District II Energy Min		New Mex and Natura		-		Re	Form C-141 vised Octuber 10, 200
1220 1 District IV 1220	South	vation Div St. Franc NM 875	is Dr.		ţ	Submit 2 C District	Copies to appropriate Office in accordance (th Rule 116 on back side of form
Release Notific				étion			
		ÓPERÀT				Report	Final Repo
Name of Company XTO Energy, Inc		Contact: Jef	f Raines				
Address 200 N: Lorraine, Suite 800 Midland Texas 79701		Telephone N	lo. 432,557.315	91			-
Facility Name Eunice Monument South Unit B # 923	······	Facility Typ	e: Historic Spil				
Surface Owner Mineral O	wner	·			Lease N	lo. API-30	-025-04304
LOCA	TIO	N OF REI	LEASE				
Unit Letter   Section   Township   Range   Feet from the	North	South Line	Feet from the	'East/V	Vest Line	County	
N 24 20 S 36 E 660	FSL		1980-	FWU		Lea _	
Latitude: <u>32° 33" 17.8"N</u>		Longitu	de: <u>103° 18'-20</u>	.8" W_			
NAT	URE	OF RELI	EASE				
Type of Release unknown			Release N/A-			ccovered: N	
Source of Release - Was Immediate Notice Given?		Date and Hour of Occurrence N/A Date and Hour of Discovery N/A If YES, To Whom?					
Yes X No Not Rea	quired	-	<i>witch</i> .				
Bý Whom? -		Date and H					
Was a Watercourse Reached?		If YES, Vo	lume Impacting t	he Wâțe	rcourse.		
If a Watercourse was Impacted, Describe Fully.*							
				MAT	ERG	371	
Describe Cause of Problem and Remecial Action Taken.*							
Abundoned historical tank battery site. Delineation is in progress.							
Describe Area Affected and Cleanup Action Taken.*							
Area was assessed for damages and a workplan will be submitted to	a the N	MOCD for a	mroval				
Area was assessed on damages and a vorkpain with be submitted o	o uic iv	aareen is too af	410341				
Thereby certify that the information given above is true and compli- regulations all operators are required to report and/or the certain re- public health or the environment. The acceptance of a C-141 repoi	lease n rt by th	ouffications a: e NMOCD ma e contamination	id perform correct arked as "Final R on that pose a thr	tive acti eport" d eat to gr	ons for rele oes not reli ound water	cases which eventhe open t surface wa	may endanger rator of liability der, human health
should their operations have failed to adequately investigate and re or the environment. In addition, NMOCD acceptance of a C-141 re federal, state, or local laws action regulations.	eport d	oes not reliev					
should their operations have failed to adequately investigate and re- or the environment. In addition, NMOCD acceptance of a C-141 m tederal; state, or local laws applier egulations.	eport d	oos notreliev	OIL CON		ATION	DIVISIC	
should their operations have failed to adequately investigate and re or the environment. In addition, NMOCD acceptance of a C-141 m	eport d		<u>OIL CON</u>	SERV ER:	ATION	DIVISIC	
should their operations have failed to adequately investigate and re or the environment. In addition, NMOCD acceptance of a C-141 re tederal; state, or local laws aption regulations.	eport d		OIL CON	SERV EK:	ATION	DIVISIC	
should their operations have failed to adequately investigate and re or the environment. In addition, NMOCD acceptance of a C-141 re tederal; state, or local laws applier regulations.	eport d	Approved by	<u>OIL CON</u> ENV ENGINE <del>District Supervis</del>	SERV EK:	dor Pro	DIVISIC	<u>DN</u>
should their operations have failed to adequately investigate and re or the environment. In addition, NMOCD acceptance of a C-141 m rederal; state, or local laws aption regulations. Signature Printed Name: Jeff Raines' Title: Construction Foreman	eport d	Approved by Approval Dat	OIL CONSENCTIONS ENV ENGINE District Supervis	SERV	Locffre Expiration I	2016:04/1	<u>)N</u> MG:
should their operations have failed to adequately investigate and re or the environment. In addition, NMOCD acceptance of a C-141 m rederal; state, or local laws aption regulations. Signature Printed Name: Jeff Raines	eport d	Approved by Approval Dat Conditions of	<u>OIL CON</u> ENV ENGINE <del>District Supervis</del>	SERV	Locffre Expiration I	24 Letem Date: 04 ft Attached	<u>)N</u> MC

.

fgri	10050	33389
------	-------	-------

## XTO Energy EMSU-B #923 Township 20 South, Range 36 East, Section 24 Lea County, New Mexico

1 1

**Delineation Report** 

January 14, 2010



**Prepared for:** 

XTO Energy P.O. BOX 700 Eunice, New Mexico 88231-0700

By:

Safety & Environmental Solutions, Inc. 703 East Clinton Hobbs, New Mexico 88240 (575) 397-0510

### TABLE OF CONTENTS

¢

ť

I.	COMPANY CONTACTS	1
11.	BACKGROUND	1
111.	SURFACE AND GROUND WATER	1
IV.	WORK PERFORMED	1
V.	CLOSURE PLAN	3
VI.	FIGURES & APPENDICES	3
	Figure 1 - Vicinity Map	.3
	Figure 1 - Vicinity Map Figure 2 - Site Plan	.4
	Appendix A – Analytical Results	.5
	Appendix B – Site Photos	.6
	Appendix A – Analytical Results Appendix B – Site Photos Appendix C – C-141	.7

### I. Company Contacts

NAME	Company	Telephone	E-mail
Gene Hudson	XTO Energy	575-441-1634	Richard_Hudson@xtoenergy.com
Isaac Kincaid	SESI	575-390-8841	ikincaid@sesi-nm.com

#### II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by XTO Energy to perform clean-up services at the EMSU-B #923 spill site. This is an area with old hard pan staining that resulted from previous operators activities. The contaminants of concern at the site appear to be crude oil and possibly produced water.

XTO Energy Inc. acquired these leases in September 2004. There has not been any facilities, pipeline, or flow lines operated on or nearby any of these subject sites by XTO Energy. However, a search of the New Mexico Oil Conservation Division (NMOCD) online database, the well files revealed the leases were held by the following companies:

Lease # EMSU-B #923	<b>Year</b> 1943-1976	<b>Company</b> Continental Oil
EM30-D #923	1979	Conoco Inc
	1990	Chevron USA Inc.
	2004	XTO Energy Inc.

### III. Surface and Ground Water

The closest groundwater of record with the Office of the State Engineer is located in Township 20 South, Range 37 East, and Section 19. The depth of water in this well was 35' in 1953.

### IV. Work Performed

On October 8, 2009, SESI was onsite with Diamondback Disposal Services Inc. to install 7 test trenches from excavated area to determine vertical extent. The area has already been excavated to a depth of 6 to 8 ft. below ground surface (bgs). The test trenches were installed to a depth of 8 to 18 ft. bgs. Samples were retrieved at a depth of 3 to 5 feet intervals and were properly preserved and transported under Chain-of-Custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Benzene, Toluene, Ethyl benzene, and Xylenes (BTEX) (EPA method 8021B), and Total Petroleum Hydrocarbons (EPA method 8015 M).

Sample Point	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
TT# <u>1</u> 8'	<10.0	<10.0	< 0.050	<0.050	<0.050	<0.300
TT #2 9'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #3 10'	11.6	440	<0.050	< 0.050	<0.050	0.368
TT #3 14'	11.6	545	0.060	0.145	0.283	0.946

The results of the analysis are as follows:

Sample Point	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
TT #3 18'	459	1,890	<0.050	0.249	<0.050	2.94
TT #4 11'	1,120	2,620	0.763	0.878	1.94	6.21
TT #4 15'	971	1,690	0.439	0.876	1.61	4.95
TT #5 10'	30.0	720	<0.050	0.137	<0.050	1.39
TT #5 15'	109	2,200	<0.050	<0.050	<0.050	0.936
TT #5 18'	41.8	1,160	<0.050	<0.050	<0.050	0.491
TT #6 10'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #6 12'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #7 9'	<10.0	25.8	<0.050	< 0.050	<0.050	<0.300
TT #7 12'	77.4	1,260	<0.050	<0.050	<0.050	1.02
TT #7 15'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300

On December 9, 2009, SESI was onsite to obtain an 11 point composite on floor bottom. The sample was analyzed for Chlorides (EPA Method 4500-CI-B) sample was taken at a depth of 8 ft. bgs.

The result of the analysis is the following:

Sample Point	Cl <sup>-</sup> (mg/kg)
Bottom 8' Composite	<16

On December 18, 2009, SESI was onsite with Gene Hudson, XTO representative, Dave Boyer, Hydrogeologist, and Diamondback Disposal. There were three areas with standing water (labeled N, E, S see figure 2).

The north area puddle (N) between TT#2 and TT#6 is located slightly away from the north end of the excavation and shows no sign of another source of water other than runoff from the excavation sides. Slightly elevated bottom areas were observed adjacent to the puddle.

The south area puddle (S) is located against the south edge of the excavation with ice covering a portion. It is close to TT#7. Erosion channels in the bottom of the excavation can be seen leading to the puddle and indicate it receives snowmelt and runoff from the higher portion of the excavation. No other source of water was observed.

The northeast area puddle (E) was excavated to a depth of  $3\frac{1}{2}$  ft bgs to determine if shallow groundwater was present as a source of the puddle. The excavation was dry and left open for several hours to see if water would seep into the trench. At the end of this time, it remained dry with no sidewall or bottom seepage and was backfilled.

On January 11, 2010, Dave Boyer, Hydrogeologist with SESI was onsite. Mr. Boyer observed that the puddles had decreased in size (as evidenced by higher elevation "bathtub rings) and stated that the remaining fluid in these areas is no more than precipitation/runoff water ponded by the clayey sediments at the bottom of the excavation. These will evaporate with decreasing precipitation and warmer weather.

Test trench #4 was re-excavated December 18 to determine to depth of hydrocarbon impacts, especially BTEX. The trench was excavated by a trackhoe to a depth of 22 ft.

bgs. Samples were retrieved at 2 ft. bgs intervals and were properly preserved and transported under Chain-of-Custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Benzene, Toluene, Ethyl benzene, and Xylenes (BTEX) (EPA method 8021B), Total Petroleum Hydrocarbons (EPA method 8015 M), and a Chloride (EPA Method 4500-Cl-B) sample was taken at a depth of 22 ft. bgs.

