

October 28, 2009

Mr. Geoffrey Leking, Env. Engineer State of New Mexico – Oil Conservation Division 1625 N French Drive Hobbs, New Mexico 88240

RE: OCD Remediation Project No. 1RP-09-10-2311, EMSU Satellite #3 Removal and Excavation Closure Report, XTO Energy, Inc., Unit D (NW/4, NW/4), Section 4, Township 21 South, Range 36 East, Lea County, New Mexico

Dear Mr. Leking:

This report is submitted to the State of New Mexico Oil Conservation Division on behalf of XTO Energy, Inc. (XTO) by Larson and Associates, Inc., its agent, and presents the results of remedial actions performed at referenced below grade tank removal.

Based upon the results of this investigation, XTO requests OCD closure approval.

If you have any questions or concerns, please call me at 432.687.0901 to discuss.

Sincerely,

LARSON & ASSOCIATES, INC.

Michelle L. Green Environmental Scientist - Chemist michelle@laenvironmental.com

#### Attachments

СС

Mr. Don Embrey – Targa, Midland, TX Mr. Cal Wrangham – Targa, Midland, TX Mr. Larry Johnson – OCD District 1

# Below Grade Tank Removal and Excavation Closure Report

XTO Energy, Inc. 1RP-09-10-2311 Eunice Monument South Unit – Satellite #3 Unit D (NW/4, NW/4), Section 4, T21S, R36E Lea County, NM

Project No. 8-0141

1

Prepared by:

Larson and Associates, Inc. 507 North Marienfeld Street Suite 200 Midland, Texas 79701 432.687.0901

October 28, 2009

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## **1.0 Executive Summary**

This report is submitted to the State of New Mexico Oil Conservation Division (OCD) on behalf of XTO Energy, Inc. (XTO) by Larson and Associates, Inc. (LAI), its consultant, and presents the results of remedial actions performed at the referenced below grade tank removal. The following report documents the removal of the below grade tank associated with the Eunice Monument South Unit (EMSU), Satellite #3 (Facility) located in Lea County, New Mexico. The legal description of the Facility is Unit D (NW/4, NW/4), Section 4, Township 21 South, Range 36 East (Figure 1).

Closure activities consisted of notifications to the New Mexico Oil Conservation Division (OCD) and the landowner of record (New Mexico State Land Office), removal of ancillary equipment and tank, removal of soil, collection of soil samples, OCD issuance of a remediation case number and the subsequent investigation. Activities were performed in conformance with New Mexico Administrative Code Rule 19.15.17 as amended June 16, 2008 and June 18, 2009.

# 2.0 Operator Information

Mr. Rick Wilson			
XTO Energy Inc., Permian Division – SE New Mexico			
PO Box 700			
Eunice, New Mexico 88231			
575.394.2089, ext. 2201			
Mr. Guy Haykus			
XTO Energy Inc.			
Midland Office			
200 N. Loraine Street, Suite 800			
Midland, Texas 79701			
422 602 0022			

## 3.0 Closure Actions

## 3.1 Location and Siting Description

The Site has a geodetic location of N32° 31' 15.54", W103° 16' 28.50", and is located in rural Lea County, New Mexico. The nearest producing well is the XTO EMSU Well #182, with API # 30-025-29868. The Site encompasses a 0.6-acre tract of land. The Facility consisted of a fiberglass, below-ground storage tank, with an approximate capacity of 90 barrels. The battery is covered with crushed caliche rock and is flat to very gently sloping (Figures 2 and 3).

The Facility's siting criteria presented the following findings:

- Groundwater is between 50 and 100 feet below ground surface based on records from the New Mexico State Engineer (NMSE).
- No continuously flowing watercourse is within 300 horizontal feet of the Facility.
- No surface water features, including lakes, rivers, ponds, arroyos, lakebed, sinkhole, or playa lake, are located within 200 horizontal feet of Facility.

