District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

30-045-25266

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: XTO Energy, Inc.	Contact: James McDaniel
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3701
Facility Name: J F Bell #2E (30-045-25266)	Facility Type: Gas Well (Basin Dakota)

Surface Owner: Federal	Mineral Owner:	Lease No.:

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	3	30N	13W	940	FSL	1020	FEL	San Juan

Latitude: 36.8373 **Longitude:** -108.1868

NATURE OF RELEASE

Type of Release: Condensate/Historical	Volume of Release: 4 BBLs	Volume Recovered: None
Source of Release: Frozen Valve on AST	Date and Hour of Occurrence: 11/23/2010	Date and Hour of Discovery: 11/23/2010
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom? James McDaniel	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
On November 23, 2019, a XTO lease operator noticed a spill at the J F Bell #2E resulting from a frozen valve on the on-site oil tank. Approximately 4 bbls was spilled inside the bermed area for the above ground tank, with non recovered. The damaged valve was replaced, and the leak stopped. A sample was collected of the spill area during a spill assessment, returning results of 16,900 ppm TPH and over 487 ppm total BTEX. The site was then ranked a 10 due to an estimated depth to groundwater of 50-100 feet, setting the closure standard to 1,000 ppm TPH, 10 ppm benzene and 50 ppm total BTEX. LTE was contracted to oversee remediation activities at this location. During excavation, historical impacted soil was encountered.

Describe Area Affected and Cleanup Action Taken.*
The attached report written by LT Environmental details the spill remediation information for this location.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION
Printed Name: James McDaniel	Approved by District Supervisor: Jonathan D. Kelly
Title: EH&S Specialist	Approval Date: 1/11/2012 Expiration Date:
E-mail Address: James_McDaniel@xtoenergy.com	Conditions of Approval: Attached ☐
Date: 1/13/2011 Phone: 505-333-3701	

RECEIVED
JAN 2011
OIL CONS. DIV. DIST 3

nJK1201130594

EXCAVATION REPORT

J F BELL #002E
API #30-045-25266
SAN JUAN COUNTY, NEW MEXICO

January 12, 2011

Prepared for:

XTO ENERGY, INC

EXCAVATION REPORT

J F BELL #002E
API #30-045-25266
SAN JUAN COUNTY, NEW MEXICO

January 12, 2011

Prepared for:

XTO ENERGY, INC
382 CR 3100
Aztec, NM 87410

Prepared by:

LT ENVIRONMENTAL, INC.
2243 Main Avenue, Suite 3
Durango, Colorado 81301
(970) 385-1096

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FIGURES

TABLES

APPENDIX

EXECUTIVE SUMMARY

This report was prepared by LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), to document remediation activities at the J F Bell #002E natural gas well (Site). The Site is located in the southeast quarter of Section 3 within Township 30 North and Range 13 West in San Juan County, New Mexico.

The scope of work for this project included mitigation of hydrocarbon-impacted soils due to a valve failure on an above ground natural gas condensate storage tank. The perimeter of the final excavation was approximately 174 feet. The excavation advanced to depths between 4 and 10 feet below ground surface (bgs). These activities contributed to overall remediation at the Site. A final total of approximately 188 cubic yards of impacted soil were excavated and transported to the Industrial Ecosystems, Inc. Landfarm for disposal. Analytical results from soil confirmation samples indicated that the walls and floor of the excavation were remediated to below New Mexico Oil Conservation Division (NMOCD) recommended remediation action levels.

SECTION 1.0

INTRODUCTION

This report was prepared by LT Environmental, Inc. (LTE) for XTO Energy, Inc (XTO) to document excavation activities at the J F Bell #002 E natural gas well site (Site). The purpose of this project was to remove hydrocarbon-impacted soils from the Site.

1.1 SITE DESCRIPTION

The J F Bell #002E natural gas well is located in the southeast quarter of Section 3 within Township 30 North and Range 13 West in San Juan County, New Mexico. The Site is situated approximately 323 feet north/northwest of North Twin Wash, a first order tributary to the La Plata River (Figure 1). Site geology is identified as the Tertiary age San Jose Formation. Groundwater was not encountered during excavation activities at the Site. Pit closure documents prepared by Blagg Engineering, Inc. in 2005 and approved by the New Mexico Oil and Conservation Division (NMOCD) on March 23, 2006 stated the depth to groundwater was greater than 100 feet below ground surface (bgs) for the Site. The elevation difference between the Site and nearby Glade Wash is 58 feet, suggesting groundwater may be between 50 and 100 feet. Acting conservatively, LTE used NMOCD soil remediation standards applying to locations where groundwater is between 50 and 100 feet.

1.2 SITE HISTORY

On November 24, 2010, a valve at the bottom of an above ground storage tank froze and released an estimated 4 barrels of natural gas condensate. As part of an initial assessment, XTO collected one sample of the impacted soils for laboratory analysis. The results indicated the soils contained 16,900 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons and 487 mg/kg of total benzene, toluene, ethylbenzene, and xylenes (BTEX). XTO initiated remediation activities and retained LTE to oversee excavation at the Site. Oversight included collecting soil samples for field screening from the walls and floor of the excavation. As the excavation expanded, the condensate tank had to be moved. Excavation of contaminated soils continued until confirmatory soil samples analyzed by a laboratory from the side walls and the floor indicated the Site had been remediated to below NMOCD recommended remediation action levels.

