratory data sheets and associated quality assurance/quality control data for 2006 and 2007 are presented as Attachment 1.

POTENTIOMETRIC SURFACE DIAGRAMS

Field data collected during site monitoring activities indicate a groundwater gradient that trends towards the northwest, in the general direction of the San Juan River. In September 2006 the groundwater gradient turned toward the southeast, away from the San Juan River and in the direction of a nearby wetland area. This change in direction is being attributed to seasonal weather conditions. During the months of the previous site visits the weather was unseasonably warm and windy with little if any rainfall. The month before the September 2006 visit had average to cooler temperatures with over an inch of rainfall. The increase in the water level of the River could push local groundwater away and in the opposite direction. Figures 2 - 5 illustrate the estimated groundwater gradients for 2006 and 2007.

ANNUAL GROUNDWATER REMEDIATION REPORTS

Previous groundwater reports submitted to New Mexico Oil Conservation Division (NMOCD) in 2005 and 2006 recommended quarterly sampling of the groundwater monitoring wells, in accordance with the NMOCD approved Groundwater Management Plan.

2007 ACTIVITIES

Quarterly groundwater samples were collected from monitoring wells MW-1, MW-2 and MW-3 in 2007 and submitted for laboratory analysis of benzene, toluene, ethyl benzene and total xylenes (BTEX). Laboratory results indicate BTEX constituents are below standards or not detectable for four guarters.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

Bore/Test Hole Reports are presented as Figures 6 - 8 representing drilling that occurred on site in September 1999.

F

2007 XTO GROUNDWATER REPORT

DISPOSITION OF GENERATED WASTES

Waste generated (groundwater) during monitoring well sampling and development was placed in the produced water tank located on the well site.

CONCLUSIONS

In January 1998 XTO Energy Inc. (XTO) acquired the McDaniel Gas Com B #1E from Amoco Production Company. XTO understands the initial groundwater assessment came from samples collected from the bottom of the earthen pit following excavation of impacted soils (Attachment 2). Laboratory analysis of the initial sample indicated the presence of elevated dissolved phase BTEX constituents. In 1999 three groundwater monitoring wells were installed to delineate the extent of hydrocarbon impacts to groundwater. Monitoring well numbered MW-2 was installed near the center of the source area (closed and backfilled earthen dehydrator pit). Monitoring wells numbered MW-1 and MW-3 were placed down gradient of the source area. Groundwater samples collected from the three groundwater monitoring wells indicated BTEX constituents were not present above the detection limits of the laboratory equipment (0.2 ug/L). Sampling was terminated and the site was submitted for closure.

Correspondence from NMOCD in 2000 requested four consecutive quarters of testing in compliance with XTO's Groundwater Management Plan. Groundwater analytical data from MW-1R, MW-2, and MW-4 for four consecutive quarters have demonstrated no detectable levels of BTEX constituents and New Mexico Water Quality Control Commission (NMWQCC) standards have been met. The quarterly sampling has confirmed no rebound of BTEX constituents has occurred, therefore, XTO requests closure of this site.

RECOMMENDATIONS

- XTO requests closure of this site.
- Following OCD approval for closure, all monitoring well locations will be abandoned in accordance with the monitoring well abandonment plan.

TABLE 1

XTO ENERGY INC. GROUNDWATER LAB RESULTS

McDANIEL GC B #1E- DEHY. PIT UNIT F, SEC. 26, T29N, R10W

					BTEX EPA Method 801 (PPB)				
Sample Date	Monitor Well No.	DTW (ft)	TD (ft)	Product (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)	
28-Oct-99	MW #1	4.04	14		ND	ND	ND	ND	
20-Jun-06			3.7			DRY ۱	VELL		
25-Sep-06		5.02	12.01		ND	ND	ND	ND	
5-Dec-06		4.22	12.01		ND	ND	ND	ND	
8-Mar-07		4.12	12.01		ND	ND	ND	ND	
28-Oct-99	MW #2	3.49	13		ND	ND	ND	ND	
20-Jun-06		5.09	13.3		ND	ND	ND	ND	
25-Sep-06		5.27	13.22		ND	ND	ND	ND	
5-Dec-06		3.88	13.22		ND	ND	ND	ND	
8-Mar-07		3.66	13.22		ND	ND	ND	ND	
28-Oct-99	MW #3	1.82	12.12		ND	ND	ND	ND	
20-Jun-06		3.7	11.85		ND	ND	ND	ND	
25-Sep-06		1.16	12.94		ND	ND	ND	ND	
5-Dec-06		2.67	12.94		ND	ND	ND	ND	
8-Mar-07		2.45	12.94		ND	ND	ND	ND	
NMWQCC (GROUND	VATE	R STAN	DARDS	10	750	750	620	

TABLE 2

XTO ENERGY INC. GROUNDWATER LAB RESULTS

McDANIEL GC B #1E- DEHY. PIT UNIT F, SEC. 26, T29N, R10W

Sample Date: October 28, 1999

PARAMETERS	MW #1	MW #2	MW #3	UNITS
LAB Ph	7.21	7.2	7.26	s.u.
LAB CONDUCTIVITY @ 25 C	4,180	4,390	3,270	umhos/cm
TOTAL DISSOLVED SOLIDS @ 180 C	2,060	2,100	1,620	mg/L
TOTAL DISSOLVED SOLIDS (Calc)	1,920	1,923	1,574	mg/L
SODIUM ABSORPTION RATIO	0.3	0.1	4.4	ratio
TOTAL ALKALINITY AS CaCO3	300	290	454	mg/L
TOTAL HARDNESS AS CaCO3	1,408	1,450	641	mg/L
BICARBONATE AS HCO3	300	290	454	mg/L
CARBONATE AS CO3	< 1	< 1	< 1	mg/L
HYDROXIDE AS OH	< 1	< 1	< 1	mg/L
NITRATE NITORGEN	< 0.1	0.1	< 0.1	mg/L
NITRITE NITROGEN	< 0.001	0.015	< 0.001	mg/L
CHLORIDE	0.6	2.8	1	mg/L
FLUORIDE	1.82	1.95	1.96	mg/L
PHOSPHATE	0.4	0.4	0.9	mg/L
SULFATE	1,170	1,180	790	mg/L
IRON	0.001	< 0.001	< 0.001	mg/L
CALCIUM	486	493	213	mg/L
MAGNESIUM	46.9	52.7	26.4	mg/L
POTASSIUM	7.0	5.5	9.5	mg/L
SODIUM	25	10	255	mg/L
CATION/ANION DIFFERENCE	0.02	0	0.41	%