- No permanent residence, school, hospital, institution, or church is within 300 horizontal feet of Facility.
- No private, domestic fresh-water well or spring are within 500 horizontal feet of Facility.
- No other fresh water wells or springs are within 1000 horizontal feet of the Facility.
- The Facility is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance.
- The Facility is not within 500 feet an area designated as wetlands.
- The Facility is not within an area overlying a subsurface mine.
- The Facility is not within an unstable area.
- The Facility is not within a 100-year flood plain.

## 3.2 Closure Plan and Approval

On December 11, 2008, Larson & Associates, Inc. (LAI), on behalf of XTO, submitted a below grade tank closure plan to the OCD in Santa Fe and Hobbs, New Mexico, in accordance with an Agreed Scheduling Order (ASO-008) between XTO and OCD. The Closure Plan was approved and signed by the OCD representative Mr. Brad Jones on July 17, 2009.

## 3.3 Landowner and OCD Notifications

In accordance with the approved closure plan and prior to commencing work, notification of closure was sent by XTO to the New Mexico State Land Office (the surface owner) and the OCD.

## 3.4 Tank Removal Closure Activities

On October 14, 2009, XTO removed ancillary equipment (i.e. metal barricade) for salvage or scrap metal. A Hydro-Vac truck was used to excavate soil around the tank. LAI personnel performed a site visit to collect a 5-part composite soil sample from the bottom (Satellite 3 Bottom).

The sample was analyzed for the following constituents: benzene, toluene, ethylbenzene, xylenes (BTEX) by method 8021B, total petroleum hydrocarbons (TPH) by method 418.1 and chloride by method 300.1. The sample, Satellite 3 Bottom, was below the report levels for, benzene (<0.0012 ppm), total BTEX (<0.0012 ppm), TPH (<11.5 ppm) and Chloride (75.7 ppm) OCD reporting levels of 0.2, 50, 100, and 250 ppm, respectively.

Summary of analytical data is presented in Table 1. The analytical laboratory report is presented in Appendix A.

## 4.0 Conclusion and Recommendation

Based on the soil sample results, XTO requests approval from OCD District 1 to close the excavation according to the requirements of the closure plan approved by the OCD Santa Fe office. The initial and final C-141 forms are presented in Appendix B.

### Table 1 Soil Analytical Data Summary EMSU - Satellite #3 XTO Energy, Inc. Lea County, New Mexico Project No.: 8-0141

Sample ID	Date	Benzene	Ethyl benzene	Toluene	Total Xylenes	Total BTEX	тярн	Chlorides
Reporting Limit	0.2				50	100	250	
Satellite 3 Bottom	10/15/2009	<0.0012	<0.0012	<0.0023	<0.0012	<0.0012	<11.5	75.7
Satellite 3 Soil Pile	10/15/2009	<0.0013	0.0023	<0.0025	0.0111	<0.0013	12,300	102

Notes

**RRAL - Recommended Remediation Action Level** 

Total Petroleum Hydrocarbons analyzed via Method 418.1.

Chlorides analyzed via EPA Method 300.

All values reported in Milligrams per Kilogram - dry (mg/kg, parts per million).

Bold and blue indicates the value exceeds NMOCD requirements.



Figure 1 - Topographic Map





# Analytical Report 348795

for

Larson & Associates

**Project Manager: Michelle Green** 

**XTO-EMSU** Satellite # 3

8-0141

22-OCT-09





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240), South Carolina(96031001), Louisiana(04154), Georgia(917)



22-OCT-09



Project Manager: **Michelle Green** Larson & Associates P.O. Box 50685 Midland, TX 79710

Reference: XENCO Report No: 348795 XTO-EMSU Satellite # 3 Project Address:

#### Michelle Green:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 348795. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 348795 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II Odessa Laboratory Manager

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## Sample Cross Reference 348795