1.3 SCOPE OF WORK

The scope of work for this remediation project included removal of impacted soil. During on-site activities, LTE personnel conducted excavation oversight, collected soil samples, field screened samples, monitored health and safety, documented all field activities, and collected composite soil samples for laboratory analysis. A summary of field work, analytical results from soil sampling, and conclusions are presented in the subsequent sections of this report.

SECTION 2.0

SUMMARY OF FIELD ACTIVITIES

2.1 EXCAVATION ACTIVITIES

2.1.1 IMPACTED SOIL REMOVAL

LTE was on site on December 3, 6, and 9, 2010, to oversee excavation activities. LTE conducted field screening of organic vapor concentrations with a photoionization detector (PID) according to NMOCD headspace techniques. LTE also collected confirmation samples of the sidewalls and floor of the excavation to document excavation activities.

The final dimensions of the primary excavation are shown on Figure 2. The total depth of the excavation ranged from 4 to 10 feet bgs. A total estimated volume of 420 cubic yards were excavated. Of that, 188 cubic yards were transported to the Industrial Ecosystems, Incorporated (IEI) landfarm near Aztec, New Mexico. The remainder was clean overburden that was used to backfill the hole.

Confirmation samples were collected for submittal to an analytical laboratory. Figure 3 presents the location of composite soil samples collected from within the excavation. Composite soil samples were collected by depositing aliquots of soil into plastic bags, thoroughly mixing the contents and sampling into four ounce glass jars. Samples were stored on ice and hand delivered to Envirotech Laboratory in Bloomfield, New Mexico, following strict chain-of-custody procedures. The soil samples were analyzed for BTEX by U.S. Environmental Protection Agency (USEPA) Method 8021 and total petroleum hydrocarbons (TPH) by USEPA Method 8015. The chain-of-custody for soil samples collected on 12/9/10 was incorrectly filled out with the site name "JF Bell #2A". The samples from 12/9/10 were collected from the JF Bell #2E site.

The excavation was backfilled with clean backfill. The source locations of the backfill were clean soils derived from the excavation and approximately 200 yards of clean fill from Four Corners Materials.

SECTION 3.0

ANALYTICAL RESULTS

Results from laboratory testing of all soil samples collected prior to and during the excavation activities are listed on Table 1. Locations of soil samples collected for Site closure are shown in Figure 3. Complete laboratory reports are included in Appendix A. Final laboratory analyses indicate that TPH and BTEX concentrations in soils on the walls and the floor were beneath NMOCD standards for sites where groundwater is between 50 and 100 feet bgs.

SECTION 4.0

SUMMARY AND CONCLUSIONS

A total of approximately 420 cubic yards of soil were excavated from the Site. Of that, approximately 188 cubic yards were transported to the Industrial Ecosystems, Incorporated (IEI) landfarm near Aztec, New Mexico for disposal. Confirmation soil samples from the side walls and floor of the excavation were below NMOCD standards for BTEX and TPH concentrations. Source locations for backfill were clean soils derived from the excavation and approximately 200 yards from Four Corners Materials.