The results of the analysis are as follows:

Sample Point	Cl <sup>-</sup> (mg/kg)	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
TT #4 16'	-	<10.0	76.4	<0.050	0.127	0.058	0.556
TT #4 18'	-	398	1,730	<0.050	0.559	0.535	3.77
TT #4 20'	-	282	1,520	<0.050	0.573	0.435	3.17
TT #4 22'	<16	563	2,190	<0.050	0.433	0.433	3.74

### V. Closure Plan

The site has been excavated to a depth ranging from 7 to 10 feet below the original ground surface. The source material has been removed and disposed of at South Monument Surface Waste Facility L.L.C., an approved NMOCD facility which is within a quarter mile of this site.

The vertical extent of TPH contamination was found in all test trenches with the exception of Trench #4 and Trench #5 which are in the middle of the excavation. The bottom hole samples of these trenches, respectively, are GRO 563 mg/kg, DRO 2,190 mg/kg, and GRO 41.8 mg/kg, DRO 1,160 mg/kg. In the EPA Method 8015, the GRO range is from  $C_6 - C_{10}$  which are short chained hydrocarbons that are volatile. The DRO range is from  $C_{10}$  to  $C_{28}$  which are longer chained hydrocarbons which are less volatile. The results indicate the presence of small amounts of GRO range hydrocarbons which have most likely been trapped for a number of years, and slightly higher amounts of DRO. Benzene was not detected in the deeper Trench 4 samples and the concentrations of the other BTEX constituents are negligible.

Given the results of these analyses, XTO requests that the bottom of the existing excavation be plowed and left open until mid-summer to allow the site to aerate. After this period of aeration, the bottom of the excavation will be sampled to document any contaminants being left in place and the sides of the excavation will be pushed in toward the middle and additional clean fill will be used to restore the site to the grade requested by the land lessee.

### VI. Figures & Appendices

Figure 1 – Vicinity Map Figure 2 – Site Plan Appendix A – Analytical Results Appendix B – Site Photos Appendix C – C-141 Figure 1 Vicinity Map

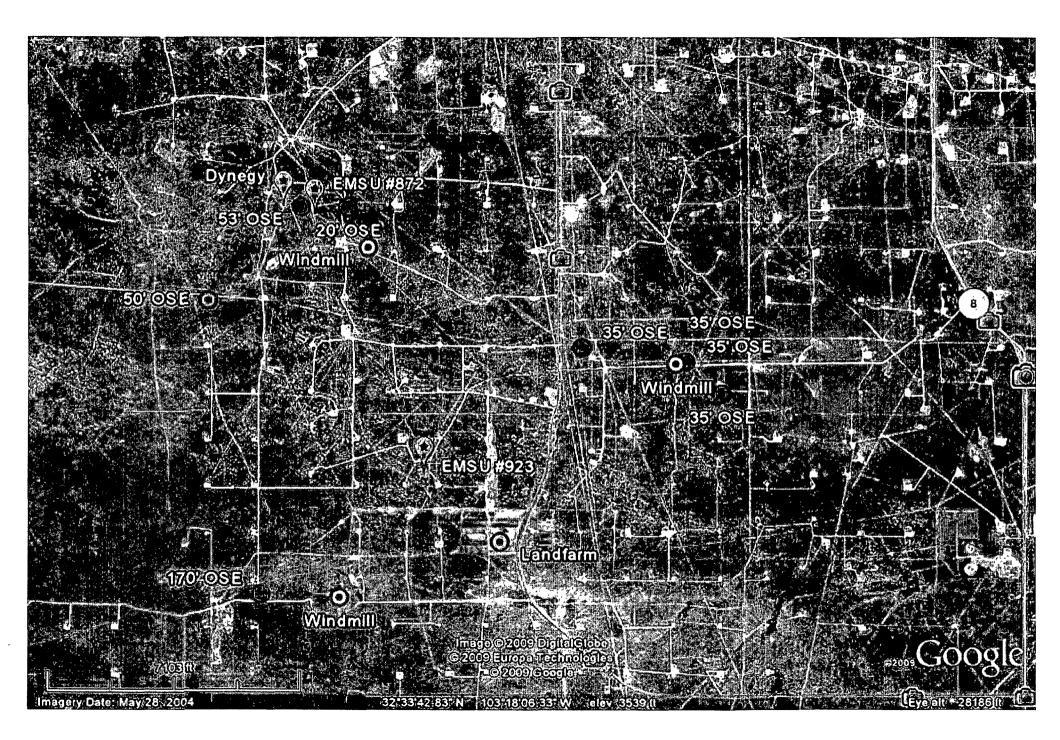
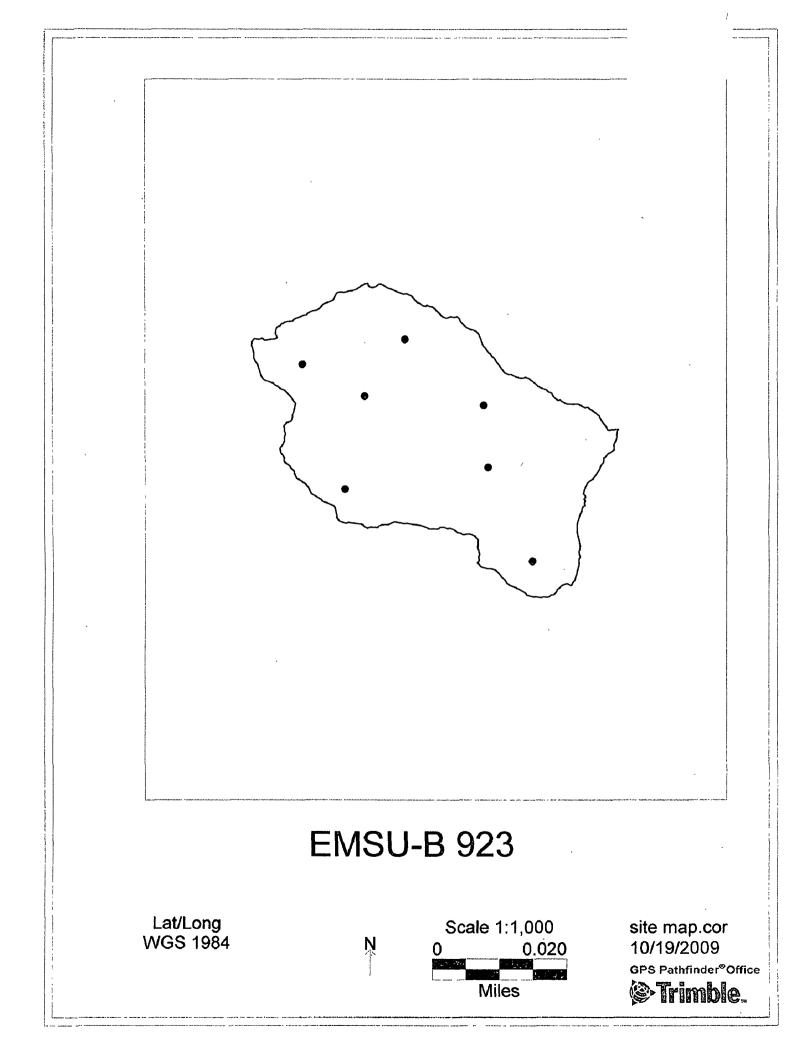




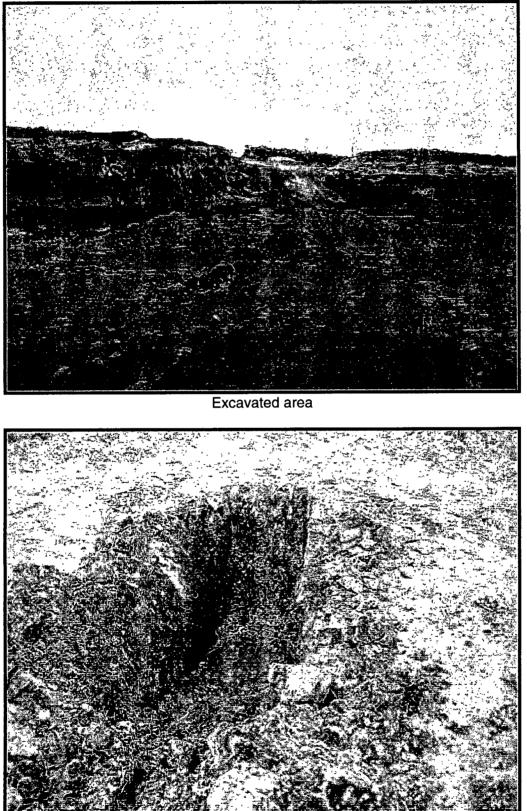
Figure 2 Site Plan

7

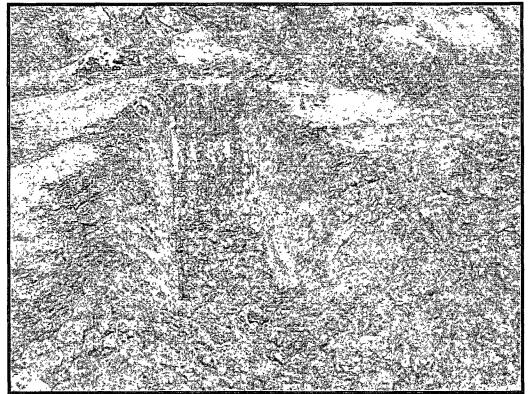




Appendix A Analytical Results Appendix B Site Photos XTO EMSU-923 Site Photos 10-8-09



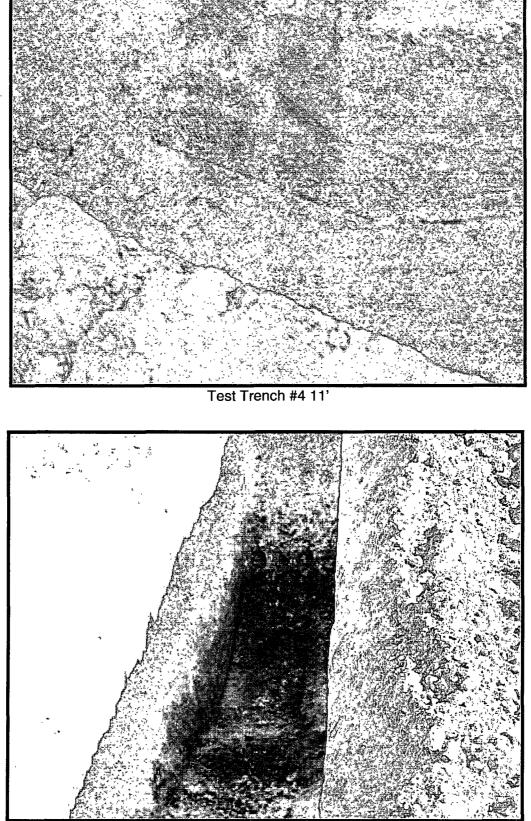
Test trench #1 8'