# Larson & Associates, Midland, TX

XTO-EMSU Satellite # 3

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Satellite # 3	S	Oct-15-09 10:15		348795-001
Satellite 3 Soil Pile	S	Oct-15-09 13:20		348795-002

### CASE NARRATIVE



Client Name: Larson & Associates Project Name: XTO-EMSU Satellite # 3

Project ID:8-0141Work Order Number:348795

Report Date: 22-OCT-09 Date Received: 10/16/2009

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

#### Analytical Non Conformances and Comments:

Batch: LBA-777626 BTEX-MTBE EPA 8021B SW8021BM

Batch 777626, Benzene, Ethylbenzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 348795-002, -001. The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

Batch: LBA-777740 Percent Moisture None

Batch: LBA-777745 Inorganic Anions by EPA 300 None

Batch: LBA-778126 TPH by EPA 418.1 None



## Certificate of Analysis Summary 348795

Larson & Associates, Midland, TX

Project Name: XTO-EMSU Satellite # 3



Project Id: 8-0141 Contact: Michelle Green

**Project Location:** 

E.

Date Received in Lab: Fri Oct-16-09 03:10 pm

Report Date: 22-OCT-09

Project Manager: Brent Barron, II

	Lab Id:	348795-00	۱ I	348795-002		
Analysis Paguastad	Field Id:	Satellite #	3	Satellite 3 Soil Pile		
Analysis Requested	Depth:					
	Matrix:	SOIL		SOIL		
	Sampled:	Oct-15-09 10	15	Oct-15-09 13 20		
Anions by E300	Extracted:					
	Analyzed:	Oct-19-09 09	9 42	Oct-19-09 09 42		
	Units/RL:	mg/kg	RL	mg/kg RL		
Chloride		75 7	4 83	102 5 26		 
BTEX by EPA 8021B	Extracted:	Oct-17-09 11	00	Oct-17-09 11 00		
	Analyzed:	Oct-17-09 16	5 47	Oct-17-09 17 08		
	Units/RL:	mg/kg	RL	mg/kg RL		
Benzene		ND 0	0012	ND 0 0013		
Toluene		ND 0	0023	ND 0 0025		
Ethylbenzene		ND 0	0012	0 0023 0 0013		
m,p-Xylenes		ND 0	0023	0 0058 0 0025		
o-Xylene		ND 0	0012	0 0053 0 0013		
Total Xylenes		ND 0	0012	0 0111 0 0013		
Total BTEX		ND 0	0012	0 0134 0 0013		
Percent Moisture	Extracted:					
	Analyzed:	Oct-19-09 09	9 00	Oct-19-09 09 00		
	Units/RL:	%	RL	% RL	 	
Percent Moisture		13 1	1 00	20.2 1 00		
<b>TPH by EPA 418.1</b>	Extracted:					
	Analyzed:	Oct-21-09 12	2 53	Oct-21-09 12 53		
	Units/RL:	mg/kg	RL	mg/kg RL		
TPH, Total Petroleum Hydrocarbons		ND	115	12300 12 5		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing

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Brent Barron, II

Odessa Laboratory Manager





- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

\* Outside XENCO's scope of NELAC Accreditation.

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842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