FIGURES

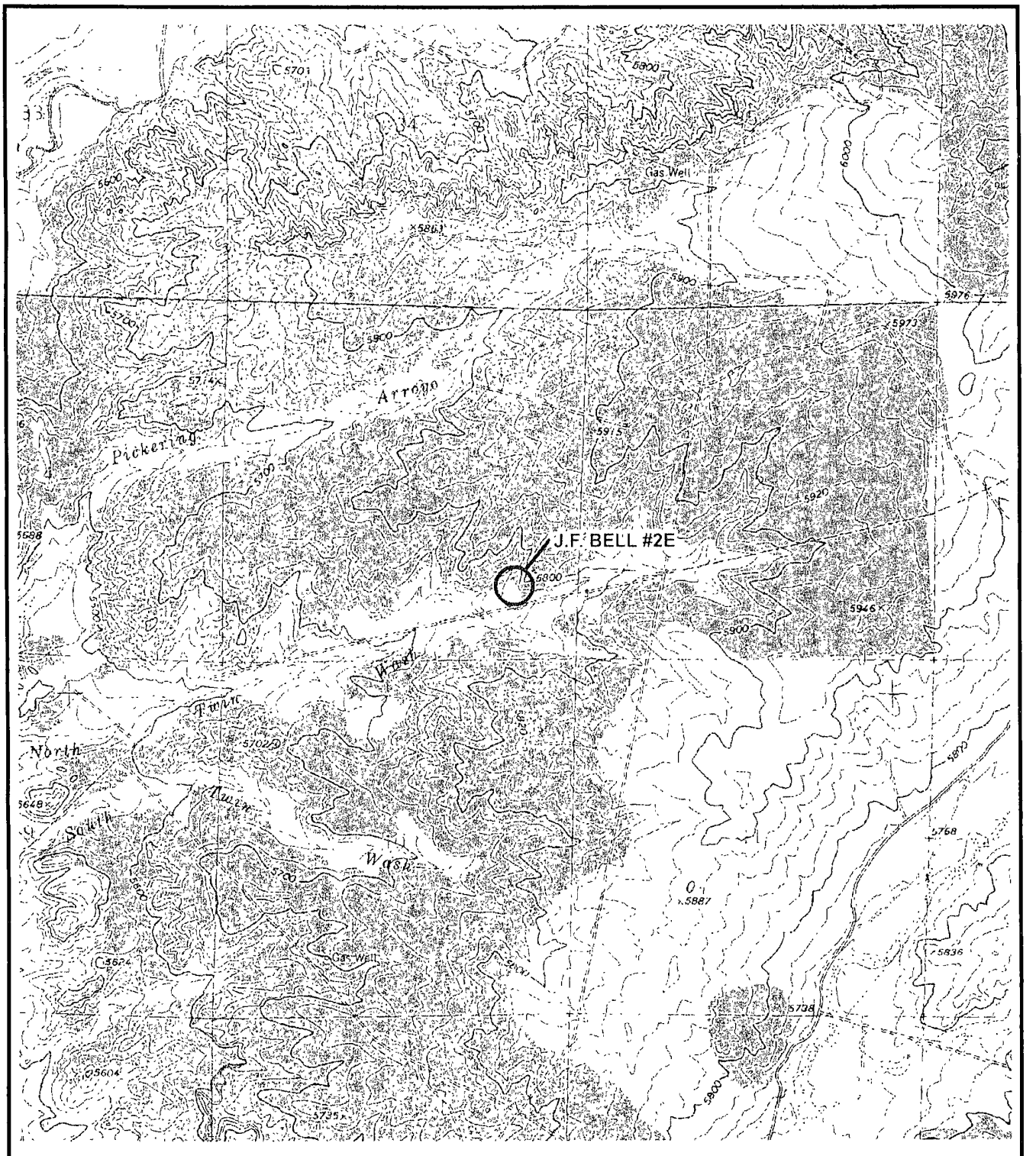
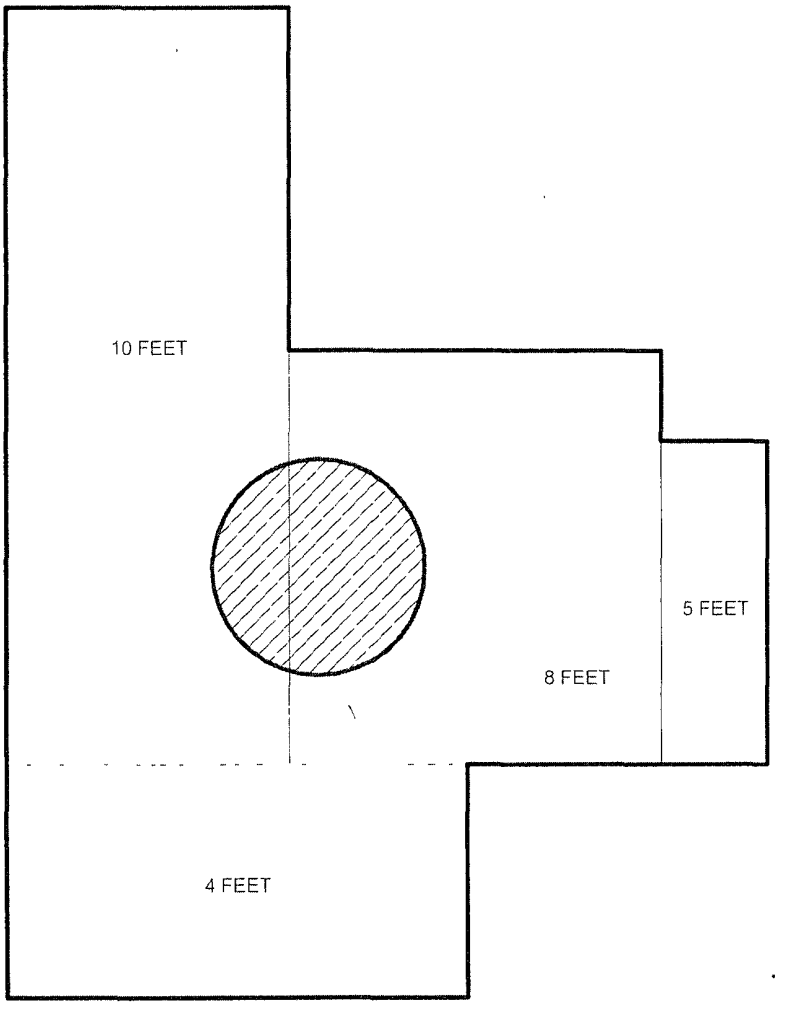


FIGURE 1
SITE LOCATION MAP
J F. BELL #2E
SESE SEC 3 T30N R13W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC. - SAN JUAN DIVISION