FIGURE 6

BLAGG ENGINEERING, Inc.	
P.O. BOX 87	
$\begin{array}{c} \text{BLOOMFIELD, NM 87413} \\ (505) 632-1199 \end{array}$	
BORE / TEST HOLE REPORT	BORING # <u>BH - 1</u> MW # <u>1</u>
CLIENT: XTO ENERGY INC. LOCATION NAME: McDANIEL GC B #1E CONTRACTOR: BLAGG ENGINEERING, INC.	PAGE #1 DATE STARTED <u>10/12/99</u> DATE FINISHED <u>10/12/99</u>
EQUIPMENT USED: MOBILE DRILL RIG (ENVIROTECH CME 61) BORING LOCATION: 132 FT., DUE SOUTH FROM WELL HEAD.	OPERATOR <u>DE</u> PREPARED BY <u>NJV</u>
DEPTH & LITHOLOGY MW FIELD CLASSIFICATION AND REMAR	KS
1 1 TOP OF CASING APPROX. 1.90 FT. ABOVE GROUND SURFACE. 2 2 10 TOS 3 4 5 GW DEPTH ON 10/28/99 = 2.14 FT. (APPROX.) FROM GROUD 3 4 5 GW DEPTH ON 10/28/99 = 2.14 FT. (APPROX.) FROM GROUD 5 0 0 0 0 1 0 0 0 0 0 2 0 0 0 0 0 0 3 0 0 0 0 0 0 0 4 0 0 0 0 0 0 0 0 0 5 0 <td>ND SURFACE. 2, SLIGHTLY MOIST, RBON ODOR DETECTED RATED, R HYDROCARBON</td>	ND SURFACE. 2, SLIGHTLY MOIST, RBON ODOR DETECTED RATED, R HYDROCARBON
DARK GRAY TO BLACK SAND, NON COHESIVE, SATURATED, FIL APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODO (4.50 - 10.00 FT. INTERVAL).	RM TO LOOSE, NO R DETECTED PHYSICALLY
10 11 12 13 14 15 10 14 15 10 10 10 10 10 10 10 10 10 10	FIRM, NO APPARENT D PHYSICALLY
16 16 17 18 19 - 20 - 11 - 12 - 13 - 14 - 15 - 18 - 19 - 19 - 19 - 19 - 10 - 10 - 10 - 10 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 <	E. GROUND SURFACE.
GW - GROUND WATER. 23 24 25 26	
27 28 29 30 31 DRAWING: BH-1.SKD	DATE: 1/19/00 DWIN BY: NJV

FIGURE 7

BLAGG ENGINEERING, Inc. P.O. BOX 87 PLOOMEURID NM 87412								
(505) 632-1199								
BORE / TEST HOLE REPORT	BORING #	<u>BH - 2</u>						
CLIENT: XTO ENERGY INC. PAGE #								
DEPTH & LITHOLOGY MW FIELD CLASSIFICATION AND REMAR	RKS							
$1 \xrightarrow{1}{1} \xrightarrow{1} \xrightarrow$	ND SURFACE							
2 Charles and a second a second and a second	, SLIGHTLY MO RBON ODOR DI	DIST, ETECTED						
5	RM TO LOOSE, R DETECTED P	NO PHYSICALLY						
8 9 10 11 12 13 14 14 14 14 14 14 14 10 11 11 11 11 11 11 11 11 11	FIRM, NO API D PHYSICALLY	PARENT						
10 16 17 17 18 19 19 Tos - TOP OF SCREEN FROM GROUND SURFACE TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND	E. GROUND SURF	ACE.						
GW - GROUND WATER.								
28 29 30								
31 DRAWING: BH-2.SKD C	DATE: 1/19/00	DWN BY: NJV						

FIGURE 8

BLAGG ENGINEERING, Inc. P.O. BOX 87 BLOOMFIELD, NM 87413	
(505) 632-1199 BORE / TEST HOLE REPORT CLIENT: XTO ENERGY INC. LOCATION NAME: MEDANIEL GC B #1E CONTRACTOR: BLAGG ENGINEERING, INC. MOBILE DRILL RIG (ENVIROTECH CME 61) DODING LOCATION	BORING # BH - 3 MW #
DEPTH INTERVAL SHEMARC FIELD CLASSIFICATION AND REMARC 1 INTERVAL SHEMARC FIELD CLASSIFICATION AND REMARC 2 INTERVAL SHEMARC FIELD CLASSIFICATION AND REMARC 2 INTERVAL SHEMARC FIELD CLASSIFICATION AND REMARC 2 INTERVAL SHEMARC FIELD CLASSIFICATION OBSERVED REMARC 3 INTERVAL SHEMARC FIELD CLASSIFICATION OBSERVED REMARC 4 Interval Shemarc FIELD CLASSIFICATION OBSERVED REMARC FIELD 4 Interval Shemarc Shemarc	RKS E. UND SURFACE. VE, SLIGHTLY MOIST, CARBON ODOR DETECTED TURATED, OR HYDROCARBON FIRM TO LOOSE, NO DOR DETECTED PHYSICALLY D, FIRM, NO APPARENT TED PHYSICALLY ACE. A GROUND SURFACE.
DRAWING: BH-3.SKD	DATE: 1/19/00 DWN BY: NJV

CLIENT: 2 Project: ((TO Energy Groundwater - McDa	niel Gas ComB	#1E			La	b Orde	r: 0606232	
Lab ID:	0606232-01				Collecti	on Date:	6/20/20	006 11:42:00 AM	
Client Sample ID:	McDaniel Gas Con	nB#1E MW-3				Matrix:	AQUE	OUS	
Analyses		Result	PQL	Qual	Units	-	DF	Date Analyzed	
EPA METHOD 802	IB: VOLATILES							Analyst: HLM	
Benzene		ND	1.0		µg/L		1	6/23/2006 3:33:07 AM	
Toluene		ND	1.0		µg/L		1	6/23/2006 3:33:07 AM	
Ethylbenzene		ND	1.0		µg/L		1	6/23/2006 3:33:07 AM	
Xylenes, Total		ND	3.0		µg/L		1	6/23/2006 3:33:07 AM	
Surr: 4-Bromofluo	robenzene	85.3	72.2-125		%REC		1	6/23/2006 3:33:07 AM	
Lab D:	0606232-02		• • • •	(Collecti	on Date:	6/20/20	006 12:50:00 PM	
Client Sample ID:	McDaniel Gas Con	nB#1E MW-2				Matrix:	: AQUEOUS		
Analyses		Result	PQL	Qual	Units		DF	Date Analyzed	
EPA METHOD 8021	IB: VOLATILES							Analyst: HI M	
Benzene		ND	1.0		uo/L		1	6/23/2006 4:02:11 AM	
Toluene		ND	1.0		19/L		1	6/23/2006 4:02:11 AM	
Ethylbenzene		ND	1.0		ua/L		1	6/23/2006 4:02:11 AM	
Xylenes, Total		ND	3.0		ua/L		1	6/23/2006 4:02:11 AM	
Surr: 4-Bromofluo	robenzene	86.4	72.2-125		%REC		1	6/23/2006 4:02:11 AM	
Lab ID:	0606232-03				Collectio	on Date:	6/20/20	006 7:00:00 AM	
Client Sample ID:	200606TB02					Matrix:	AQUE	OUS	
Analyses		Result	PQL	Qual	Units		DF	Date Analyzed	
EPA METHOD 8021	B: VOLATILES		·					Analyst: HI M	
Benzene		ND	1.0		ug/L		1	6/23/2006 4:31:21 AM	
Toluene		ND	1.0		.υ <u>.</u>		1	6/23/2006 4:31:21 AM	
Ethylbenzene		ND	1.0		.ς μg/L		1	6/23/2006 4:31:21 AM	
Xylenes, Total		ND	3.0		μg/L		1	6/23/2006 4:31:21 AM	
Surr: 4-Bromofluo	robenzene	81.3	72.2-125		%REC		1	6/23/2006 4:31:21 AM	