# Form 2 - Surrogate Recoveries

Project Name: XTO-EMSU Satellite # 3

ork Orders : 348795	5, 5 - 1., 540920 1 BKS / B	170 D-4-1	Project II	<b>D: 8-0</b> 141		
Lab Batch #: ///020	Sample: 340830-1-BAS/ D	KS Baten	RROGATE R	Sona	STUDY	<u></u>
	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R IDI	Control Limits %R	Flags
	Analytes		0.0200	100		<b> </b>
1,4-Difluorobenzene		0 0298	0.0300	99	80-120	<b> </b>
4-Bromotiuorobenzene			0.0300	104	80-120	<u>.                                    </u>
Lab Batch #: 777626	Sample: 540830-1-BSD / BS	SD Batch	1: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 10/17/09 12:53	SUP	ROGATE R	COVERY 3	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0 0296	0 0300	99	80-120	<u> </u>
4-Bromofluorobenzene		0 0311	0 0300	104	80-120	
Lab Batch #: 777626	Sample: 540830-1-BLK / B	LK Batch	n: 1 Matrix	:Solid	<u></u>	
Units: mg/kg	Date Analyzed: 10/17/09 13:35	SUF	RROGATE RI	<b>ECOVERY</b> ?	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Dıfluorobenzene		0 0267	0 0300	89	80-120	[
4-Bromofluorobenzene		0 0308	0 0300	103	80-120	ĺ
Lab Batch #: 777626	Sample: 348795-001 / SMP	Batch	n: 1 Matrix	:Soil	<u>.</u> .	
Units: mg/kg	Date Analyzed: 10/17/09 16:47	SUF	<b>RROGATE RI</b>	ECOVERY S	ŜTUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes	<b></b>				I
1,4-Dıfluorobenzene		0 0271	0 0300	90	80-120	<b> </b>
4-Bromotluorobenzene		0 0319	0 0300	106	80-120	<u>i</u>
Lab Batch #: 777626	Sample: 348795-002 / SMP	Batch	1: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 10/17/09 17:08	SUF	ROGATE RE	COVERY S	STUDY	
		· · · · · · · · · · · · · · · · · · ·		1	[ out ]	Ē
BTE?	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Limits %R	Flags
BTE2	X by EPA 8021B Analytes	Amount Found [A] 0 0266	True Amount [B]	Recovery %R [D] 89	Limits %R 80-120	Flags

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits, data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

All results are based on MDL and validated for QC purposes



# Form 2 - Surrogate Recoveries

# Project Name: XTO-EMSU Satellite # 3

Vork Orders : 348795 Lab Batch #: 777626	5, Sample: 348710-001 S / M5	Project ID: 8-0141 S Batch: 1 Matrix: Soil							
Units: mg/kg	Date Analyzed: 10/17/09 20:19	SU	RROGATE R	.ECOVERY ?	STUDY				
BTE:	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Dıfluorobenzene	Anarytes	0 0286	0 0300	95	80-120				
4-Bromofluorobenzene		0 0314	0 0300	105	80-120				
Lab Batch #: 777626	Sample: 348710-001 SD / N	ASD Batc	h: 1 Matrix	x:Soil					
Units: mg/kg	Date Analyzed: 10/17/09 20:40	SU	RROGATE R	ECOVERY ?	STUDY				
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Dıfluorobenzene		0 0285	0 0300	95	80-120				
4-Bromofluorobenzene		0 0317	0 0300	106	80-120				

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits, data and surrogates confirmed by reanalysis \*\*\* Poor recoveries due to dilution Surrogate Recovery [D] = 100 \* A / B All results are based on MDL and validated for QC purposes





## Project Name: XTO-EMSU Satellite # 3

Work Order #: 348795		Project ID:				
Lab Batch #: 777745	Sample: 777745	Sample: 777745-1-BKS Matrix: Solid				
Date Analyzed: 10/19/2009	Date Prepared: 10/19/2	009	Analyst: LATCOR			
Reporting Units: mg/kg	<b>Batch #:</b> 1	Batch #: 1 BLANK /BLANK SPIKE RECO			OVERY S	STUDY
Anions by E300	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags
Analytes	[A]	[B]	Result [C]	%R [D]	%R	
Chloride	ND	10 0	9 98	100	75-125	

Blank Spike Recovery [D] = 100\*[C]/[B] All results are based on MDL and validated for QC purposes BRL - Below Reporting Limit