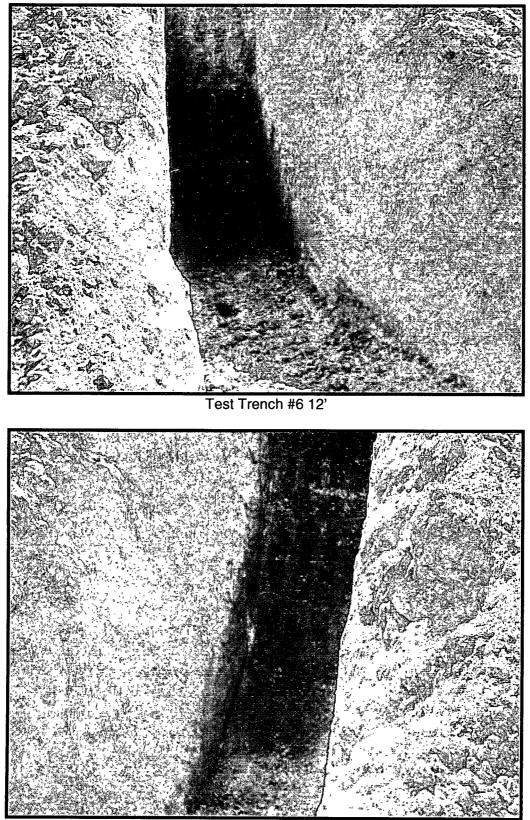
Test Trench #2 9'



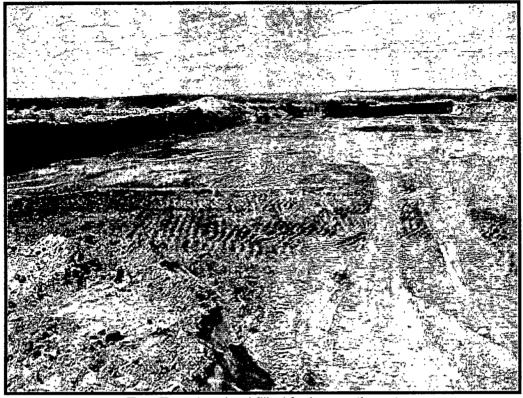
Test trench #3 10'



Test Trench #5 18'



Test Trench #7' 15

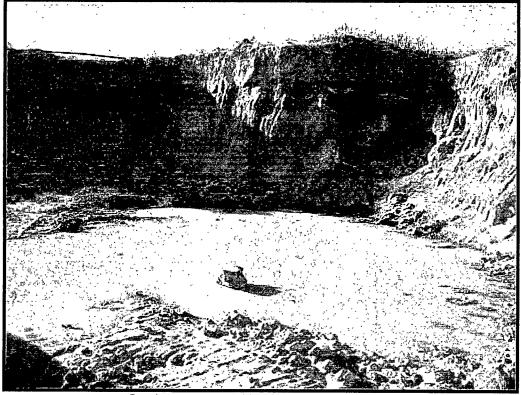


Test Trenches backfilled facing southwest

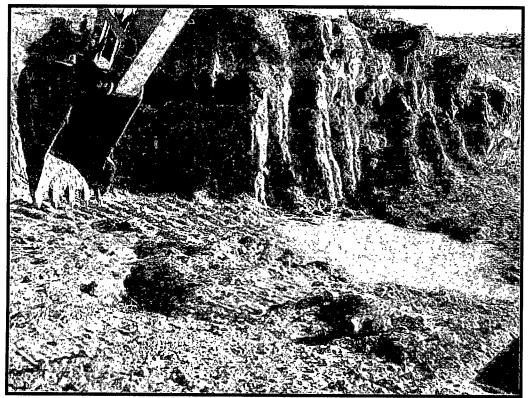


Test Trenches backfilled facing northwest

XTO EMSU Site photos 12-18-09



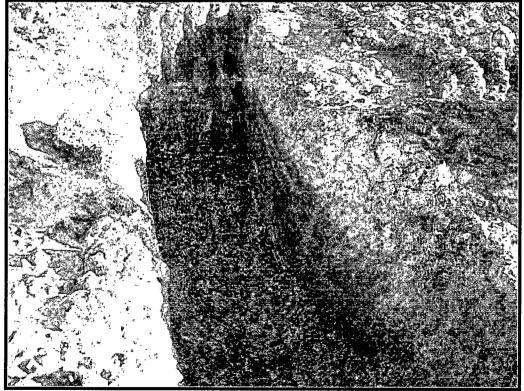
Southeast corner with rain water facing south



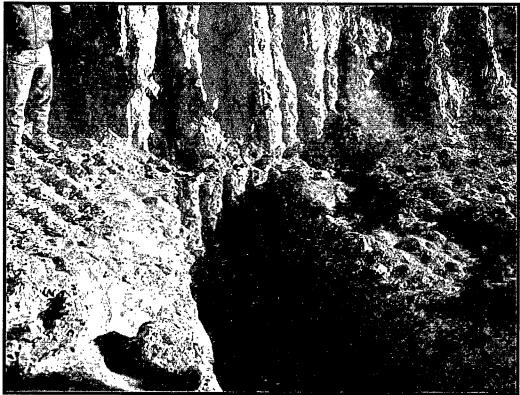
Northeast corner with rain water facing northeast



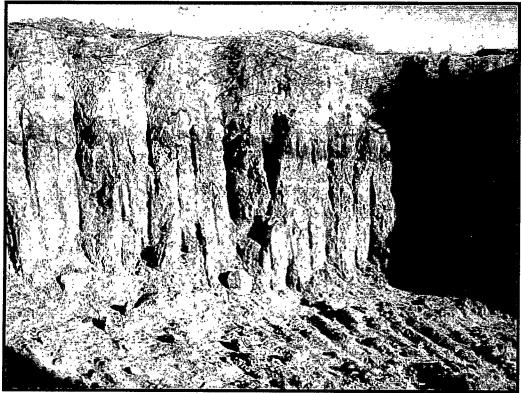
Northeast corner with rain water on top facing east



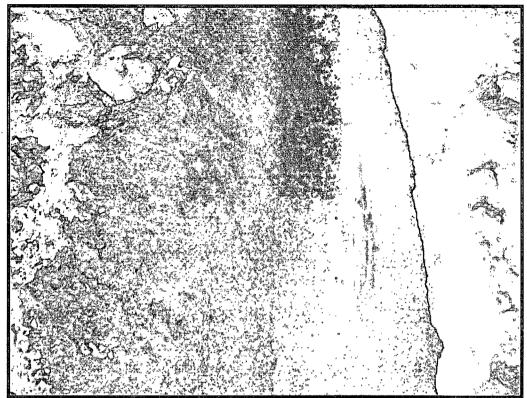
Northeast corner at 3 1/2' dry facing north



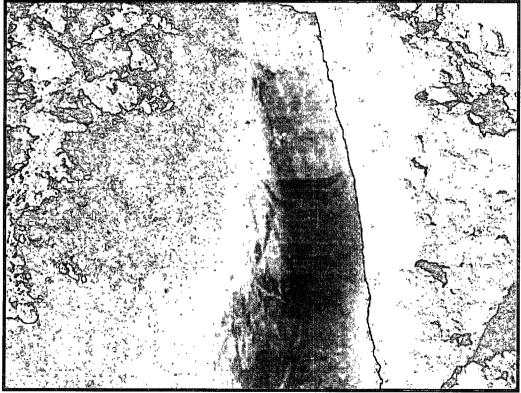
Northeast corner north wall facing north



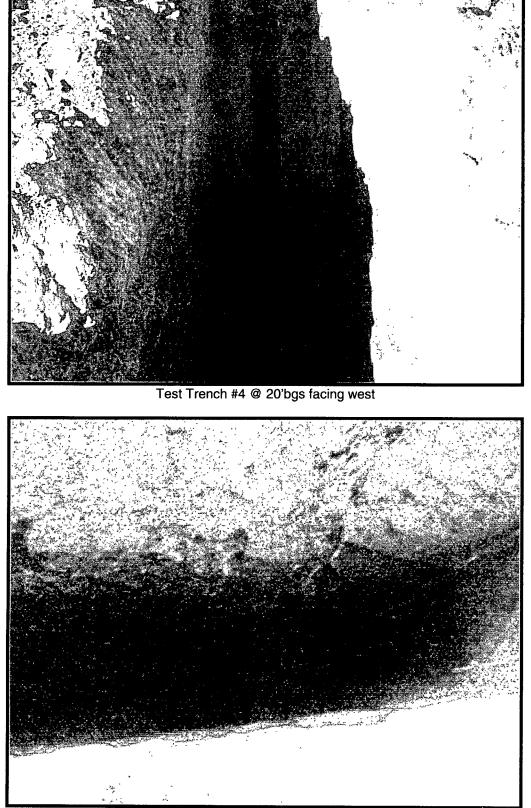
North wall facing north



Test Trench #4 @ 16'bgs facing west



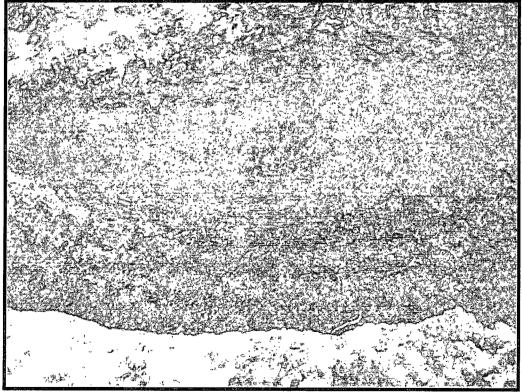
Test Trench #4 @ 18'bgs facing west



Test Trench #4 @ 22'bgs



Test Trench #4 backfilled facing west



Northeast corner bottom dry facing east



Northeast corner backfilled facing east

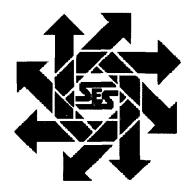
Appendix C C-141

## XTO Energy EMSU-B #923 Township 20 South, Range 36 East, Section 24 Lea County, New Mexico

 $I_{i}^{V}$ 

### **Work Plan**

## October 27, 2009



**Prepared for:** 

XTO Energy P.O. BOX 700 Eunice, NM 88231-0700

By:

Safety & Environmental Solutions, Inc. 703 E. Clinton Hobbs, New Mexico 88240 (575) 397-0510

### TABLE OF CONTENTS

1

1
1
1
2
<b>2</b> 3
3
4
5
6
5 6 9

•

٦

#### I. Company Contacts

NAME	Company	Telephone	E-mail
Jeff Raines	XTO Energy	575-	Jeff_Raines@xtoenergy.com
Isaac Kincaid	SESI	575-390-8841	ikincaid@sesi-nm.com

### II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by XTO Energy to perform clean-up services at the EMSU-B #923 spill site. This is an area with old hard pan staining.