Qualifiers:

- Value exceeds Maximum Contaminant Level
 E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank

Date: 28-Jun-06

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

QA/QC SUMMARY REPORT

Client: X Project: G	TO Energy roundwater - McDani	el Gas Com	3#1F					Voul Ordan	0/0/121
								work Order:	0606232
Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit Qua	al
Method: SW8021								Batch ID	: R19665
Sample ID: 5ML RB		MBLK						Analysis Date:	6/22/2006
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100NG B	TEX LCS	LCS						Analysis Date:	6/22/2006
Benzene	18.63	µg/L	1.0	93.2	85	115 .			
Toluene	17.48	µg/L	1.0	87.4	85	118			
Ethylbenzene	17.83	µg/L	1.0	89.2	85	116			
Xylenes, Total	55,30	µg/L	3.0	92.2	85	119			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spite Persovery outside accepted recovery limits 2 / 3

CLIENT:	XTO Energy		Client Sample ID:				niel Gas Com B1E MW-1		
Lab Order:	0609347	0609347 Collection Date:				9/25/2	9/25/2006 12:57:00 PM		
Project:	XT0 Groundwater			Date Received:			9/27/2006		
Lab ID:	0609347-01		Matrix: AQUEOUS		EOUS				
Analyses		Result	PQL	Qual Units	····•	DF	Date Analyzed		
EPA METHOD	8021B: VOLATILES						Analyst: NSB		
Benzene		ND	1.0	µg/L		1	10/5/2006 3:09:36 PM		
Toluene		ND	1.0	µg/L		1	10/5/2006 3:09:36 PM		
Ethylbenzene		ND	1.0	μg/L		1	10/5/2006 3:09:36 PM		
Xylenes, Tolal		ND	3.0	µg/L		1	10/5/2006 3:09:36 PM		
Surr: 4-Brom	ofluorobenzene	97.3	72.2-125	%REC		1	10/5/2006 3:09:36 PM		

Date: 06-Oct-06

Qualifiers:

- * Value exceeds Maximum Contaminant Level
 - E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT: Lab Order: Project: Lab ID:	XTO Energy 0609347 XT0 Groundwater 0609347-02		Client Sample ID: Collection Date: Date Received: Matrix:		McDa 9/25/2 9/27/2 AQU	aniel Gas Com B1E MW-2 2006 12:32:00 PM 2006 EOUS	
Analyses		Result	PQL	Qual Unit	; ;	DF	Date Analyzed
EPA METHOD	8021B: VOLATILES						Analyst: NSB
Benzene		ND	1.0	µg/L		1	10/5/2006 1:22:19 AM
Toluene		ND	1.0	µg/L		1	10/5/2006 1:22:19 AM
Ethylbenzene		ND	1.0	µg/L		1	10/5/2006 1:22:19 AM
Xylenes, Total		ND	3.0	μg/L		1	10/5/2006 1:22:19 AM
Surr: 4-Brom	ofluorobenzene	90.0	72.2-125	%REC	;	1	10/5/2006 1:22:19 AM

Date: 06-Oct-06

Qualifiers:

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

CLIENT: Lab Order: Project:	XTO Energy 0609347 XT0 Groundwater		Client Sample ID: Collection Date: Date Received: Matrix:		McDa 9/25/2 9/27/2	niel Gas Com B1E MW-3 2006 1:40:00 PM 2006	
Analyses	0009347-03	Result	PQL	Qual Units		DF	Date Analyzed
EPA METHOD	8021B: VOLATILES						Analyst: NSB
Benzene		ND	1.0	µg/L		1	10/5/2006 1:51:16 AM
Toluene		ND	1.0	µg/L		1	10/5/2006 1:51:16 AM
Elhylbenzene		ND	1.0	µg/L		1	10/5/2006 1:51:16 AM
Xylenes, Total		ND	3.0	µg/L		1	10/5/2006 1:51:16 AM
Surr: 4-Brom	ofluorobenzene	93.5	72.2-125	%REC		1	10/5/2006 1:51:16 AM

Date: 06-Oct-06

Qualifiers:

-- --

- Value exceeds Maximum Contaminant Level
 - E Value above quantitation range

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

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT:	XTO Energy		ale ID: 2509	2006TB01			
Lab Order:	0609347			Date:	9/27/2006		
Project:	XT0 Groundwater			eived: 9/27			
Lab ID:	0609347-11			Μ	latrix: AQU	JEOUS	
Analyses		Result	PQL Qu	al Units	DF	Date Analyzed	
EPA METHOD	8021B: VOLATILES					Analyst: NSB	
Benzene		ND	1.0	µg/L	1	10/5/2006 6:16:33 AM	
Toluene		ND	1.0	µg/L	1	10/5/2006 6:16:33 AM	
Ethylbenzene		ND	1.0	µg/L	1	10/5/2006 6:16:33 AM	
Xylenes, Total		ND	3.0	µg/L	1	10/5/2006 6:16:33 AM	
Surr: 4-Brom	ofluorobenzene	97.5	72.2-125	%REC	1	10/5/2006 6:16:33 AM	

Date: 06-Oct-06

····· · · · · · · · · · · ·		······································		
Qualifiers:	*	Value exceeds Maximum Contaminant Level	В	Analyte detected in the associated Method Blank
	Е	Value above quantitation range	н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		Page 11 of 11