## Project Name: XTO-EMSU Satellite # 3

Work Order #: 348795 Analyst: ASA	Work Order #: 348795 Analyst: ASA Date Prenared: 10/17/2009						Project ID: 8-0141 Date Analyzed: 10/17/2009					
Lab Batch ID: 777626 Sample: 540830-1-	BKS	KS Batch #: 1				Matrix: Solid						
Units: mg/kg		BLAN	K/BLANK S	SPIKE / E	BLANK S	PIKE DUPI	ICATE	RECOVE	ERY STUD	Y		
BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Benzene	ND	0 1000	0 0826	83	01	0 0785	79	5	70-130	35		
Toluene	ND	0 1000	0 0819	82	01	0 0777	78	5	70-130	35		
Ethylbenzene	ND	0 1000	0 0835	84	01	0 0791	79	5	71-129	35		
m,p-Xylenes	ND	0 2000	0 1852	93	02	0 1754	88	5	70-135	35		
o-Xylene	ND	0 1000	0 0890	89	01	0 0847	85	5	71-133	35		
Analyst: ASA Lab Batch ID: 778126 Sample: 778126-1-	Date Prepared: 10/21/2009   BKS Batch #: 1					Date Analyzed: 10/21/2009 Matrix: Solid						
Units: mg/kg		BLAN	K/BLANK S	SPIKE / H	BLANK S	SPIKE DUPI	JCATE	RECOVE	ERY STUD	9Y		
TPH by EPA 418.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
TPH, Total Petroleum Hydrocarbons	ND	2500	2430	97	2500	2320	93	5	65-135	35		

Relative Percent Difference RPD = 200\*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100\*(C)/[B]Blank Spike Duplicate Recovery [G] = 100\*(F)/[E]All results are based on MDL and Validated for QC Purposes



## Form 3 - MS Recoveries



## Project Name: XTO-EMSU Satellite # 3

#### Work Order #: 348795 Lab Batch #: 777745

## Project ID: 8-0141

<b>Date Analyzed:</b> 10/19/2009	Date Prepared: 10/	19/2009	A	nalyst: L	ATCOR		
QC- Sample ID: 348726-001 S	Batch #:	1	1	Matrix: So	oil		
Reporting Units: mg/kg	MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag	
Analytes	[A]	[B]					
Chloride	102	212	293	90	75-125		

Matrix Spike Percent Recovery [D] = 100\*(C-A)/BRelative Percent Difference [E] = 200\*(C-A)/(C+B)All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



# Form 3 - MS / MSD Recoveries

#### Project Name: XTO-EMSU Satellite # 3



Work Order # : 348795						Project II	<b>): 8-</b> 0141				
Lab Batch ID: 777626 Q Date Analyzed: 10/17/2009	C- Sample ID: Date Prepared:	348710- 10/17/2	-001 S 009	Bat An:	tch #: alyst:	l Matrix ASA	: Soil				
Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup. % P	RPD ୭∕	Control Limits % P	Control Limits	Flag
Analytes	[A]	[B]		[D]	[E]	Kesun [1]	[G]	70		/0101 0	
Benzene	ND	0 1 1 6 6	0 0733	63	0 1166	0 0738	63	1	70-130	35	X
Toluene	ND	0 1 1 6 6	0 0735	63	0 1166	0 0743	64	1	70-130	35	Х
Ethylbenzene	ND	0 1 1 6 6	0 0747	64	0 1166	0 0740	63	1	71-129	35	Х
m,p-Xylenes	ND	0 2332	0 1649	71	0 2332	0 1632	70	1	70-135	35	
o-Xylene	ND	0 1166	0 0791	68	0 1166	0 0780	67	1	71-133	35	Х
Lab Batch ID: 778126 Q Date Analyzed: 10/21/2009	C- Sample ID: Date Prepared:	348795 10/21/2	-001 S 009	Ba An:	tch #: alyst:	l Matrix ASA	s Soil	OVEDV	STUDY		1
TPH by EPA 418.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH, Total Petroleum Hydrocarbons	ND	2880	2950	102	2880	2940	102	0	65-135	35	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/BRelative Percent Difference RPD = 200\*[(C+F)/(C+F)] Matrix Spike Duplicate Percent Recovery [G] = 100\*(F-A)/E