LEGEND

SITE LOCATION

P \XTO Energy\GIS\MXD\XTO1026 J F BELL #2E\XTO1026_JF_BELL 2E_FIG01_SITE mxd



0 10 20
Feet

N

LEGEND

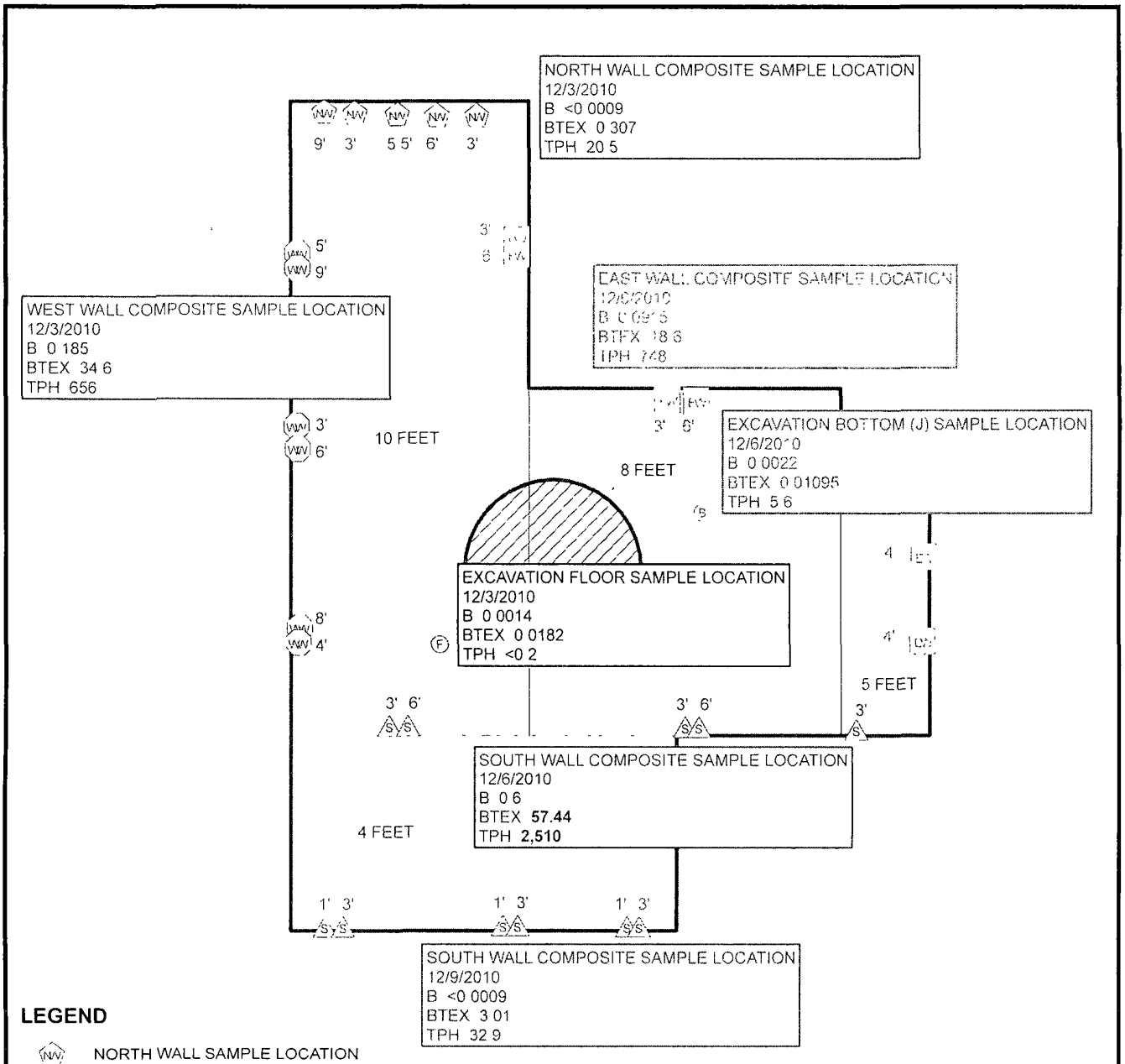
ABOVEGROUND STORAGE TANK (AST)

EXCAVATION PERIMETER (12/03/10 - 12/09/10)

BOUNDARY OF EXCATION DEPTH

FIGURE 2
SITE MAP
J.F. BELL #2E
SESE SEC 3 T30N R13W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC. - SAN JUAN DIVISION

P \XTO Energy\GIS\MXD\XTO1026 J F BELL #2E\XTO1026_JF_BELL 2E_FIG01_SITE mxd



LEGEND

- NORTH WALL SAMPLE LOCATION
- SOUTH WALL (12/06/10) SAMPLE LOCATION
- SOUTH WALL (12/09/10) SAMPLE LOCATION
- WEST WALL SAMPLE LOCATION
- EAST WALL SAMPLE LOCATION
- EXCAVATION FLOOR SAMPLE LOCATION
- EXCAVATION BOTTOM (J) SAMPLE LOCATION

NUMBERS BESIDE SAMPLE LOCATIONS INDICATE DEPTH OF SAMPLE IN FEET

- ABOVEGROUND STORAGE TANK (AST)
- EXCAVATION PERIMETER (12/03/10 - 12/09/10)
- BOUNDARY OF EXCATION DEPTH

SAMPLE ID
SAMPLE DATE
B BENZENE IN MILLIGRAMS PER KILOGRAM (mg/kg)
BTEX TOTAL BENZENE, TOLUENE, ETHYLBENZENE, & XYLENES (mg/kg)
TPH TOTAL PETROLEUM HYDROCARBONS (mg/kg)
< LESS THAN LABORATORY METHOD DETECTION LIMIT
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO SOIL STANDARD

0 10 20
Feet

N

FIGURE 3
COMPOSITE SOIL ANALYTICAL RESULTS
J F. BELL #2E
SESE SEC 3 T30N R13W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC. - SAN JUAN DIVISION

P \XTO Energy\GIS\MXD\XTO1026 J F BELL #2E\XTO1026_JF_BELL 2E_FIG01_SITE mxd

TABLES

TABLE 1

SOIL ANALYTICAL RESULTS
J.F. BELL #2E
XTO ENERGY, INC.