### III. Surface and Ground Water

The closest groundwater of record with the Office of the State Engineer is located in Township 20 South, Range 37 East, and Section 19. The depth of water in this well was 35' in 1953.

### IV. Work Performed

;

On October 8, 2009, SESI was onsite with Diamondback Disposal Services Inc. to install test trenches from excavated area. The excavated area has already been excavated to a depth of six (6) feet to eight (8) feet. The samples were properly preserved and transported under Chain-of-Custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Benzene, Toluene, Ethyl benzene, and Xylenes (BTEX) (EPA method 8021B), and Total Petroleum Hydrocarbons (EPA method 8015 M).

The results of the analysis are as follows:

Sample Point	GRO mg/kg	DRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
TT#1 8'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #2 9'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #3 10'	11.6	440	< 0.050	<0.050	<0.050	0.368
TT #3 14'	11.6	545	0.060	0.145	0.283	0.946
TT #3 18'	459	1,890	<0.050	0.249	<0.050	2.94
TT #4 11'	1,120	2,620	0.763	0.878	1.94	6.21
TT #4 15'	971	1,690	0.439	0.876	1.61	4.95
TT #5 10'	30.0	720	<0.050	0.137	<0.050	1.39
TT #5 15'	109	2,200	<0.050	<0.050	<0.050	0.936
TT #5 18'	41.8	1,160	<0.050	<0.050	<0.050	0.491
TT #6 10'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #6 12'	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.300
TT #7 9'	<10.0	25.8	<0.050	<0.050	< 0.050	<0.300
TT #7 12'	77.4	1,260	<0.050	<0.050	<0.050	1.02
TT #7 15'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300

### V. Closure Plan

It is requested that the excavated area will then be backfilled to a depth of 4'. The area will be domed and a 40-mil impervious liner installed to prevent any further migration of any contaminants left in place. The area will be capped with clean soil, returned to natural grade, and reseeded.

### VI. Figures & Appendices

Figure 1 – Vicinity Map Figure 2 – Site Plan Figure 3 – Log of Borings Appendix A – Analytical Results Appendix B – Site Photos Appendix C – C-141 Figure 1 Vicinity Map

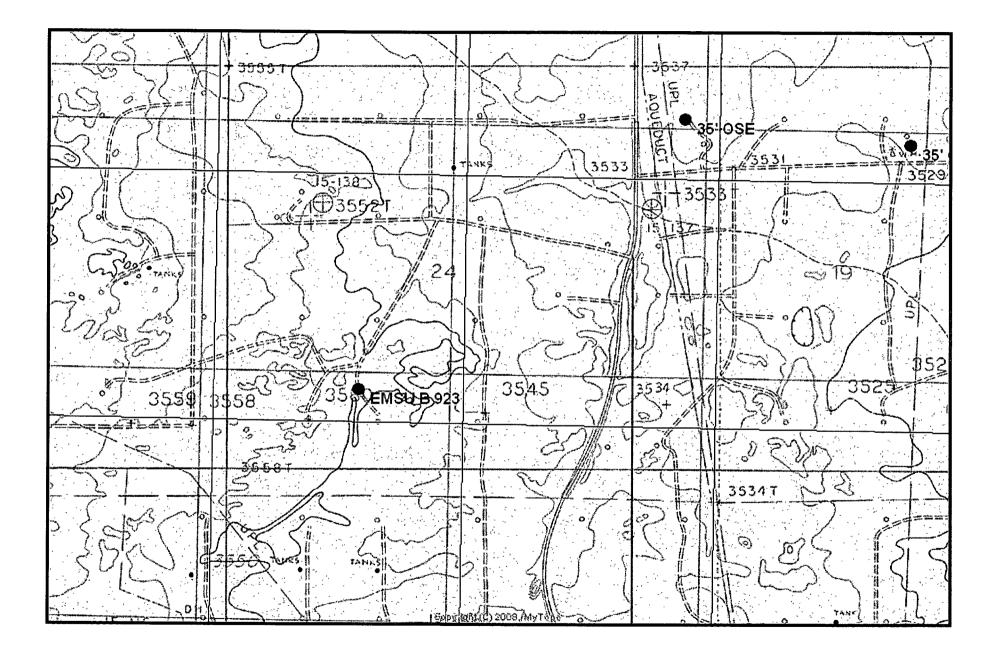


Figure 2 Site Plan

.

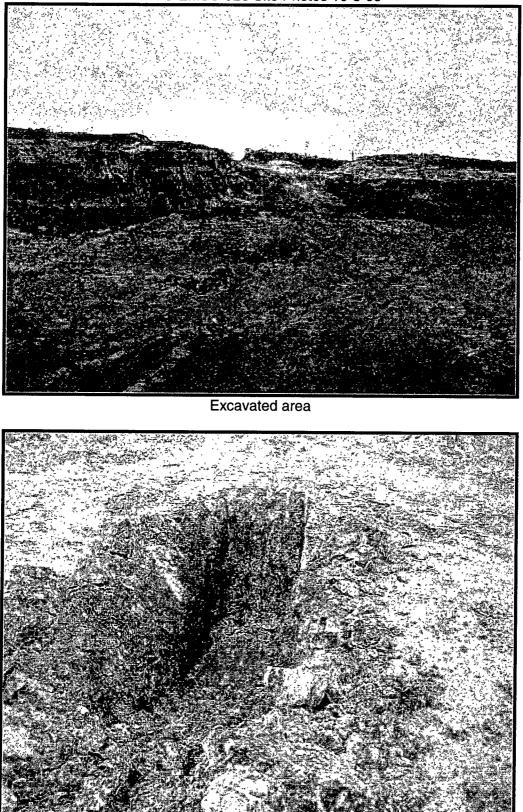
# Appendix A Analytical Results

1

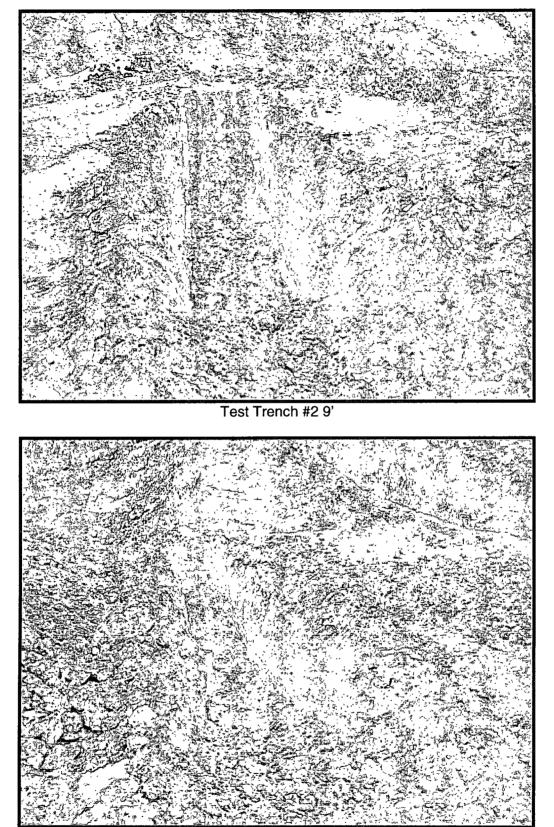
1

# Appendix B Site Photos

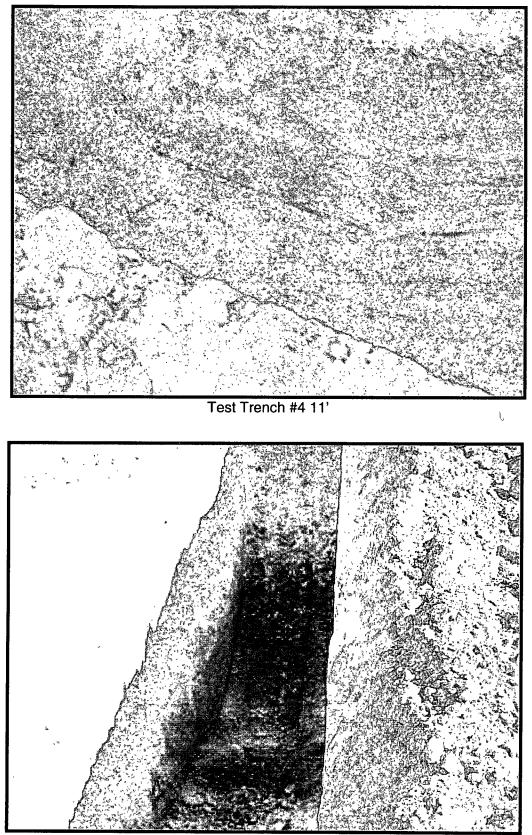
XTO EMSU-923 Site Photos 10-8-09



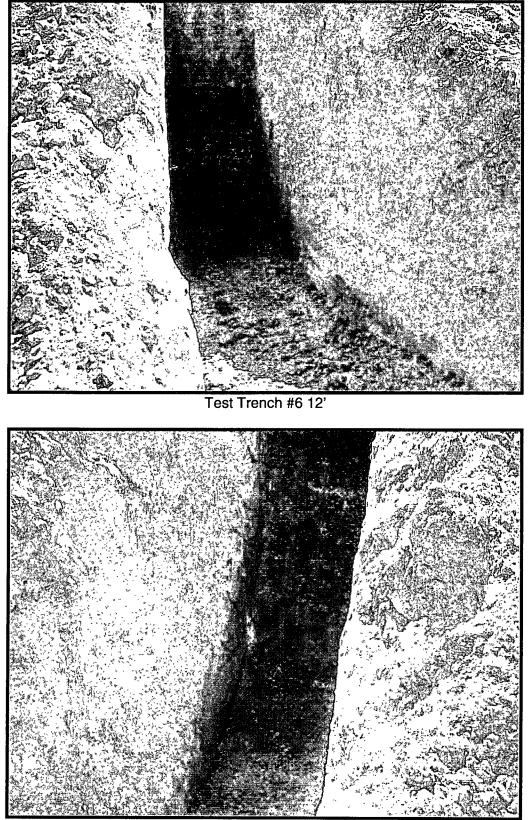
Test trench #1 8'