## Project Name: XTO-EMSU Satellite # 3

Work Order #: 348795

Lab Batch #: 777745			Project I	<b>D:</b> 8-0141	
Date Analyzed: 10/19/2009 Date Prep	ared: 10/19/2009	) Ana	lyst: LATC	COR	
QC- Sample ID: 348726-001 D Ba	tch #: 1	Mat	t <b>rix:</b> Soil		
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	102	101	1	20	
Lab Batch #: 777740					
Date Analyzed: 10/19/2009 Date Prep	ared: 10/19/2009	) Ana	lyst: LATC	COR	
QC- Sample ID: 348724-001 D Ba	tch #: 1	Mat	rix: Soil		
Reporting Units: %	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	Parent Sample Result  A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	12 0	12 2	2	20	

Spike Relative Difference RPD 200 \* | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes BRL - Below Reporting Limit

	H Y T			2300 Phor	) Double Ci ne (512) 38	eek 8-8;	: Driv 222 -	/e • I	Flou X (5	ind 512	Ro ) 38	ck, 38-6	TX 322	7866 9	54		2	,4 <u>(</u>	8-	19	S				(	Cł	<b>i</b> -1/-	N AIN	≗ √-(	418 <b>DF-(</b>	47 CUS	TOD
CLIENT: L-Grson ADDRESS: PHONE: 432-0 DATA REPORTED TO: ADDITIONAL REPORT	087 	4550C10 - 09 01 - Gr ES TO:	ilos I I reen	Inc AX_	•								F F C	DATE: PO#: PROJ	EC	10 TLO	- 1 CA		0	RN 8-	AME O	<u>ه</u> .	) X	LW M	ORI 2	ко <u>£</u> .	RDE M.S	ER#	: 5	PAGE . ghelli	 e #:	DF _1 3 ,611 n1
Authorize 5% surcharge for TRRP report?		tamens	PRI	ESEJ																					C. C							
Field Sample I D	DHL Lab#	Date	Time	Matrix	Container Type	# of Con	Ŷ	ONH 2	7 0 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10E					¥ 	/9/  }				2/5 3/2		Ì Ìs		\$% }}					Y		FIELDI	VOTES
Satelite #3 Salelite 3 soil pilo	-01 -02	10-15 10-15	1015 1370	5	402 402	2			\  }	4	Ż	ホーム	x *														×			300		
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TOTAL								+	+				-				-											+	-		_	
RECIVOUISHED BY (SK	nature) nature) nature)	II DHL DIS	10-11 0-16-	OATE/TH OATE/TH OATE/TH DATE/TH	ME RI 1200 ME Py 7/0 ME RI 0 each		VED	BY NBY.		vinu Or ratu	ге) <u>7//</u> ге)					TUR RUSI 1 DA 2 DA 2 DA NORI				TIM	E		BO CEI ST( AR PC	RAT VIN DDY RIE DE	G TI SE R BI LIVE	EMF ALS ILL ERY	SE  # IED	ONI Z. ( BR	.Y: 2_ OKE	Ther N J INT	м# аст£	A7_ NOT USE

#### Environmental Lab of Texas Variance/ Corrective Action Report- Sample Log-In



#### Sample Receipt Checklist

	•				
		$\sim$		Client	Initial
#1	Temperature of container/ cooler?	(Yes)	No	2.6 °C	
#2	Shipping container in good condition?	(es)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yès	No		
#7	Chain of Custody signed when relinquished/ received?	(Ye)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	Cres	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples property preserved?	Yes	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	<b>See</b>	No		
#16	Containers documented on Chain of Custody?	Xes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable )	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

#### Variance Documentation

Date/ Time.

Contact.