QA/QC SUMMARY REPORT

Client: XTO Energy									
Project: XT0 Ground	water						v	Vork (Order: (609347
Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPD	Limit Qua
Method: SW8021									
Sample ID: 5ML REAGENT BLA		MBLK			Batch I	D: R20938	Analysis D	ate:	10/4/2006 11:00:33 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 5ML REAGENT BLA		MBLK			Batch I	D: R20958	Analysis D	ate:	10/5/2006 10:03:16 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	μg/L	1.0						
Xylenes, Total	ND	μg/L	3.0						
Sample ID: 100NG BTEX LCS		LCS			Batch II	D: R20938	Analysis Da	ate:	10/4/2006 9:28:27 PM
Benzene	20.90	μg/L	1.0	105	85	115			
Toluene	20.64	µg/L	1.0	103	85	118			
Ethylbenzene	20.83	μg/L	1.0	104	85	116			
Xylenes, Total	63.36	µg/L	3.0	106	85	11 9			
Sample ID: 100NG BTEX LCS		LCS			Batch II	D: R20958	Analysis Da	ate:	10/5/2006 1:42:53 PM
Benzene	20.96	µa/L	1.0	105	85	115	-		
Toluene	20.53	µg/L	1.0	103	85	118			
Ethylbenzene	20.82	µg/L	1.0	104	85	116			
Xylenes, Total	63.12	µg/L	3.0	105	85	119			
Sample ID: 100NG BTEX LCSD		LCSD			Batch II	D: R20958	Analysis Da	ate:	10/5/2006 9:31:35 PM
Вепzеле	21.14	uo/L	10	106	85	115	0.855	77	
Toluene	20.72	ua/L	1.0	104	85	118	0.000	10	
Ethylbenzene	20.79	µa/L	1.0	104	85	116	0.173	10	
Xylenes, Total	63.10	μg/L	3.0	105	85	119	0.0317	13	
Method: SW7470									
Sample ID: 0609347-04A msd		MSD			Batch II	D: 11395	Analysis Da	ite:	9/27/2006
Mercury	0 005070	mo/l	0 00020	101	75	125	7 36		
Sample ID: MB-11395	0.000010	MBLK	0.00020	101	Batch II	ובט ר- 11305	Analycic Dr	20	0/27/2006
Mercupy		ma/l	0.00020			11000	maryaia De		3/2//2000
Sample ID: 1 CS-11395	NP.	ng/L LCS	0.00020		Date: 1	3. 44905	Angelensie D		0/07/0000
Massue					Batch II	J. 11395	Analysis Da	ne:	9/27/2006
	0.005070	mg/L	0.00020	101	80	120			
Sample ID: 0009347-04A ms		MS			Batch II	J: 11395	Analysis Da	ıle:	9/27/2006
Mercury	0.004710	mg/L	0.00020	94.2	75	125			

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

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XTO Energy				La	b Order	0612120
Ground Water	• # # # #				o oraci	
0612120-07			С	ollection Date:	12/5/200	06 1:03:00 PM
OH Randel 7 MW-4	_			Matrix:	AQUEC	OUS
	Result	PQL	Qual T	Units	DF	Date Analyzed
1B: VOLATILES						Analyst: NSB
	ND	1.0	F	ug/L	1	12/12/2006 4:06:20 AM
	ND	1.0	F	ug/L	1	12/12/2006 4:06:20 AM
	ND	1.0	ł	Jg/L	1	12/12/2006 4:06:20 AM
	ND	3.0	ŀ	ug/L	1	12/12/2006 4:06:20 AM
probenzene	81.4	70.2-105	ġ	%REC	1	12/12/2006 4:06:20 AM
0612120-08			Co	ollection Date:	12/5/200	
McDaniel Gas Com I	BIE MW-1			Matrix:	AQUEO	OUS
	Result	PQL	Qual I	Units	DF	Date Analyzed
1B: VOLATILES						Analyst: NSB
	ND	1.0	ŀ	ug/L	1	12/12/2006 4:36:26 AM
,	ND	1.0	L	ug/L	1	12/12/2006 4:36:26 AM
	ND	1.0	, F	ug/L	1	12/12/2006 4:36:26 AM
	ND	3.0	ŀ	ug/L	1	12/12/2006 4:36:26 AM
robenzene	79.5	70.2-105	0	%REC	1	12/12/2006 4:36:26 AM
0612120-09			Co	ollection Date:	12/5/200)6 3:10:00 PM
McDaniel Gas Com I	BIE MW-2			Matrix:	AQUEO	US
	Result	PQL	Qual U	Units	DF	Date Analyzed
1B: VOLATILES						Analyst: NSB
	ND	1.0	L	ug/L	1	12/12/2006 5:06:30 AM
	ND	1.0	L	_ Jg/L	1	12/12/2006 5:06:30 AM
	ND	1.0	, L	- Jg/L	1	12/12/2006 5:06:30 AM
	ND	3.0	L L	- Jg/L	1	12/12/2006 5:06:30 AM
				-		
	XTO Energy Ground Water 0612120-07 OH Randel 7 MW-4 1B: VOLATILES wobenzene 0612120-08 McDaniel Gas Com I 1B: VOLATILES wobenzene 0612120-08 McDaniel Gas Com I 1B: VOLATILES wobenzene 0612120-09 McDaniel Gas Com I 1B: VOLATILES	XTO Energy Ground Water 0612120-07 OH Randel 7 MW-4 Result 1B: VOLATILES ND ND ND ND ND ND ND ND ND ND	KTO Energy Bigger Stream 0612120-07 0H Randel 7 MW-4 Result PQL 1B: VOLATILES ND 1.0 ND 1.0 ND 3.0 wobenzene 81.4 70.2-105 0612120-08 McDaniel Gas Com BIE MW-1 PQL 1B: VOLATILES ND 1.0 ND 1.0 ND 3.0 probenzene 79.5 70.2-105 0612120-09 McDaniel Gas Com BIE MW-2 Result PQL 1B: VOLATILES ND 1.0 ND 3.0 0612120-09 McDaniel Gas Com BIE MW-2 Result PQL 1B: VOLATILES ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 ND 1.0 <td< td=""><td>KTO Energy Ground Water 0612120-07 C 0H Randel 7 MW-4 Result PQL Qual Qual 1B: VOLATILES ND 1.0 I ND 1.0 I ND 1.0 I ND 3.0 I ND 1.0 I 0612120-08 C C O C McDaniel Gas Com BIE MW-1 Result PQL Qual Qual I 1B: VOLATILES ND 1.0 I I I I I ND 1.0 I ND 3.0 I<!--</td--><td>KTO Energy La Ground Water 0612120-07 Collection Date: OH Randel 7 MW-4 Matrix: Result PQL Qual Units 1B: VOLATILES ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L wobenzene 81.4 70.2-105 %REC Watrix: 0612120-08 Collection Date: Matrix: McDaniel Gas Com BIE MW-1 Matrix: Matrix: 1B: VOLATILES ND 1.0 µg/L ND 1.0 µg/L ND 1.0 ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 3.0 µg/L of12120-09 Collection Date: ND 0612120-09 Matrix: Result PQL Qual Units Matrix: 1B: VOLATILES ND 1.0 µg/L ND 1.0</td><td>KTO Energy Lab Order 3round Water Collection Date: 12/5/200 0612120-07 Matrix: AQUEC Result PQL Qual Units DF 1B: VOLATILES ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 ND 3.0 $µg/L$ 1 ND 3.0 $µg/L$ 1 0612120-08 Collection Date: 12/5/200 McDaniel Gas Com BIE MW-1 Matrix: AQUEC ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 1 ND 3.0 $µg/L$ 1 1 ND 1.0 $µg/L$ 1 1 ND 3.0 $µg/L$ 1 1 ND 1.0</td></td></td<>	KTO Energy Ground Water 0612120-07 C 0H Randel 7 MW-4 Result PQL Qual Qual 1B: VOLATILES ND 1.0 I ND 1.0 I ND 1.0 I ND 3.0 I ND 1.0 I 0612120-08 C C O C McDaniel Gas Com BIE MW-1 Result PQL Qual Qual I 1B: VOLATILES ND 1.0 I I I I I ND 1.0 I ND 3.0 I </td <td>KTO Energy La Ground Water 0612120-07 Collection Date: OH Randel 7 MW-4 Matrix: Result PQL Qual Units 1B: VOLATILES ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L wobenzene 81.4 70.2-105 %REC Watrix: 0612120-08 Collection Date: Matrix: McDaniel Gas Com BIE MW-1 Matrix: Matrix: 1B: VOLATILES ND 1.0 µg/L ND 1.0 µg/L ND 1.0 ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 3.0 µg/L of12120-09 Collection Date: ND 0612120-09 Matrix: Result PQL Qual Units Matrix: 1B: VOLATILES ND 1.0 µg/L ND 1.0</td> <td>KTO Energy Lab Order 3round Water Collection Date: 12/5/200 0612120-07 Matrix: AQUEC Result PQL Qual Units DF 1B: VOLATILES ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 ND 3.0 $µg/L$ 1 ND 3.0 $µg/L$ 1 0612120-08 Collection Date: 12/5/200 McDaniel Gas Com BIE MW-1 Matrix: AQUEC ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 1 ND 3.0 $µg/L$ 1 1 ND 1.0 $µg/L$ 1 1 ND 3.0 $µg/L$ 1 1 ND 1.0</td>	KTO Energy La Ground Water 0612120-07 Collection Date: OH Randel 7 MW-4 Matrix: Result PQL Qual Units 1B: VOLATILES ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L wobenzene 81.4 70.2-105 %REC Watrix: 0612120-08 Collection Date: Matrix: McDaniel Gas Com BIE MW-1 Matrix: Matrix: 1B: VOLATILES ND 1.0 µg/L ND 1.0 µg/L ND 1.0 ND 1.0 µg/L ND 1.0 µg/L ND 1.0 µg/L ND 3.0 µg/L of12120-09 Collection Date: ND 0612120-09 Matrix: Result PQL Qual Units Matrix: 1B: VOLATILES ND 1.0 µg/L ND 1.0	KTO Energy Lab Order 3round Water Collection Date: 12/5/200 0612120-07 Matrix: AQUEC Result PQL Qual Units DF 1B: VOLATILES ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 ND 3.0 $µg/L$ 1 ND 3.0 $µg/L$ 1 0612120-08 Collection Date: 12/5/200 McDaniel Gas Com BIE MW-1 Matrix: AQUEC ND 1.0 $µg/L$ 1 ND 1.0 $µg/L$ 1 1 ND 3.0 $µg/L$ 1 1 ND 1.0 $µg/L$ 1 1 ND 3.0 $µg/L$ 1 1 ND 1.0