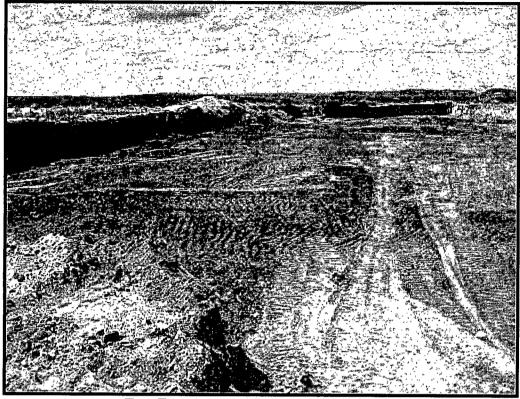
Test trench #3 10'



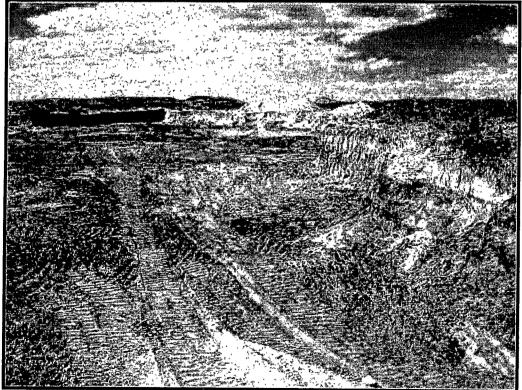
Test Trench #5 18'



Test Trench #7' 15



Test Trenches backfilled facing southwest



Test Trenches backfilled facing northwest

Appendix C C-141

1625 N. French Dr., Hobbs, NM 88240		of New Mex ls and Natura	al Resources	χ.)	Form C-14 Revised October 10, 200					
1000 Rio Brazos Road Aztec NM 87410	20 Sou	ervation Di 1th St. Franc Fe, NM 875	cis Dr.		Submit 2 Copies to appropriat District Office in accordanc with Rule 116 on back side of form					
				ction						
		<b>OPERA</b>	the second s	X	Initial I	Report	📑 Fir	al Repo		
Name of Company XTO Energy, Inc.		Contact G	and the second							
Address P.O. Box 700 Eunice, N.M. 88231 Facility Name E.M.S.UB # 856			No.575-441-163 e Production							
	l Owner					Fed. Ur	it # NM7	0948B		
		DN OF REI	LEASE							
Unit LetterSectionTownshipRangeFeet from theK1120 S36E		h/South Line	Feet from the	East/West	Line C	County				
Latitude		Longitud	e	<u></u>				•		
	TURE	E OF RELI								
Type of Release oil & produced water			Release 150 bbl.			overed 65				
Source of Release fiberglass flow line		Date and H	our of Occurrence		te and Hou Opm	ur of Disc	overy 12/1	6/08		
Was Immediate Notice Given? X [] Yes [] No [] No Required	ot	If YES, To	Whom? Mark W Trishia		IOCD			~		
By Whom? Gene Hudson		Date and Hour 3:00pm 12/16/08								
Was a Watercourse Reached?		If YES, Volume Impacting the Watercourse.								
n a watercourse was impacted, Describe Fully.*				<u>,</u>						
If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break							·			
Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break Describe Area Affected and Cleanup Action Taken.* An area approximately 200' X 85' is affected .A vacuum truck approved disposal site.			_		-					
Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break Describe Area Affected and Cleanup Action Taken.* An area approximately 200' X 85'is affected .A vacuum truck approved disposal site. hereby certify that the information given above is true and comp egulations all operators are required to report and/or file certain p bublic health or the environment. The acceptance of a C-141 rep hould their operations have failed to adequately investigate and r or the environment. In addition, NMOCD acceptance of a C-141	plete to the release ne ort by the remediate	he best of my k otifications and e NMOCD mar e contamination	nowledge and un perform correcti ked as "Final Rep a that pose a threa	derstand that ve actions fo port" does no it to ground v	t pursuant or releases ot relieve t water, surf	to NMOC which mather the operato face water	D rules an ay endange or of liabili , human he	d r ty salth		
Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break Describe Area Affected and Cleanup Action Taken.* An area approximately 200' X 85' is affected .A vacuum truck approved disposal site. hereby certify that the information given above is true and comp egulations all operators are required to report and/or file certain to ublic health or the environment. The acceptance of a C-141 rep hould their operations have failed to adequately investigate and n r the environment. In addition, NMOCD acceptance of a C-141 ederal, state, or local laws and/or regulations.	plete to the release ne ort by the remediate	he best of my k otifications and e NMOCD mar e contamination	nowledge and un perform correcti ked as "Final Rep a that pose a threa	derstand that ve actions fo port" does no at to ground v sponsibility f	t pursuant or releases ot relieve t water, suri for compli	to NMOC which mather the operato face water liance with	CD rules an ay endange or of liabili , human he any other	d r ty salth		
Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break Describe Area Affected and Cleanup Action Taken.* An area approximately 200' X 85' is affected .A vacuum truck the approved disposal site. hereby certify that the information given above is true and comp egulations all operators are required to report and/or file certain to ublic health or the environment. The acceptance of a C-141 rep hould their operations have failed to adequately investigate and to r the environment. In addition, NMOCD acceptance of a C-141 ederal, state, or local laws and/or regulations.	plete to the release not by the remediate report do	he best of my ke otifications and e NMOCD man e contamination oes not relieve t	nowledge and un perform correcti ked as "Final Rep a that pose a threa the operator of re	derstand that ve actions fo port" does no it to ground v sponsibility f ERVATIO	t pursuant or releases ot relieve t water, suri for compli	to NMOC which mather the operato face water liance with	CD rules an ay endange or of liabili , human he any other	d r ty salth		
Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break Describe Area Affected and Cleanup Action Taken.* An area approximately 200' X 85'is affected .A vacuum truck	plete to the release not by the remediate report do	he best of my ke otifications and e NMOCD man e contamination oes not relieve t	nowledge and und perform correcti ked as "Final Rep a that pose a threa the operator of re OIL CONS	derstand that ve actions fo port" does no it to ground v sponsibility f ERVATIC	t pursuant or releases ot relieve t water, suri for compli	to NMOC s which ma the operato face water iance with VISION	CD rules an ay endange or of liabili , human he any other	d r ty salth		
Describe Cause of Problem and Remedial Action Taken.* leak caused by the fiberglass flow line break Describe Area Affected and Cleanup Action Taken.* An area approximately 200' X 85' is affected .A vacuum truck approved disposal site. hereby certify that the information given above is true and comp egulations all operators are required to report and/or file certain to ublic health or the environment. The acceptance of a C-141 rep hould their operations have failed to adequately investigate and a r the environment. In addition, NMOCD acceptance of a C-141 ederal, state, or local laws and/or regulations. ignature:	plete to the release nort by the remediate report do the remediate report do the repor	he best of my ki otifications and e NMOCD mar e contamination oes not relieve t Approved by Di	nowledge and und perform correcti ked as "Final Rep a that pose a threa the operator of re <u>OIL CONS</u> istrict Supervisor	derstand that ve actions fo port" does no it to ground v sponsibility f ERVATIC	t pursuant or releases of relieve t water, surf for compli	to NMOC s which ma the operato face water iance with VISION	CD rules an ay endange or of liabili , human he any other	d r ty salth		



ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS, INC. ATTN: BOB ALLEN 703 E. CLINTON, #102 HOBBS, NM 88240 FAX TO: (575) 393-4388

Receiving Date: 12/18/09 Reporting Date: 12/22/09 Project Owner: XTO ENERGY (XTO-09-004) Project Name: EMSU # 923 Project Location: MONUMENT, NM

Sampling Date: 12/18/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 6°C Sample Received By: NF Analyzed By: AB/CK

R SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)
DATE:	12/20/09	12/20/09
TT #4 16' BGS	<10.0	76.4
TT #4 18' BGS	398	1,730
TT #4 20' BGS	282	1,520
TT #4 22' BGS	563	2,190
	DATE: TT #4 16' BGS TT #4 18' BGS TT #4 20' BGS	R SAMPLE ID (mg/kg)   DATE: 12/20/09   TT #4 16' BGS <10.0

ANALYSISD	AIE:	12/20/09	12/20/09
H18912-1	TT #4 16' BGS	<10.0	76.4
H18912-2	TT #4 18' BGS	398	1,730
H18912-3	TT #4 20' BGS	282	1,520
H18912-4	TT #4 22' BGS	563	2,190
Quality Contro	pl	551	567
True Value Q	C	500	500
% Recovery		110	113
<b>Relative Perc</b>	ent Difference	<0.1	2.8

METHOD: SW-846 8015 M. Reported on wet weight. Not accredited through NELAP for GRO/DRO.

Directo H18912T SESI

12/22/09 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS, INC. ATTN: BOB ALLEN 703 E. CLINTON, #102 HOBBS, NM 88240 FAX TO: (575) 393-4388

Receiving Date: 12/18/09 Reporting Date: 12/22/09 Project Owner: XTO ENERGY (XTO-09-004) Project Name: EMSU #923 Project Location: MONUMENT, NM

Sampling Date: 12/18/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 6°C Sample Received By: NF Analyzed By: ZL

LAB NO. SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:	12/21/09	12/21/09	12/21/09	12/21/09
H18912-1 TT#4 16'BGL	< 0.050	0.127	0.058	0.556
H18912-2 TT#4 18'BGL	< 0.050	0.559	0.535	3.77
H18912-3 TT#4 20'BGL	< 0.050	0.573	0.435	3.17
H18912-4 TT#4 22'BGL	<0.050	0.433	0.433	3.74
Quality Control	0.051	0.049	0.048	0.146
True Value QC	0.050	0.050	0.050	0.150
% Recovery	102	98.0	96.0	97.3
Relative Percent Difference	3.9	2.0	4.2	3.6

METHODS: BTEX - SW-846 8021B.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight.