Regarding:

Corrective Action Taken:

Check all that Apply:

#### See attached e-mail/ fax

11

Contacted by

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

#### 1RP-09-10-2311

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

Lease No.

## **Release Notification and Corrective Action**

	OPERATOR	Initial Report	Final Report
Name of Company: XTO Energy Permian Division - SE New Mexico	Contact: Rick Wilson/Production F	oreman	
Address: P.O. Box 700, Eunice, New Mexico 88231	Telephone No.: (575) 394-2089		
Facility Name: EMSU – Satellite No. 3	Facility Type: Tank Battery - Near	est Well is EMSU #182 (API #30	)-025-29868)

Surface Owner: State of New Mexico

	LOCATION OF RELEASE								
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County	
D	4	21S	36E					Lea	

Mineral Owner

Latitude: N 32° 31' 15.54" Longitude: W 103° 16' 28.50"

#### **NATURE OF RELEASE**

Type of Release: Crude Oil and Water	Volume of Release: Unknown	Volume R	ecovered: N/A						
Source of Release: Below Grade Tank	Date and Hour of Occurrence:	Date and I	Hour of Discovery:						
	Unknown	Unknown							
Was Immediate Notice Given?	If YES, To Whom?								
🗌 Yes 🖾 No 🗌 Not Required	ired								
By Whom?	Date and Hour								
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	itercourse.							
L Yes 🛛 No									
If a Watercourse was Impacted, Describe Fully.*									
Describe Cause of Problem and Remedial Action Taken.* Below grade ta	nk removed per OCD approved closu	re olan. Initi	al composite sample (5-spot)						
from bottom of tank excavation shows no evidence of a release. Propose	to close with clean soil.	<b>F</b>							
Describe Area Affected and Cleanup Action Taken.* Below grade tank re	emoved and laboratory sample results	s showed no s	ign of release, therefore, close						
tank excavation per OCD approved closure plan.									
I hereby certify that the information given above is true and complete to the	he best of my knowledge and underst	and that pursu	uant to NMOCD rules and						
regulations all operators are required to report and/or file certain release n	otifications and perform corrective ac	tions for rele	ases which may endanger						
public health or the environment. The acceptance of a C-141 report by the	e NMOCD marked as "Final Report"	does not relie	we the operator of liability						
should their operations have failed to adequately investigate and remediat	e contamination that pose a threat to	ground water,	surface water, human health						
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respon	sibility for co	mpliance with any other						
federal, state, or local laws and/or regulations.									
	OIL CONSERY	VATION	DIVISION						
Signature () () ()									
signature. Out Conflation									
Printed Name: Guy Haykus – XTO Energy	Approved by District Supervisor:								
Title Brody (draw) S. DED. Ide ident	Annroval Date:	Evairation Da							
	iprova Dato.	LAPITATOTI Da							
E-mail Address: William_haykus@xtoenergy.com	Conditions of Approval:		Attachat						
Date: 10/26/2009 Phone: (432) 682-8873									

\* Attach Additional Sheets If Necessary

#### 1RP-09-10-2311

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		1								

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	Unknown	Unknown	·
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🗌 Yes 🛛 No 🗌 Not Required			
By Whom?	Date and Hour		
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.	
🗌 Yes 🛛 No			
If a Watercourse was Impacted Describe Fully *			<u> </u>
	-		
Describe Cause of Problem and Remedial Action Taken.* Below grade ta	nk removed per OCD approved closu	re plan. Initia	al composite sample (5-spot)
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federal, state, or local laws and/or regulations.			
	OIL CONSERV	VATION	DIVISION
(1)			
Signature: US Hereform			
Printed Name: Guy Havkus - XTO Energy	Approved by District Supervisor:		
Title: Roduction Superintendent	Approval Date:	Expiration Da	te:
E-mail Address: William_haykus@xtoenergy.com	Conditions of Approval:		Attached
Date: 10/26/2009 Phone: (432) 682-8873			

\* Attach Additional Sheets If Necessary