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits 3 /
- B Analyte detected in the associated Method Blank

Date: 15-Dec-06

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

CLIENT: > Project: ((TO Energy Ground Water					Lab Order	:: 0612120
Lab ID:	0612120-10			(Collection Da	te: 12/5/20	06 3:17:00 PM
Client Sample ID:	McDaniel Gas Com	BIE MW-3			Matr	ix: AQUE	OUS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	B: VOLATILES						Analyst: NSB
Benzene		ND	1.0		µg/L	1	12/13/2006 10:27:09 AM
Toluene		ND	1.0		µg/L	1	12/13/2006 10:27:09 AM
Ethylbenzene		ND	1.0		·μg/L	1	12/13/2006 10:27:09 AM
Xylenes, Total		ND	3.0		µg/L	1	12/13/2006 10:27:09 AM
Surr: 4-Bromofluo	robenzene	81.2	70.2-105		%REC	1	12/13/2006 10:27:09 AM
Lab ID:	0612120-11			(Collection Da	te:	
Client Sample ID:	0512 2006 TBO1				Matr	ix: TRIP B	LANK
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES						Analyst: NSB
Benzene		ND	1.0		µg/L	1	12/13/2006 10:57:15 AM
Toluene		ND	1.0		µg/L	. 1	12/13/2006 10:57:15 AM
Elhylbenzene		ND	1.0		µg/L	1	12/13/2006 10:57:15 AM
Xylenes, Total		ND	3.0		µg/L	1	12/13/2006 10:57:15 AM
Surr: 4-Bromofluo	robenzene	79.9	70.2-105		%REC	1	12/13/2006 10:57:15 AM
Lab ID:	0612120-12	·····		(Collection Da	te: 12/5/20	06 3:50:00 PM
Client Sample ID:	Sullivan Gas Com I	NW-1R			Matr	ix: AQUE(DUS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES						Analyst: NSB
Benzene		ND	1.0		μg/L	1	12/14/2006 3:14:42 PM
Toluene		ND	1.0		µg/L	1	12/14/2006 3:14:42 PM
Ethylbenzene		ND	1.0		µg/L	1	12/14/2006 3:14:42 PM
Xylenes, Total		ND	3.0		µg/L	1	12/14/2006 3:14:42 PM
Come A Descendion	rahonzona	00 E	70 0 405		NDCO	4	40/44/0000 0-44-40 DM

Date: 15-Dec-06

Qualifiers: * Value exceeds Maximum Contaminant Level ₿ Analyte detected in the associated Method Blank Е Value above quantitation range Н Holding times for preparation or analysis exceeded Analyte detected below quantitation limits J MCL Maximum Contaminant Level ND Not Detected at the Reporting Limit RL Reporting Limit Page 4 of 4 Spike recovery outside accepted recovery limits S 4/6

QA/QC SUMMARY REPORT

Client: XTO Energy

Project: Ground Wate	er						Wor	k Order: (612120
Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD RI	PDLimit Qua
Method: SW8021		<u></u>						
Sample ID: 0612120-02A MSD		MSD			Batch	ID: R21754	Analysis Date:	12/12/2006 I:36:12 AM
Benzene	17.92	µg/L	1.0	87.5	85.9	113	6.25	27
Toluene	17.88	μg/L	1.0	87.7	86.4	113	4.33	19
Ethylbenzene	17.30	µg/L	1.0	86.5	83.5	118	4.82	10
Xylenes, Total	51.71	μg/L	3.0	86.2	83.4	122	4.61	13
Sample ID: b 15		MBLK			Batch	ID: R21754	Analysis Date:	12/11/2006 3:54:38 PM
Benzene	ND	μg/L	1.0					
Toluene	ND	µg/L	1.0				•	
Ethylbenzene	ND .	hd\r	1.0					
Xylenes, Total	ND	μg/L	3.0					
Sample ID: 5ML REAGENT BLA		MBLK			Batch	ID: R21800	Analysis Date:	12/13/2006 8:26:25 AM
Benzene	ND	µg/L	1.0					
Toluene	ND	µg/L	1.0					
Ethylbenzene	ND	μg/L	1.0					
Xylenes, Total	ND	µg/L	3.0					
Sample ID: 5ML REAGENT BLA		MBLK			Batch	ID: R21831	Analysis Date:	12/14/2006 8:42:55 AM
Benzene	ND	µg/L	1.0					
Toluene	ND	µg/L	1.0					
Ethylbenzene	ND	µg/L	1.0					
Xylenes, Total	ND	µg/L	3.0					
Sample ID: 100NG BTEX LCS II		LCS			Batch	ID: R21754	Analysis Date:	12/12/2006 2:06:12 AM
Benzene	18.26	µg/L	1.0	90.3	85.9	113		
Toluene	18.31	µg/L	1.0	91.6	86.4	113		
Ethylbenzene	17.98	µg/L	1.0	89.9	83.5	118		
Xylenes, Total	53.73	µg/L	3.0	89.6	83.4	122		
Sample ID: 100NG BTEX LCS		LCS			Batch	ID: R21800	Analysis Date:	12/13/2006 4:33:03 PM
Benzene	18.09	µg/L	1.0	90.4	85.9	113		
Toluene	17.99	µg/L	1.0	89.9	86.4	113		
Ethylbenzene	17.55	µg/L	1.0	87.7	83.5	118		
Xylenes, Total	52.58	µg/L	3.0	87.6	83.4	122		
Sample ID: 100NG BTEX LCS		LCS			Batch	ID: R21831	Analysis Date:	12/14/2006 7:50:29 PM
Benzene	17.78	μg/L	1.0	88.9	85.9	113		
Toluene	17.85	µg/L	1.0	89.2	86.4	113		
Ethylbenzene	17.33	µg/L	1.0	86.6	83.5	118		
Xylenes, Total	52.15	µg/L	3.0	86.9	83.4	122		
Sample ID: 0612120-02A MS		MS			Batch	ID: R21754	Analysis Date:	12/12/2006 1:06:08 AM
Benzene	19.07	µg/L	1.0	93.3	85.9	113		
Toluene	18.68	μg/L	1.0	91.7	86.4	113		
Ethylbenzene	18.16	μg/L	1.0	90.8	83.5	118		
Xylenes, Total	54.15	µg/L	3.0	90.2	83.4	122		
								· ·