Lab Director

nhelog Date

## H18912 BTEX SESI

PLEASE NOTE: Liability and Damages. Cardina's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardina' be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS, INC. ATTN: BOB ALLEN 703 E. CLINTON, #102 HOBBS, NM 88240 FAX TO: (575) 393-4388

Receiving Date: 12/18/09 Reporting Date: 12/21/09 Project Number: XTO-09-004 (XTO) Project Name: EMSU #923 Project Location: MONUMENT, NM

Analysis Date: 12/21/09 Sampling Date: 12/18/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 6°C Sample Received By: NF Analyzed By: HM

	Cl
LAB NO. SAMPLE ID	(mg/kg)
H18912-4 TT #4 22' BGS	< 16
······	
·····	
· · · · · · · · · · · · · · · · · · ·	
Quality Control	500
True Value QC	500
% Recovery	100
Relative Percent Difference	< 0.1

METHOD: Standard Methods 4500-CIB Note: Analysis performed on a 1:4 w:v aqueous extract.

Not accredited for Chloride.

und Chemis

12/22/09 Date

## H18912 SESI

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services harounder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

ARDINAL LABORATORIES 101 East Mariand, Hobbs, NM 88240

1575) 202 2200 E (575) 202 2470

(575) 393-2326 Fax (575) 393-2476		Page of
Company Name: SEST	BILL TO	ANALYSIS REQUEST
Project Manager: Bob Allen	P.O. #:	
Address: 763 E clinton	Company:	
City: 14065 State: MM Zip: 58240	Attn:	
Phone #: 575-397-0510 Fax #:	Address:	
Project #: X70-09-004 Project Owner: XTO	City:	
Project Name: <u>FMSU <sup>±</sup>923</u>	State: Zip:	1 1 1 1 1 1 1 1 1 1 1
P ct Location: Munument, nm	Phone #:	S m
Sampler Name: I Sciac Fincaid	Fax #:	
PORLABUSE ONLY Lab I.D. Sample I.D. MATRIX WATRIX WATRIX WATRIX BUILD WATRIX	PRESERV SAMPLING	714 810 13767X CI- calde
H18912-1 77 44 46 BGS 51	12/18/9 0855	
-2 77th 18 bgs 61	0900	
-3 77 # 4 20 by 5 6	1 0508	
-4 74 E4 22 25 621 V	V 0515	
	·	╶┠┈┅┞┈╌┞╼╍╉╌╼┡╴╌┣╍╌┠╼╾╎╼╼┥╌╍┝╌╍┝
· ···· ·		
		╶╂╌╌┼╼╌┼╼╾┼╍╾┼╌╾┥╼╌┼╾╌┤╼╌╎╴╴
		╶╹┫╍╍─┤╼╾┼╼╾┼╼╾┼╼╌┼╌╌┼╌╌┝──┤╌╼┤╍╸
PLEASE NOTE: Lability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contra analyses All claims including those for negligence and any other cause whatsoever shall be deemed waived upless made in writing services in no event shall be table for incidental do consequential damages. Including without imated business interruption affiduates or successors manage up of pretered to the performance of the writes hereunder by Cardinal, regarding of whether sourch to successors manage up of pretered to the performance of the writes hereunder by Cardinal, regarding of whether sourch to successors manage up of pretered to the performance of the writes hereunder by Cardinal, regarding of whether sourch to successors manage up of pretered to the performance of the writes hereunder by Cardinal, regarding to whether sourch to successors manage up of pretered to the performance of the writes hereunder by Cardinal, regarding to whether sourch to successors manage up of pretered to the performance of the writes hereunder by Cardinal, regarding to whether sourch to successors manage up of the transmission of the performance of the writes hereunder by Cardinal, regarding the successors manage up of the transmission of tr	and received by Cardinal within 30 days after completion of s, loss of use, or loss of profils incurred by client, its subsid im is based upon any of the above stated reasons or other <u>Phone R</u> Fax Res REMAR dittion CHECKED BY: t (Initials) res	afthe applicable Sanies, rvisa, Result: □ No Add'I Phone #: ult: □ No Add'I Fax #:

t Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476. There #36



ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS ATTN: BOB ALLEN 703 E. CLINTON, #102 HOBBS, NM 88240 FAX TO: (575) 393-4388

Receiving Date: 12/09/09 Reporting Date: 12/10/09 Project Number: XTO-09-004 Project Name: EMSU #923 Project Location: MONUMENT, NM Analysis Date: 12/10/09 Sampling Date: 12/09/09 Sample Type: SOIL Sample Condition: INTACT @ 22.5°C Sample Received By: ML Analyzed By: HM

	CI
LAB NO. SAMPLE ID	(ppm)
H18845-1 BOTTOM 8' COMPOSITE	< 16
Quality Control	500
True Value QC	500
% Recovery	· 100
Relative Percent Difference	< 0.1

METHOD: Standard Methods Note: Analysis performed on a 1:4 w:v aqueous extract.

left Chemist

12/14/09 Date

4500-CIB

## H18845 SESI

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount pald by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories. ARDINAL LABORATORIES

(575) 393-2326 Fax (575) 393-2476		Page of
Company Name: V SESF	BILL TO	ANALYSIS REQUEST
Project Manager: Bb Allen	P.O. #:	
Address: 703 E. Clinton	Company:	
City: 140665 State: MM Zip: 88240	Attn:	
Phone #:575-397-0510 Fax #:	Address:	
Project #: 170-09-004 Project Owner:	City:	
Project Name: Fm Sin #923	State: Zip:	
Project Location: Monument nM	Phone #:	
Sa ir Name: tsage Kirraid	Fax #:	
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING	
Tap: 1.0 Containers # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS		
	μ, μ	
Tap I'D # Containers GROUNDWATER Soil	SNUDGE OTHER: ACIDIBASE ACIDIBASE ACIDIBASE ACIDIBASE ACIDIBASE ACIDIBASE	
erection and the second s		
H18845. Bottom & Composite CI	1 12/9/09 ,330	
	11110	
		╶┨╾╼╞╼╼╞╼╼╞╾╼╞╾╼╎╾╾╎╼╼┥╴╸╎╴╴╎
		╺┨╾╼┥╼╌┤╾╾┼╾╌┝╾╌┝╌╌┝╌╌╎╸╌┥┍╴
		╶┠──┼──┼──┼──┼──┼──┼──┼──┼
		╼╏╾╾┝╾╾┝╾╾┼╼╾┼╌┉╎╴┉╎╴┈┟╴┈╢╴╴╢╴┼╴
PLEASE NOTE: Liability and Damages. Cardina's liability and client's exclusive remedy for any claim ansing whether based in car analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writur	ng and received by Cardinat within 30 days after completion of	of the applicable
service. In no event shall Cardinal be liable for incidential or consequental damages, including without limitation, business interrupti affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such	claim is based upon any of the above stated reasons or othe	rwise.
Sampler Relinquisheet Date: Received By:	A Fax Res	sult: 🔲 No Add'l Fax #:
Time of Multy	Kelu REMAR	ikincaid @ SESI- nm-com
Relinquished By: Date: Received By:		
, Time:		
Delivered By: (Circle One) Temp. Sample Co		
Sample - UPS - Bus - Other: 22.50 Group - UPS - Bus - Other:	No Man	

.

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS, INC. ATTN: BOB ALLEN 703 E. CLINTON, #102 HOBBS, NM 88240 FAX TO: (575) 393-4388

Receiving Date: 10/08/09 Reporting Date: 10/13/09 Project Owner: XTO ENERGY (XTO-09-004) Project Name: EMSU - B 923 Project Location: MONUMENT, NM Sampling Date: 10/08/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 4.5<sup>o</sup>C Sample Received By: CK Analyzed By: AB/ZL

LAB NO.	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS	DATE:	10/13/09	10/13/09	10/12/09	10/12/09	10/12/09	10/12/09
H18446-1	TT#1 8'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H18446-2	TT#2 9'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H18446-3	TT#3 10'	11.6	440	<0.050	<0.050	<0.050	0.368
H18446-4	TT#3 14'	11.6	545	0.060	0.145	0.283	0.946
H18446-5	TT#3 18'	459	1,890	<0.050	0.249	<0.050	2.94
H18446-6	TT#4 11'	1,120	2,620	0.763	0.878	1.94	6.21
H18446-7	TT#4 15'	971	1,690	0.439	0.876	1.61	4.95
H18446-8	TT#5 10'	30.0	720	<0.050	0.137	<0.050	1.39
H18446-9	TT#5 15'	109	2,200	<0.050	<0.050	<0.050	0.936
H18446-10	TT#5 18'	41.8	1,160	<0.050	<0.050	<0.050	0.491
H18446-11	TT#6 10'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H18446-12	TT#6 12'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300

25.8

1.260

<10.0

512

500

102

0.6

< 0.050

< 0.050

< 0.050

0.049

0.050

98.0

13.3

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B. TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight. Not accredited for GRO/DRO.

<10.0

<10.0

77.4

440

500

88.0

2.9

lOM. Lab Director

H18446 TPHBTEX SESI

**Relative Percent Difference** 

H18446-13 TT#7 9'

Quality Control

True Value QC

% Recovery

H18446-14 TT#7 12' H18446-15 TT#7 15'