Sample ID	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Total Petroleum Hydrocarbons (mg/kg)
NMOCD Standard		10	n/e	n/e	n/e	50	n/e	n/e	1,000
Spill Composite	11/24/2010	7 18	130	40 2	309.8	**487**	14,300	2,580	**16,900**
Excavation Floor*	12/3/2010	0 0014	0 0011	0.0034	0 00123	0 0182	<0 2	<0 1	<0 3
North Wall Composite *	12/3/2010	<0 0009	0 0115	0 0142	0.2813	0.307	20 5	<0 1	20 5
West Wall Composite *	12/3/2010	0 185	3 91	2 49	27.97	34.6	578	78 4	656
Excavation Bottom (J) *	12/6/2010	0 0022	0 0017	0 0025	46 7	0 0519	<0 2	5 6	5 6
S Wall Composite	12/6/2010	0 6	8 87	4.07	43 9	**57.5**	2,270	241	**2,510**
E Wall Composite *	12/6/2010	0 0915	1.88	1 01	15.65	18.6	664	84 3	748
S Wall Composite *	12/9/2010	<0 9	0 219	0 214	2 576	3 01	24	8 9	39 2

Notes:

mg/kg - milligrams per kilogram

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - Diesel Range Organics

GRO - Gasoline Range Organics

< - indicates result is less than the stated laboratory method detection limit

* - indicates final confirmation sample

n/e - not established

NMOCD - New Mexico Oil Conservation Commission

Bold font indicates values exceeding NMOCD standards

TPH analyzed by EPA Modified Method 8015

BTEX analyzed by EPA Method 8021

APPENDIX A

LABORATORY REPORTS

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	Spill Composite	Date Reported:	11-29-10
Laboratory Number:	56563	Date Sampled:	11-24-10
Chain of Custody No:	10813	Date Received:	11-24-10
Sample Matrix:	Soil	Date Extracted:	11-29-10
Preservative:	Cool	Date Analyzed:	11-29-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**14,300**	**0.2**
Diesel Range (C10 - C28)	**2,580**	**0.1**
Total Petroleum Hydrocarbons	**16,900**	

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: **J F Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-29-10 QA/QC	Date Reported:	11-29-10
Laboratory Number:	56527	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-29-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	11-29-10	9.9960E+002	1.0000E+003	**0.04%**	**0 - 15%**
Diesel Range C10 - C28	11-29-10	9.9960E+002	1.0000E+003	**0.04%**	**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**

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**	**242**	**96.6%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**231**	**92.3%**	**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 56527-56529, 56558, 56561-56563**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	Spill Composite	Date Reported:	11-29-10
Laboratory Number:	56563	Date Sampled:	11-24-10
Chain of Custody:	10813	Date Received:	11-24-10
Sample Matrix:	Soil	Date Analyzed:	11-29-10
Preservative:	Cool	Date Extracted:	11-29-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**7,180**	**0.9**
Toluene	**130,000**	**1.0**
Ethylbenzene	**40,200**	**1.0**
p,m-Xylene	**221,000**	**1.2**
o-Xylene	**88,800**	**0.9**
Total BTEX	**487,000**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**111 %**
	1,4-difluorobenzene	**96.0 %**
	Bromochlorobenzene	**101 %**

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: **J F Bell #2E**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1129BBLK QA/QC	Date Reported:	11-29-10
Laboratory Number:	56560	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-29-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc.	Detect. Limit
Benzene	3.3501E+005	3.3569E+005	0.2%	ND	0.1
Toluene	3.7994E+005	3.8070E+005	0.2%	ND	0.1
Ethylbenzene	3.4829E+005	3.4898E+005	0.2%	ND	0.1
p,m-Xylene	8.2477E+005	8.2643E+005	0.2%	ND	0.1
o-Xylene	2.9394E+005	2.9453E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	235	222	5.6%	0 - 30%	1.0
Ethylbenzene	71.9	70.5	1.9%	0 - 30%	1.0
p,m-Xylene	1,260	1,310	4.0%	0 - 30%	1.2
o-Xylene	336	344	2.3%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	591	118%	39 - 150
Toluene	235	500	703	95.6%	46 - 148
Ethylbenzene	71.9	500	650	114%	32 - 160
p,m-Xylene	1,260	1000	2,610	116%	46 - 148
o-Xylene	336	500	895	107%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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 56560-56563, 56558

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

10813

Client: XTO Energy	Project Name / Location: JF Bell #2E
Client Address: 382 CR 3100	Sampler Name: J McDaniel
Client Phone No.: Email	Client No.: 98031-0528