- Qualifiers:
- Е Value above quantitation range
- J Analyte detected below quantitation limits

R RPD outside accepted recovery limits Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

 $^{c_{\rm output}}_{\rm 5 / 6}$ recovery outside accepted recovery limits

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ND

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CLIENT: Project:	XTO Energy Ground Water				L	ab Ordei	r: 0703123		
Lab ID:	0703123-04				Collection Date:	3/8/200	7 10:22:00 AM		
Client Sample ID:	Haney GC 1E MW-2				Matrix:	AQUE	DUS		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed		
EPA METHOD 802	1B: VOLATILES								
Benzene		ND	1.0		ua/L	1	3/12/2007 3-58-54 PM		
Toluene		ND	1.0		ua/L	1	3/12/2007 3:58:54 PM		
Ethylbenzene		ND	1.0		ua/L	1	3/12/2007 3:58:54 PM		
Xylenes, Total		ND	2.0		ua/L	1	3/12/2007 3:58:54 PM		
Surr: 4-Bromoflue	probenzene	85.4	70.2-105		%REC	1	3/12/2007 3:58:54 PM		
Lab ID:	0703123-05				Collection Date:	3/8/200	7 10·30·00 AM		
Client Sample ID:	Hancy GC 1E MW-4	-			Matrix:	Matrix: AQUEOUS			
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed		
EPA METHOD 802	1B: VOLATILES				······································		Analyst: NSB		
Benzene		ND	1.0		µg/L	1	3/12/2007 4:28:57 PM		
Toluene		ND	1.0		µg/L	1	3/12/2007 4:28:57 PM		
Ethylbenzene		ND	1.0		µg/L	1	3/12/2007 4:28:57 PM		
Xylenes, Total		ND	2.0		µg/L	1	3/12/2007 4:28:57 PM		
Surr: 4-Bromofluc	probenzene	88.5	70.2-105		%REC	1	3/12/2007 4:28:57 PM		
Lab ID:	0703123-06				Collection Date:	3/8/2001	7 11·34·00 AM		
Client Sample ID:	McDaniel GC B1E M	W-1			Matrix:	AQUEC	OUS		
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed		
EPA METHOD 802	1B: VOLATILES						Analyst: NSB		
Benzene		ND	1.0		µg/L	1	3/12/2007 4:59:01 PM		
		ND	1.0		µg/L	1	3/12/2007 4:59:01 PM		
Toluene			10		uall	1	3/12/2007 4-50-01 DM		
Toluene Ethylbenzene		IND	1.0		hair		J/12/2007 4.39.01 FW		
Toluene Ethylbenzene Xylenes, Total		ND	2.0		hðyr hðyr	1	3/12/2007 4:59:01 PM		

Date: 13-Mar-07

Qualifiers: * E

- Value exceeds Maximum Contaminant Level
- E Value above quantitation rangeJ Analyte detected below quantitation
- J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

- S Spike recovery outside accepted recovery limits 2/8
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

CLIENT:	XTO Energy Ground Water				L٤	ıb Order:	0703123
Lab ID:	0703123-07				Collection Date:	3/8/2007	11.52.00 AM
Client Sample ID:	McDaniel GC B1E N	1W-2			Matrix:	AOUEO	US
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES				-		Analyst: NSB
Benzene		ND	1.0		ua/L	1	3/12/2007 7:59:55 PM
Toluene		ND	1.0		μα/L	1	3/12/2007 7:59:55 PM
Ethylbenzene		ND	1.0		10/l	1	3/12/2007 7:50:55 PM
Xylenes, Total		ND	2.0		μα/l	1	3/12/2007 7:50:55 PM
Surr: 4-Bromofluc	probenzene	85.8	70.2-105		%REC	1	3/12/2007 7:59:55 PM
Lab ID:	0703123-08				Collection Date:	3/8/2007	12·54·00 PM
Client Sample ID:	McDaniel GC B1E M	ſW-3		·	Matrix:	US	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802 [°]	1B: VOLATILES						Analyst: NSB
Benzene		ND	1.0		μg/L	1	3/12/2007 8:29:59 PM
Toluene		ND	1.0		µg/L	1	3/12/2007 8:29:59 PM
Ethylbenzene		ND	1.0		µg/L	1	3/12/2007 8:29:59 PM
Xylenes, Total		ND	2.0		µg/L	1	3/12/2007 8:29:59 PM
Surr: 4-Bromofluo	robenzene	85.5	70.2-105		%REC	1	3/12/2007 8:29:59 PM
Lab ID:	0703123-09				Collection Date:	3/8/2007	1:34:00 PM
Client Sample ID:	OH Randel 7 MW-3				Matrix:	AQUEOU	JS
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 802	1B: VOLATILES						Analyst: NSB
Benzene		ND	1.0		µg/L	1	3/12/2007 9:00:02 PM
Teluene		ND	1.0		µg/L	1	3/12/2007 9:00:02 PM
Toluene		ND	1.0		µg/L	1	3/12/2007 9:00:02 PM
Ethylbenzene							
Ethylbenzene Xylenes, Total		3.8	2.0		µg/L	1	3/12/2007 9:00:02 PM