10/13/09

<0.050

<0.050

<0.050

0.047

0.050

94.0

13.5

< 0.050

< 0.050

< 0.050

0.048

0.050

96.0

7.7

< 0.300

< 0.300

0.141

0.150

94.0

14.8

1.02

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

١	R	n	I	N	Δ	L	I	Δ	R	0	R	Δ	T	n	R	IF	= c	3
τ.	11	_					_	~	┛	$\sim$	1 14	~		~	83	-	_ ``	

ARD	DINAL LABORATORIES																						
	101 East Marland, Hobbs, NM 88240																-		_	1	2	-	
	(575) 393-2326 Fax (575) 393-24	76												_					Page_				
Company Name:	SEST						BI		то			Т	<u> </u>				ALYS	IS R	EQUI	EST		·	
Project Manager:	Bob Alleg	• 				). #:							ļ										ł
Address: 703 E Clinton						mpa	ny:																
City: Hobbs State: AM Zip: 88240						n:										[					ł		1
Phone #: 575-	-397-0510 Fax #:				Ad	dres	s: 5	G.	me								1						
Project #: X70	-09-004 Project Owner:	X	1	0	Cit	y:											ļ		1		1		
Project Name: 🗶	TOEMSU-B, SZ3				Sta	ite:		Zip	):							[	Į.			ļ			
	monument, nm.				Ph	one	#:													}			
S Jer Name: Z					Fax #:																		
FOR LABUSE ONLY		T	Ţ	MATRIX		PRE	SERV		SAMPLI	NG	0					]				1	1	1	
		No.		œ.							X	ž	え						ł				
		(C)OMP	ERS	ATE				Į.				1	3									}	
LaB I.D.	Sample I.D.	No.	N N	MON H		ASE	5				7	1	1			}							
170 Jul		(G)RAB OR	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	臣	ACID/BASE:	ICE / COOL OTHER :	1			12		5			1			1			]	
1718446-		0	<u>*</u>	GROI WAST SOIL OIL	į۵	N N	<u>ច្ប័៦</u>		DATE	TIME	Ľ-	]_	_]			<u> </u>		<b></b>	<b></b>				
<u> </u>	7741 8	6	Ц		-			14	18/1	OHU	K	1_	$\boldsymbol{\measuredangle}$										
	772 5'	<b></b>	4		ļ		┨┼_		<u> </u>	0820			-			.	_		<u> </u>				
37	7 # 3 10		-+-	┝╌┾╾╫╋╌┼╼┥╼			++	-		0823		+	+						-				
<u> </u>	TT # 2 14'	H	+	┝─┿─╂┼━┼╼	<u> </u>	- <u> </u> '		-		0838	$\vdash$	_ -	+		<u> </u>			-					-
<u> </u>	T-RU II	┞┿┠	+	┝╾┼╾┼╋┼╼┼╼			++-	- -	<del> </del>	0900	┝╂	_ -		<u> </u>			+					-	
<u> </u>	THE IN	╎┼╌╿	+	╏━┽╌┽╂┽╴┽╴	+		++	-		0826	$\vdash$				<u> </u>								
	<u>1749 15</u>	┝╊╼╄	+	╺┽╍┊╏┽╶┼┈	╞	-	┝╊┼╌	- -		0833	╟┼		┠'			-		-		+		-	
	11-2-10'		$\left  + \right $	┠╾┽╶┽╂┼╌┿╸	+-	-	╎┠╌┞╌	- -	7	0920	╟┼												
	THE IX	₩I		<b>└──┤</b> <u></u> <u>/</u> <u>/</u> -/-	+	-	+ /-	-N	/	0925								-					
PLEASE NOTE: Lisbility and	Damages. Cardina's Nability and cliant's exclusive remedy for a	ny claim	arish	ng whether based in contra	i at or lu	ort, Shat	s be limite	d to th	e amount n	aid by the client to	r the		4	L	<u> </u>	1							<u> </u>

service In no event shall Cardinal be flable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profils incurred by client, its subsidiaries, affiliates or successors ansing out of or related to the performance of services hereunder by Cardinal, regardiess of whether such claim is based upon any of the above staled means or otherwise

Sampler Relingrished:	Date: Date:	Phone Result:	0	No	'Add'I Phone #:
		Fax Result:		No	Add'l Fax #:
1 di-	Time: 1550	REMARKS:			
Relinquished By:	Date: Received By:				
	Time: Cilie Mene		10	) 0 20	r-nm-com
Delivered By: (Circle One)	Temp. Sample Condition CHECKED BY:	- iKincas	q w	525	
Sampler - UPS - Bus - Other:	$\begin{array}{c c} \mathcal{L} & \mathcal{L} \\ $	Office	2 @	SES	I - AM-COM

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

ç

۵	R	W	ΔΙ	ΙΔ	RO	RA	то	RIES
ч	ハレ	ни.		27	$\mathbf{D}\mathbf{O}$	3 <b>1 7 1</b>	10	NILU

101 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476		
Company Name: SESE	BILL TO	
Project Manager: Bob Allen	P.O. #:	
Address: 703 E Clinton	Company:	

Address: 70	3 E Clinton				Com	pany:						1					1	, İ	
City: Hak	55 State: NM	Zip:	8	8240	Attn:														
	-397-0510 Fax #:				Addr	ress: <	2631	me			}		1						
Project #: X7	D-09-004 Project Owner	x	7	0	City:						1							1	
Project Name:	Emsu-923				State	э:	Zij	p:			ĺ								
Project Location	monument. NM				Pho	ne #:						•							
ler Name:	ISAAC Incard				Fax					ビ									ł
FOR LABUSE ONLY			-	MATRIX	P	RESER	<u>v.</u>	SAMPLI	NG	Ó.									
		UM NO	S	Ш.r.						8			1						1
	Sample I.D.	R C	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE							X		l						
		AB O	NTA	UND TEW	Ë		 			44	N								
H13446-		(G)RAB	0 7	SLUC SOIL SOIL SOIL	OTHER :	ACID/BASE: ICE / COOL	Ë	DATE	TIME	N	·M								
11	77#6 10'	6	Ĩ						0935		$\overline{\gamma}$					1	1		
12	77# 6 12'	Π							0952	1									
13	77#7 91								1000										
14	7747 12	H.				_:[]_	_ _		1015	$\downarrow$					 			l	
15	77#7 15'	<b> *</b>	Ľ	<b>V</b>	┿╋	<u> </u>		4	1020	<b>v</b>	$\mathbf{V}$				 		_		
	-			┝╾┼╼┼╼┽╍┽┉	┿╌┠				<u> </u>		<b> </b>				 		-		
			<u> </u>	┝╌╄╾┞╼┼╼	┿╌┠		- -		·!	· <b> </b>					 				
	·····	-	1	┠╾┼╾┼╌┼╼╁╴	<u>+</u> -				+		┧				 				
	<u> </u>			┣━┭╾┾╼┊╼╅╴	- <u> </u>				+				┼	┝━━━━-{-	 				·

Page\_Zof\_Z

ANALYSIS REQUEST

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the smouth paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within 30 days effer completion of the applicable service is no event shall Cardinal be liable for incidental or consequential damages, including without limition, hour business interruptions, loss of use, or toss of profils incurred by client, is subsciparies, ariticates or without and the cardinal to the cardinace to the cardines becauted by Cardinal cardinales and whether such claims is based unon any of the above stalled reasons or otheraice and the cardinal section of the cardinale to the cardinace to the cardinace to Cardinal cardinace and the such claims of the above stalled reasons or otheraice and the cardinal to the cardinal to the cardinace to the cardinace becauted by Cardinal cardinace and the such claims any of the above stalled reasons or otheraice and the cardinace to the cardinace of the cardinace and the cardinace to the cardinace of the such claims (the such claims) and the cardinace of the cardinace to the cardinace and the cardinace of the cardinace of the cardinace of the cardinace of the such claims (the such claims) and the cardinace of the cardina

	services nereunder by Cardinal, regardless of whether such claim is based upon any of the above stated m	asons or otherwise.	 	
Sampler Relinedished:	Date: A Received By:	Phone Result:	No	Add'I Phone #:
	1018107	Fax Result:	No	Add'I Fax #:
	Time	REMARKS:		
China -	_//>>//			
Relinquished By:	Date: Received By:			
	Time:			
	NUM NUM	_		
Delivered By: (Circle One)	Temp. Sample Condition CHECKED BY:			
	i, Cool Intaet (Initials)			
Sampler - UPS - Bus - Other:	450 WYes Ves Cubk			
	. To D No No MAN		 	

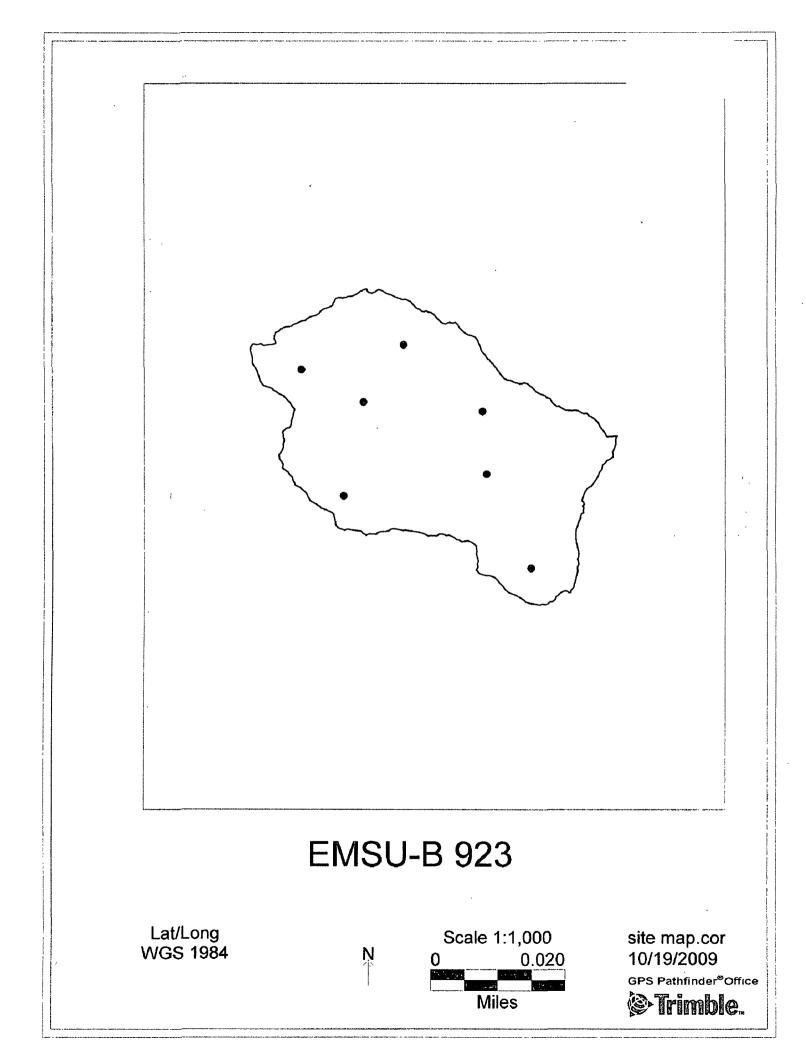
† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