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl₂	Preservative HCl	Preservative Cool	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Spill Composite	11/24/10	1445	56563	(Soil) Sludge Solid Aqueous	1/4oz			X	X	X												✓	✓
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
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				Soil Sludge Solid Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/24/10	1535	[signature]	11/24/10	1535
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

envirotech
Analytical Laboratory

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envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	Excavation Floor	Date Reported:	12-06-10
Laboratory Number:	56616	Date Sampled:	12-03-10
Chain of Custody No:	10763	Date Received:	12-03-10
Sample Matrix:	Soil	Date Extracted:	12-03-10
Preservative:	Cool	Date Analyzed:	12-06-10
Condition:	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**	

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	North Wall Composite	Date Reported:	12-06-10
Laboratory Number:	56617	Date Sampled:	12-03-10
Chain of Custody No:	10763	Date Received:	12-03-10
Sample Matrix:	Soil	Date Extracted:	12-03-10
Preservative:	Cool	Date Analyzed:	12-06-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**20.5**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**20.5**	

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	West Wall Composite	Date Reported:	12-06-10
Laboratory Number:	56618	Date Sampled:	12-03-10
Chain of Custody No:	10763	Date Received:	12-03-10
Sample Matrix:	Soil	Date Extracted:	12-03-10
Preservative:	Cool	Date Analyzed:	12-06-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**578**	**0.2**
Diesel Range (C10 - C28)	**78.4**	**0.1**
Total Petroleum Hydrocarbons	**656**	

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: **JF Bell #2E**

Analyst

Review

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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:	12-06-10 QA/QC	Date Reported:	12-06-10
Laboratory Number:	56611	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-06-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	12-06-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	12-06-10	9.9960E+002	1.0000E+003	0.04%	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

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	6,060	7,130	17.7%	0 - 30%
Diesel Range C10 - C28	340	363	6.7%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	6,060	250	6,200	98.3%	75 - 125%
Diesel Range C10 - C28	340	250	595	101%	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 56611, 56616-56621, 56626-56627**

Analyst

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	Excavation Floor	Date Reported:	12-06-10
Laboratory Number:	56616	Date Sampled:	12-03-10
Chain of Custody:	10763	Date Received:	12-03-10
Sample Matrix:	Soil	Date Analyzed:	12-06-10
Preservative:	Cool	Date Extracted:	12-03-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**1.4**	**0.9**
Toluene	**1.1**	**1.0**
Ethylbenzene	**3.4**	**1.0**
p,m-Xylene	**8.7**	**1.2**
o-Xylene	**3.6**	**0.9**
Total BTEX	**18.2**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**106 %**
	1,4-difluorobenzene	**110 %**
	Bromochlorobenzene	**115 %**

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: **JF Bell #2E**

Analyst

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5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	North Wall Composite	Date Reported:	12-06-10
Laboratory Number:	56617	Date Sampled:	12-03-10
Chain of Custody:	10763	Date Received:	12-03-10
Sample Matrix:	Soil	Date Analyzed:	12-06-10
Preservative:	Cool	Date Extracted:	12-03-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**11.5**	**1.0**
Ethylbenzene	**14.2**	**1.0**
p,m-Xylene	**268**	**1.2**
o-Xylene	**13.3**	**0.9**
Total BTEX	**307**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**98.9 %**
	1,4-difluorobenzene	**101 %**
	Bromochlorobenzene	**111 %**

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: **JF Bell #2E**

Analyst

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5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO Energy	Project #:	98031-0528
Sample ID:	West Wall Composite	Date Reported:	12-06-10
Laboratory Number:	56618	Date Sampled:	12-03-10
Chain of Custody:	10763	Date Received:	12-03-10
Sample Matrix:	Soil	Date Analyzed:	12-06-10
Preservative:	Cool	Date Extracted:	12-03-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**185**	**0.9**
Toluene	**3,910**	**1.0**
Ethylbenzene	**2,490**	**1.0**
p,m-Xylene	**23,300**	**1.2**
o-Xylene	**4,670**	**0.9**
Total BTEX	**34,600**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**95.0 %**
	1,4-difluorobenzene	**98.9 %**
	Bromochlorobenzene	**88.1 %**

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1206BBLK QA/QC	Date Reported:	12-06-10
Laboratory Number:	56611	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-06-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	4.0728E+005	4.0809E+005	0.2%	ND	0.1
Toluene	4.7872E+005	4.7968E+005	0.2%	ND	0.1
Ethylbenzene	4.4726E+005	4.4816E+005	0.2%	ND	0.1
p,m-Xylene	1.0845E+006	1.0867E+006	0.2%	ND	0.1
o-Xylene	4.0927E+005	4.1010E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	692	720	4.1%	0 - 30%	0.9
Toluene	24,500	25,400	3.7%	0 - 30%	1.0
Ethylbenzene	7,830	8,200	4.7%	0 - 30%	1.0
p,m-Xylene	73,000	74,900	2.6%	0 - 30%	1.2
o-Xylene	18,900	19,700	4.2%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	692	500	1,150	96.5%	39 - 150
Toluene	24,500	500	27,200	109%	46 - 148
Ethylbenzene	7,830	500	9,430	113%	32 - 160
p,m-Xylene	73,000	1000	77,400	105%	46 - 148
o-Xylene	18,900	500	21,500	111%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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 Photolonization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 56611, 56616-56621, 56626**