Date: 13-Mar-07

 Qualifiers:
 *
 Value exceeds Maximum Contaminant Level

 E
 Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits -3/8

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

XTO Energy

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QA/QC SUMMARY REPORT

Project: Ground Wate	er						١	Work (Order	: 0703123
Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPD	Limit	Qual
Method: SW8021					·····					
Sample ID: 0703123-10A MSD		MSD			Batch	ID: R22791	Analysis D	ate:	3/12/	2007 5:59:11 PI
Benzene	20.46	µg/L	1.0	102	85.9	113	0.726	27		
Toluene	20.45	μg/L	1.0	102	86.4	113	0.156	19		
Ethylbenzene	20.55	µg/L	1.0	103	83.5	118	0.553	10		
Xylenes, Total	62.34	µg/L	2.0	104	83.4	122	0.115	13		
Sample ID: 5ML REAGENT BLA		MBLK			Batch	ID: R22791	Analysis D	ate:	3/12/	2007 7:48:15 AI
Benzene	ND	µg/L	1.0							
Toluene	ND	µg/L	1.0							
Ethylbenzene	ND	μg/L	1.0							
Xylenes, Tolal	ND	μg/L	2.0							
Sample ID: 100NG BTEX LCS		LCS			Batch	ID: R22791	Analysis D	ate:	3/12/	2007 6:29:11 PI
Benzene	20.59	µg/L	1.0	103	85.9	113				
Toluene	20.69	μg/L	1.0	103	86.4	113				
Ethylbenzene	20.53	µg/L	1.0	103	83.5	118				
Xylenes, Total	62.49	µg/L	2.0	104	83.4	122				
Sample ID: 0703123-10A MS		MS			Batch	ID: R22791	Analysis D	ate:	3/12/	2007 5:29:09 PI
Benzene	20.31	µg/L	1.0	102	85.9	113				
Toluene	20.49	μg/L	1.0	102	86.4	113				
Ethylbenzene	20.67	µg/L	1.0	103	83.5	118				
Xylenes, Tolal	62.41	µg/L	2.0	104	83.4	122				

Qualifiers:

Client:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

 $S \qquad Snike recovery outside accepted recovery limits \\ 7 \ / \ 8 \\$

Form 3160-5	UNI	TED STATES	FORM APPROVED Budget Bureau No. 1004-0135					
(June 1990)	DEPARTMEN	IT OF THE INTERIOR	Expires: March 31, 1993					
	BUREAU OF I	LAND MANAGEMENT	5. Lease Designation and Deria Ter					
Do not use this for Use	SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals							
	SUBMIT IN TRIPLICATE							
1. Type of Well Oil Gas Well X Well	Other		8. Well Name and No. McDANIEL GC BIE					
2. Name of Operator	2. Name of Operator Amoco Production Company							
200 Amoco Co	ourt, Farmington,	N.M. 87401 Tel: (505) 326-9200	10. Field and Pool, or Exploratory Area					
4. Location of well (Poolage $SE / H N$	w/4, SEC.26	TZ9N, RIOW, NMPM	11. County or Parish, State SAN JUAN, NM					
12. CHECK A	APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPOP	T, OR OTHER DATA					
TYPE OF S	SUBMISSION	TYPE OF ACTION						
Notice of	Intent	Abandonment Recompletion	Change of Plans					
Subseque	nt Report	Plugging Back Casing Repair	Water Shut-Off					
Final Ab	andonment Notice	Altering Casing Nother Fit cleaune	Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)					
13. Describe Proposed or Con give subsurface local	npleted Operations (Clearly state a tions and measured and true verti	Il pertinent details, and give pertinent dates, including estimated date of starting cal depths for all markers and zones pertinent to this work.)*	; any proposed work. If well is directionally drilled,					
Pit	closure verifica	ation - see attached documentation.						
DEHYDRATZ	R PIT - AB	ANDONED, GROWDWATER IMPACT	ED.					
		9.5 Z/14/00						
14. 1 hereby cortific that the Signed	or State office use)	Tille ENVIRO. COORDINATOR	Date 12 (30/94					
Approved by Conditions of approval,	if any:	Title	Date					
Title 18 U.S.C. Section 1001 or representations as to any 1	I, makes it a crime for any person matter within its jurisdiction.	n knowingly and willfully to make to any department or agency of the United	States any false, fictitious or fraudulent statement					
		*See Instruction on Heverse Side						

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BO 191

BO 191

District I P.O. Box 1980, Hobbs, NM District II P.O. Drawer DD, Artesia, NM 88211 Strict III 1000 Rio Brazos Rd, Aztec, NM 87410 State of New Mexico Energy, Minerals and Natural Resources Department

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

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

PIT REMEDIATION AND CLOSURE REPORT

ومتحمد والمراجع		
Operator:	Amoco Production Company	Telephone: (505) - 326-9200
Address:	200 Amoco Court, Farmington	, New Mexico 87401
Facility Or: Well Name	MCDANIEL GC R	<u>, IE</u>
Location: Unit	or Qtr/Qtr Sec_ F Se	CZG T29NR IDD COUNTY SAN JUAN
Pit Type: Separ	rator Dehydrator X O	ther
Land Type: BL	M, State, Fee	, Other Com AGMT.
Pit Location: (Attach diagram)	Pit dimensions: length Reference: wellhead Footage from reference: Direction from referenc	20', width $23'$, depth $4', other110'e: 32 Degrees \times East NorthofWest South \times$
Depth To Groun (Vertical distanc contaminants to s high water elevat ground water)	d Water: e from easonal ion of	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points) <u>こ</u> つ
Wellhead Prote (Less than 200 fe domestic water so 1000 feet from al	ection Area: Set from a private Durce, or; less than Ll other water sources)	Yes (20 points) No (0 points) <u>O</u>
Distance To Su (Horizontal dista lakes, ponds, riv irrigation canals	<pre>Irface Water: ance to perennial vers, streams, creeks, a and ditches)</pre>	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points) <u>20</u>
		RANKING SCORE (TOTAL POINTS): 40

		BO 191	-
Date Remediation St	arted:	Date Completed: 12(30)94	
Remediation Method:	Excavation $\underline{\times}$	Approx. cubic yards 50	
(Check all appropriate sections)	Landfarmed $\underline{\times}$	Insitu Bioremediation	
	Other		
Remediation Locatio (ie. landfarmed onsite, name and location of offsite facility)	n: Onsite 🔀 Of	efsite <u>X</u> BAGA GC A #1A (F-26-29-10 -	ی ا
General Description	Of Remedial Actio	מי:	
Excavatio	on GROWNDWAT	ER PLMPED & HALLED,	Beerland B
LANDFR	m son mixed u	WITH BRICA GC A THIA - REFER TO	
BASA	Ge A #HA FUR LA	NOFARM CLOSURE INFORMATION.	
Ground Water Encoun	tered: No	Yes $\underline{\checkmark}$ Depth $\underline{3}^{\dagger}$	
Final Pit:	Sample location	see Attached Documents	
Closure Sampling:	mu	LTIPLE SAMPLES	
attach sample results and diagram of sample	Sample depth		
locations and depths)	Sample date	Sample time	
	Sample Results		
	Benzene(ppm)	
	Total BTEX(ppm)	
	Field heads	pace(ppm)	
	трн		
Ground Water Sample	: Yes 🔀 No	(If yes, attach sample results)	
I HEREBY CERTIFY TH OF MY KNOWLEDGE AND	IAT THE INFORMATIO) BELIEF	N ABOVE IS TRUE AND COMPLETE TO THE BEST	r
DATE 12 30 94	٨	RIIN SI.	
SIGNATURE SAST	haw PRINTE AND TI	D NAME I, Juddy P. MAW TLE ENVIRONMENTAL COORDINATOR	