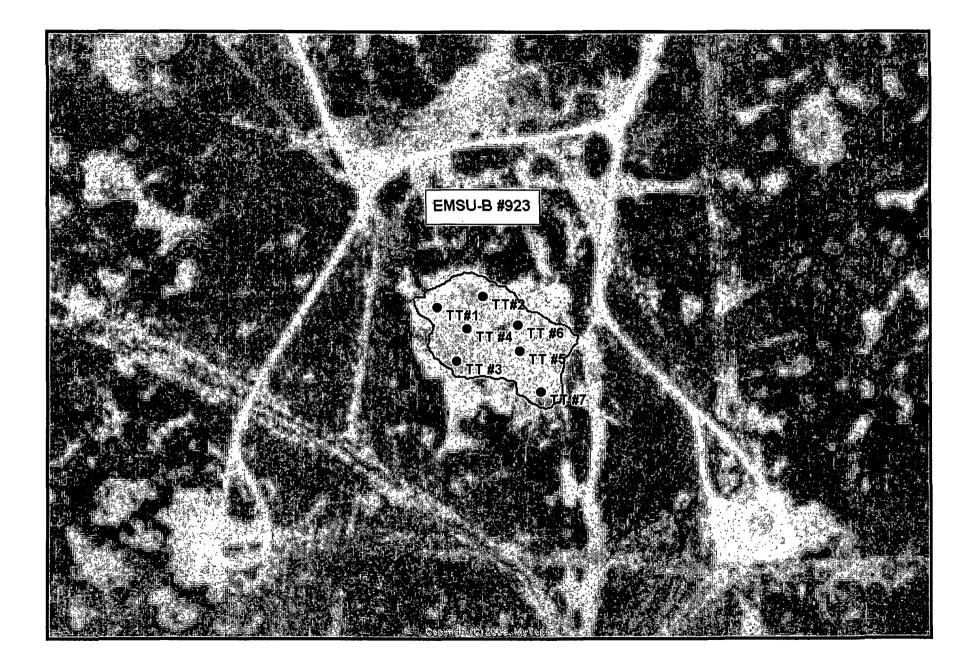
9

XTO-09-004 Cardinal Laboratories Results October 13, 2009

Sample Point	GRO mg/kg	DRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
TT#1 8'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #2 9'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #3 10'	11.6	440	<0.050	<0.050	<0.050	0.368
TT #3 14'	11.6	545	0.060	0.145	0.283	0.946
TT #3 18'	459	1,890	<0.050	0.249	<0.050	2.94
TT #4 11'	1,120	2,620	0.763	0.878	1.94	6.21
TT #4 15'	971	1,690	0.439	0.876	1.61	4.95
TT #5 10'	30.0	720	<0.050	0.137	<0.050	1.39
TT #5 15'	109	2,200	<0.050	<0.050	<0.050	0.936
TT #5 18'	41.8	1,160	< 0.050	<0.050	<0.050	0.491
TT #6 10'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #6 12'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
TT #7 9'	<10.0	25.8	<0.050	< 0.050	<0.050	<0.300
TT #7 12'	77.4	1,260	<0.050	<0.050	<0.050	1.02
TT #7 15'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300

EPA method: TPH GRO & DRO (EPA SW-846 8015) BTEX (EPA SW-846 8021B)







October 13, 2009

Bob Allen Safety & Environmental Solutions, Inc. 703 East Clinton, #102 Hobbs, NM 88240

Re: XTO Energy (XTO-09-004)

Enclosed are the results of analyses for sample number H18446, received by the laboratory on 10/08/09 at 3:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Method SW-846 8260 Method TX 1005 Benzene, Toluene, Ethyl Benzene, and Total Xylenes Benzene, Toluene, Ethyl Benzene, and Total Xylenes Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene Laboratory Director

This report conforms with NELAP requirements.



ANALYTICAL RESULTS FOR SAFETY & ENVIRONMENTAL SOLUTIONS, INC. ATTN: BOB ALLEN 703 E. CLINTON. #102 HOBBS, NM 88240 FAX TO: (575) 393-4388

Receiving Date: 10/08/09 Reporting Date: 10/13/09" Project Owner: XTO ENERGY (XTO-09-004) Project Name: EMSU - B 923 Project Location: MONUMENT, NM

Sampling Date: 10/08/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 4.5°C Sample Received By: CK Analyzed By: AB/ZL

SAMPLE ID LAB NO.

GRO (mg/kg)

(C6-C10) (>C10-C28) BENZENE TOLUENE (mg/kg)

DRO

(mg/kg) (mg/kg) ETHYL TOTAL

Ē	BENZENE	XYLENES
	(mg/kg)	(mg/kg)

		• • • •	-		•	
ANALYSIS DATE:	10/13/09	10/13/09	10/12/09	10/12/09	10/12/09	10/12/09
H18446-1 TT#1 8'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H18446-2 TT#2 9'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H18446-3 TT#3 10'	, 11.6	440	<0.050	<0.050	<0.050	0.368
H18446-4 TT#3 14'	11.6	545	0.060	0.145	0.283	0.946
H18446-5 TT#3 18'	459	1,890	<0.050	0.249	<0.050	2.94
H18446-6 TT#4 11'	1,120	2,620	0.763	0.878	1.94	6.21
H18446-7 TT#4 15'	971	1,690	0.439	0.876	1.61	4.95
H18446-8 TT#5 10'	30.0	720	<0.050	0.137	<0.050	1.39
H18446-9 TT#5 15'	109	2,200	<0.050	<0.050	<0.050	0.936
H18446-10 TT#5 18'	41.8	1,160	< 0.050	<0.050	< 0.050	0.491
H18446-11 TT#6 10'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
H18446-12 TT#6 12'	<10.0	<10.0	<0.050	··<0.050	<0.050	< 0.300
H18446-13 TT#7 9'	<10.0	25.8	<0.050	<0.050	<0.050	<0.300
H18446-14 TT#7 12'	77.4	1,260	<0.050	<0.050	<0.050	1.02
H18446-15 TT#7 15'	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300
-	-					
Quality Control	440	512	0.049	0.047	0.048	0.141
True Value QC	500	500	0.050	0.050	0.050	0.150
% Recovery	88.0	102	. 98.0	94.0	96.0	94.0
Relative Percent Difference	2.9	0.6	13.3	13.5	7.7	14.8

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B. TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight. Not accredited for GRO/DRO.

Lab Director

H18446 TPHBTEX SESI

0/13/09

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or fort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with writton approval of Cardinal Laboratories.

RDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240		1 7,
(575) 393-2326 Fax (575) 393-2476	· ·	Pageof
Company Name: SESE	BILL TO	ANALYSIS REQUEST
Project Manager: Bab Allin	P.O. #:	
Address: 703 E Clinton	Company:	
City: 10005 State: AP Zip: 58240	Attn:	
Phone #: 575-3978-0510 Fax #:	Address: Same	
Project #: 170-09-009 Project Owner: 10	City:	
Project Name: XTOEMSU-BASS	State: Zip:	
	Phone #:	
Project Location: Monument, nm Sampler Name: ZSGAC Kincad	Fione #:	$- \mathcal{A} $
FOR VALUES ONLY	PRESERV. SAMPLING	
	O RE	
Lab I.D. Sample I.D. (G)RAB OR (C)O	OTHER: ACIDIBASE OTHER: DITHER:	
	5 5 2 5 DATE TIME	
177418 61	10/8/9 0810	
27702 9	0820	
3 77# 3 10	0823	
4 7773 141	0838	
5 7 73 18	0900	
	0826	26 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
7 7749 15	0833	<u>33 </u>
8 77 # 5 10	0920	
	0925	
10 7745 18	0930	

analyses. All claims including those for negligence and any other cause whateoever shall be deemed waved unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business infortuptions, loss of use, or loss of profits incurred by client, its subaidiaries, affliates or successors prising and of a related in the conformance of environ hereins and the prior stated reasons or otherwise.

Sampler Relinopished: Date:	CReceived By:	Phone Result:	0	No	'Add'l Phone #:		
	X 7	Fax Result:	0	/ No	Add'i Fax #:	· · · ·	
Time:		REMARKS:		· · ·		· ,	
le gener 13	SO I I I I I I I I I I I I I I I I I I I					1	•
Relinguished By: Date:	Received By:			•	· · · · · · · · · · · · · · · · · · ·	- ` ·	
Time:	1 HA THORA O		÷				
	Citre Mallac	- 11. 100	$\square \square$	1.020	r-nm-co		
Delivered By: (Circle One)	Temp. Sample Condition CHECKED BY:	IRINC91	$q \subset$	101		- · · ·	•
	(initials)	011-	2 0				
Sampler - UPS - Bus - Other:	US VIERS No No	OFFICE	2.00	25	I-AM.COM	· · · · ·	
			; •••••••••••			<u>, , , , , , , , , , , , , , , , , , , </u>	· . · · ·
† Cardinal cannot accept verbal changes. P	lease fax written changes to 575-393-2476.	· · · · · · · · · · · · · · · · · · ·	۰,		en 1.5.		

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

RDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476	<u> </u>	Pageof
Company Name: SESE	BILL TO	ANALYSIS REQUEST
Project Manager: Bab Allen	P.O. #:	
Address: 70 3 E Clinton	Company:	
City: 14065 State: NM Zip: 88240	Attn:	
Phone #: 575-397-0510 Fax #:	Address: Game	
Project #: X70-09-004 Project Owner: X70	City:	
Project Name: EMSU - 923	State: Zip:	
Project Location: MONUMP of MM	Phone #:	
Sampler Name: ISGAC InCArd	Fax #:	
FOR CABUSE ONLY	PRESERV. SAMPLING	
	DGE BASE COOL	
HH SATE	OTHER: OTHER: OTHER: DTHER: DTHER:	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10 x 10 x 19 CB35	
$1277^{#}612'$	0952	
13 77#7 91	1000	an a
14	1015	
15 77# 7 15"	1 1020	
PLEASE NOTE: Liability and Damages Cardinal's liability and client's exclusive ramedy for any claim attaing whether based in con		
analyses. All claims including those for nogligence and any other cause wheteover shall be deemed waived unless made in which service. In no event shall Cardinal be listle for incidental or consequental damages, including without limitation, business interruption	ms, tosa of use, or loss of profits incurred by client, its subsidi	laries,
attiliates or succession arising out of or related to the performance of saviers hereunder by Cardinal, regardless of whether such on the savier of saviers of the savier	aim is besed upon any of the above stated reasons or other Phone R	esult: 🔲 No Add'l Phone #:
1018(07) Time	Fax Res REMAR	
Relinquished By: Date: Received By:		
Time:	êne .	
Delivered By:: (Circle One) Temp. Sample Cor a.;. Cool- Inter	dition CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other: ↓ S C I Yes Ø No □	Yes Cicle	
t Cardinal cannot accentiverbal changes Please fay written changes		na na shi na shi ka

+ Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.