Analyst

Review

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CHAIN OF CUSTODY RECORD

10763

Client:	Project Name / Location:
XTO Energy	JF Bell #2E
Client Address:	**Sampler Name:**
James McDaniel	Sam LaRue
Client Phone No.:	**Client No.:**
505-787-0519	98031-0528

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Excavation Floor	12-3-10	13:31	56616	(Soil) Solid Sludge Aqueous	1/4oz			✓	✓												X	y
North Wall Composite	12-3-10	13:31	56617	(Soil) Solid Sludge Aqueous	1/4oz			✓	✓												↓	↓
West Wall Composite	12-3-10	15:06	56618	(Soil) Solid Sludge Aqueous	1/4oz			✓	✓													
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		

	Date	Time		Date	Time
Relinquished by: (Signature)	12-3-10	15:50	Received by: (Signature)	12/3/10	15:50
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

Rush

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO	Project #:	98031-0528
Sample ID:	Excavation Bottom (J)	Date Reported:	12-07-10
Laboratory Number:	56634	Date Sampled:	12-06-10
Chain of Custody No:	10762	Date Received:	12-06-10
Sample Matrix:	Soil	Date Extracted:	12-06-10
Preservative:	Cool	Date Analyzed:	12-07-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**5.6**	**0.1**
Total Petroleum Hydrocarbons	**5.6**	

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO	Project #:	98031-0528
Sample ID:	E Wall Composite	Date Reported:	12-07-10
Laboratory Number:	56635	Date Sampled:	12-06-10
Chain of Custody No:	10762	Date Received:	12-06-10
Sample Matrix:	Soil	Date Extracted:	12-06-10
Preservative:	Cool	Date Analyzed:	12-07-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**664**	**0.2**
Diesel Range (C10 - C28)	**84.3**	**0.1**
Total Petroleum Hydrocarbons	**748**	

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO	Project #:	98031-0528
Sample ID:	S Wall Composite	Date Reported:	12-07-10
Laboratory Number:	56636	Date Sampled:	12-06-10
Chain of Custody No:	10762	Date Received:	12-06-10
Sample Matrix:	Soil	Date Extracted:	12-06-10
Preservative:	Cool	Date Analyzed:	12-07-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**2,270**	**0.2**
Diesel Range (C10 - C28)	**241**	**0.1**
Total Petroleum Hydrocarbons	**2,510**	

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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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:	12-07-10 QA/QC	Date Reported:	12-07-10
Laboratory Number:	56630	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-07-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	12-07-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	12-07-10	9.9960E+002	1.0000E+003	0.04%	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

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	256	103%	75 - 125%
Diesel Range C10 - C28	ND	250	270	108%	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 56630-56640**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO	Project #:	98031-0528
Sample ID:	Excavation Bottom (J)	Date Reported:	12-07-10
Laboratory Number:	56634	Date Sampled:	12-06-10
Chain of Custody:	10762	Date Received:	12-06-10
Sample Matrix:	Soil	Date Analyzed:	12-07-10
Preservative:	Cool	Date Extracted:	12-06-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**2.2**	**0.9**
Toluene	**1.7**	**1.0**
Ethylbenzene	**2.5**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**45.5**	**0.9**
Total BTEX	**51.9**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**100 %**
	1,4-difluorobenzene	**106 %**
	Bromochlorobenzene	**90.5 %**

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: **JF Bell #2E**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO	Project #:	98031-0528
Sample ID:	E Wall Composite	Date Reported:	12-07-10
Laboratory Number:	56635	Date Sampled:	12-06-10
Chain of Custody:	10762	Date Received:	12-06-10
Sample Matrix:	Soil	Date Analyzed:	12-07-10
Preservative:	Cool	Date Extracted:	12-06-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**91.5**	**0.9**
Toluene	**1,880**	**1.0**
Ethylbenzene	**1,010**	**1.0**
p,m-Xylene	**13,700**	**1.2**
o-Xylene	**1,950**	**0.9**
Total BTEX	**18,600**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**102 %**
	1,4-difluorobenzene	**102 %**
	Bromochlorobenzene	**92.3 %**

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: **JF Bell #2E**

Analyst

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO	Project #:	98031-0528
Sample ID:	S Wall Composite	Date Reported:	12-07-10
Laboratory Number:	56636	Date Sampled:	12-06-10
Chain of Custody:	10762	Date Received:	12-06-10
Sample Matrix:	Soil	Date Analyzed:	12-07-10
Preservative:	Cool	Date Extracted:	12-06-10
Condition:	Intact	Analysis Requested.	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**600**	**0.9**
Toluene	**8,870**	**1.0**
Ethylbenzene	**4,070**	**1.0**
p,m-Xylene	**36,100**	**1.2**
o-Xylene	**7,890**	**0.9**
Total BTEX	**57,500**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**107 %**
	1,4-difluorobenzene	**102 %**
	Bromochlorobenzene	**117 %**