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING P.O. BOX 87, BLOOMFIELD, (505) 632-1199	, INC. NM 87413 9	ICATION NO: <u>80191</u> 2329 C.O.C. NO: <u>2563</u>
FIELD REPOF	T: CLOSURE VERIF	'ICATION PA	GE No: <u>/</u> of <u>/</u>
LOCATION: NAME: Me DR	NEL GC WELL #: SIE PIT:	DEHY DA	E STARTED: <u>12/15/94</u> E FINISHED:
QUAD/UNIT: F SEC: QTR/FOOTAGE: 56(4	NW14 CONTRACTOR: P. VEWS	CNTY:ST ST:NM PNGZ SPE	/IRONMENTAL ECIALIST:/
EXCAVATION APPROX.	$\begin{array}{c} \begin{array}{c} \begin{array}{c} FT. x \\ \hline \end{array} \\ FT. x \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ FT. x \\ \hline \end{array} \\ \\ \hline \end{array} $ \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \\ \hline \end{array} \\ \\ \hline \end{array} \\ \\ \hline \end{array} \\ \\ \hline \\ \\ \\ \\ \hline \\ \\ \\	DEEP. CUBIC YA	ARDAGE: <u>50</u> <i>Landfarted</i> ATION: <u>0k</u>
DEPTH TO GROUNDWATER: <5	V NEAREST WATER SOURCE: >1000 '	NEAREST SURFACE W	ATER:
NMOCD RANKING SCORE:	NMOCD TPH CLOSURE STD: /00 PF		CHECK ONE :
SOIL AND EXCAVATIO	IN DESCRIPTION:	\$1	EEL TANK INSTALLED
GROWN SOIL BY TR SCALE	DWATER OBSERVED IN TRENE SAMPLE(S) FROM ANY SIDEWAR .IPLE S & HAUCED. FIELD 418.1 TIME SAMPLE I.D. LAB NO: WEIGHT	CALCULATIONS (g) mL. FREON DILUT	ON READING CALC. ppm
0 FT	ETTED OVM		ROFILE
SALE'S SALE'S LUSE A A	ETER A RESULTS SAMPLE FIELD HEADSPACE ID PID (ppm) 1 2 3 4 5 23 A LAB SAMPLES SAMPLE ANALYSIS TIME	A 3' D 660 m	A ' A '
TREVEH ALEA	PIPIN'S PIPIN'S EXTENDED AUZEGUS(3) BTEX 1400 AUZEGUS(3) BTEX 1400	0 12/15 FAILED 5 12/21 FAILED 12/28 PR55ED	



OFF: (505) 325-8786

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:	Nelson V	/elez			Date:	12/16/94
Company:	Blagg En	gineering			Lab ID:	2329
Address:	P.O. Box	87			Sample ID:	4403
City, State:	Bloomfie	ld, NM 8741	3		Job No.	2-1000
Project Nam	ne:	McDanie	IGCB1E			
Project Loca	ation:	PW 1 @	GW (3') - Del	hy Pit		
Sampled by	:	NV	Date:	12/15/94	Time:	14:20
Analyzed by	/ :	DLA	Date:	12/16/94		
Sample Mat	trix:	Water				

Aromatic Volatile Organics

Component	Measured Concentration ug/l	Detection Limit
Component		
Benzene	130.9	0.2
Toluene	84.4	0.2
Ethylbenzene	30.7	0.2
m,p-Xylene	284.6	0.2
o-Xylene	53.7	0.2
	TOTAL 584.4 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: $Date: \frac{12}{12}$

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- Technology Blending Industry with the Environment -



OFF: (505) 325-8786

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:	Nelson \	/elez			Date:	12/22/94
Company:	Blagg Er	ngineering			Lab ID:	2563
Address:	P.O. Box	< 87			Sample ID:	4480
City, State:	Bloomfie	eld, NM 8741	3		Job No.	2-1000
Project Nan	ne:	McDanie	I GC B 1 E			
Project Loca	ation:	PW 2 @	GW (3') - D	ehy Pit		
Sampled by	/:	NV	Date:	12/21/94	Time:	9:25
Analyzed b	y:	DLA	Date:	12/22/94		
Sample Ma	trix:	Water				

Aromatic Volatile Organics

Component	Measured Concentration ug/L	Detection Limit Concentration ug/L
Benzene	112.6	0.2
Toluene	36.1	0.2
Ethylbenzene	24.0	0.2
m,p-Xylene	308.8	0.2
o-Xylene	57.4	0.2
	тота <i>L 539.0 ug/L</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: De 4 Date: 12/22/94

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OFF: (505) 325-8786

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:	Nelson N	/elez			Date:	12/30/94
Company:	Blagg Er	ngineering			Lab ID:	2515
Address:	P.O. Box	x 87			Sample ID:	4550
City, State:	Bloomfie	eld, NM 8741	3		Job No.	2-1000
Project Nam	ne:	McDanie	I GC B 1 E			
Project Loca	ation:	PW 3 @	GW(3')-D	ehy Pit	1	
Sampled by		NV	Date:	12/28/94	Time:	14:00
Analyzed by	/:	DLA	Date:	12/30/94		
Sample Mat	trix:	Water				

Aromatic Volatile Organics

Component	Mea Concentr	sured ration ug/L	Detection Limit Concentration ug/L
Benzene	· · · ·	0.8	0.2
Toluene		0.5	· 0.2
Ethylbenzene		0.3	0.2
m,p-Xylene		4.2	0.2
o-Xylene		0.8	0.2
	TOTAL	6.7 ug/L	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: Date:

P. O. BOX 2606 • FARMINGTON, NM 87499

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SEN Address P.O. BOX S	(~)			SESI RESI	State, Zip	SAME				
City, State, Zip Sucom FILL	2 AM 874	13		Tele	phone No.	632 -1	1,99	Telefax No.	•	
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l.	Method of Shipment:	, usr	24-48 Hours	10 Working Days	Special Instruction		
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	Distribution: White – On Site Yellow – LAB Pink –	- Sampler Gol	denrod – Client				

ON SITE FECHNOLOGIES, LTD. 657 W. Maple • P. O. Box 2606 • FA TECHNOLOGIES, LTD. 657 W. Maple • P. O. Box 2606 • FA Purchase Order No.: Job No. Purchase Order No.: Job No. Name Job No. Recompany Job No. Name Job No. Name Job No. Name Name Ordpany R.146-C Address P. BOX 83 City, State, Zip R.10 Sampling Location: City, State, Zip Sampler: Manue Sampler: Manue Sampler: Manue	Date Farmington NM 87499 X: (505) 325-6256 Dept.	12/2	18/94		Page / of /
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