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: **JF Bell #2E**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1207BBLK QA/QC	Date Reported:	12-07-10
Laboratory Number:	56630	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-07-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	4.2730E+005	4.2816E+005	0.2%	ND	0.1
Toluene	5.3331E+005	5.3438E+005	0.2%	ND	0.1
Ethylbenzene	4.9056E+005	4.9154E+005	0.2%	ND	0.1
p,m-Xylene	1.1501E+006	1.1524E+006	0.2%	ND	0.1
o-Xylene	4.6090E+005	4.6183E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	4.3	3.8	11.6%	0 - 30%	1.0
Ethylbenzene	2.7	2.7	0.0%	0 - 30%	1.0
p,m-Xylene	60.8	61.7	1.5%	0 - 30%	1.2
o-Xylene	12.1	12.5	3.3%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	434	86.9%	39 - 150
Toluene	4.3	500	448	88.9%	46 - 148
Ethylbenzene	2.7	500	450	89.5%	32 - 160
p,m-Xylene	60.8	1000	976	92.0%	46 - 148
o-Xylene	12.1	500	453	88.5%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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 56630, 56633-56640

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

10762 RUSH

Client:	Project Name / Location:
XTO-James McDo	JF Bell #2E
Client Address:	Sampler Name: Sam LaRue, LTE
Client Phone No.: (505) 787-0519	Client No.: XTO1026 98031-0528

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative: $HgCl_2$	Preservative: HCl	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
~~Excavation~~				Soil Solid Sludge Aqueous	1																✓	✓
Excavation Bottom (J)	12/6	14:29	56634	(Soil) Solid Sludge Aqueous	1			X	X												✓	✓
E. Wall Composite	12/6	15:21	56635	(Soil) Solid Sludge Aqueous	1			X	X												✓	✓
S. Wall Composite	12/6	15:24	56636	(Soil) Solid Sludge Aqueous	1			X	X												✓	✓
				Soil Solid Sludge Aqueous																		
				Soil Solid Sludge Aqueous																		
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Rush

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	XTO	Project #:	98031-0528
Sample ID:	S Wall Composite	Date Reported:	12-10-10
Laboratory Number:	56699	Date Sampled:	12-09-10
Chain of Custody No:	10753	Date Received:	12-09-10
Sample Matrix:	Soil	Date Extracted:	12-09-10
Preservative:	Cool	Date Analyzed:	12-10-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**24.0**	**0.2**
Diesel Range (C10 - C28)	**8.9**	**0.1**
Total Petroleum Hydrocarbons	**32.9**	

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: **JF Bell #2A**

Analyst

Review

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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:	12-10-10 QA/QC	Date Reported:	12-10-10
Laboratory Number:	56699	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-10-10
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	12-10-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	12-10-10	9.9960E+002	1.0000E+003	0.04%	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

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	24.0	24.8	3.3%	0 - 30%
Diesel Range C10 - C28	8.9	8.0	10.1%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	24.0	250	285	104%	75 - 125%
Diesel Range C10 - C28	8.9	250	277	107%	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 56699**

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	XTO	Project #:	98031-0528
Sample ID:	S Wall Composite	Date Reported:	12-10-10
Laboratory Number:	56699	Date Sampled:	12-09-10
Chain of Custody:	10753	Date Received:	12-09-10
Sample Matrix:	Soil	Date Analyzed:	12-10-10
Preservative:	Cool	Date Extracted:	12-09-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**219**	**1.0**
Ethylbenzene	**214**	**1.0**
p,m-Xylene	**2,100**	**1.2**
o-Xylene	**476**	**0.9**
Total BTEX	**3,010**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**101 %**
	1,4-difluorobenzene	**98.5 %**
	Bromochlorobenzene	**104 %**

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: **JF Bell #2A**

Analyst

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1210BBLK QA/QC	Date Reported:	12-10-10
Laboratory Number:	56699	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-10-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	4.8440E+005	4.8537E+005	0.2%	ND	0.1
Toluene	5.2470E+005	5.2575E+005	0.2%	ND	0.1
Ethylbenzene	4.6266E+005	4.6359E+005	0.2%	ND	0.1
p,m-Xylene	1.0942E+006	1.0964E+006	0.2%	ND	0.1
o-Xylene	4.1711E+005	4.1794E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	219	253	15.5%	0 - 30%	1.0
Ethylbenzene	214	221	3.5%	0 - 30%	1.0
p,m-Xylene	2,100	2,190	4.3%	0 - 30%	1.2
o-Xylene	476	480	0.9%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	500	521	104%	39 - 150
Toluene	219	500	833	116%	46 - 148
Ethylbenzene	214	500	830	116%	32 - 160
p,m-Xylene	2,100	1000	3,450	111%	46 - 148
o-Xylene	476	500	971	99.5%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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 56699**

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CHAIN OF CUSTODY RECORD

10753

Client: ~~LT Env.~~ XTO	Project Name / Location: JF Bell #2A
Client Address: James McDaniel 2243 Main Ave. Suite 3	Sampler Name: Sam LaRue
Client Phone No.: 970 385 1096	Client No.: 98031-0528

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative Ø	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
S. Wall Composite	12/9	10:45	56699	~~Soil~~ Sludge Solid Aqueous	1			X	X	X												✓	✓
				Soil Sludge Solid Aqueous																			
				Soil Sludge Solid Aqueous																			
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