District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 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

RECEIVED
JUL 12 2010
HOBBSOCD

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

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	XTO Energy, Inc	Contact: Jeff Raines	
Address	200 N. Lorraine, Suite 800 Midland Texas 79701	Telephone No. 432.557.3159	
Facility Name	Eunice Monument South Unit B # 923	Facility Type: Historic Spill	

Surface Owner	Mineral Owner	Lease No. API 30-025-04304

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	24	20 S	36 E	660	FSL	1980	FWL	Lea

Latitude: 32° 33' 17.8"N **Longitude:** 103° 18' 20.8" W

NATURE OF RELEASE

Type of Release unknown	Volume of Release N/A	Volume Recovered: N/A
Source of Release -	Date and Hour of Occurrence N/A	Date and Hour of Discovery N/A
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? -	
By Whom? -	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.*

Abandoned 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 the NMOCD for approval.

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: Jeff Raines	OIL CONSERVATION DIVISION	
Printed Name: Jeff Raines	Approved by District Supervisor:	
Title: Construction Foreman	Approval Date:	Expiration Date:
E-mail Address: Jeff_Raines@xtoenergy.com	Conditions of Approval:	Attached ☐
Date: September 25, 2009 Phone: 432.557.3159		

* Attach Additional Sheets If Necessary

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

Work Plan

June 28, 2010

RECEIVED
JUL 12 2010
HOBBSOCD

Prepared for:

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

work plan approved for drilling of boreholes per extent & contamination vertically. will have meeting of ~~stakeholders~~ after vertical extent defined to discuss path forward.
Geoff Leking
Environmental Engineer
NMOCD - Hobbs
07/12/10

By:

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

2428

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 #	Year	Company
EMSU-B #923	1943-1976	Continental Oil
	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).

The results of the analysis are as follows:

Sample Point	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (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

Sample Point	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (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-Cl-B) sample was taken at a depth of 8 ft. bgs.

The result of the analysis is the following:

Sample ID	Cl^- (mg/kg)
Bottom 8' Composite	<16

On December 18, 2009, SESI was onsite with Gene Hudson, XTO representative, Dave Boyer, Hydro-geologist, 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 ½ ft bgs to determine if shallow groundwater was present as a source of the puddle. The excavations were 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, Hydro-geologist 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^- (mg/kg)	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (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

On May 7, 2010, at 9 in the morning David Boyer with Safety and Environmental Solutions, Inc. (SESI) was onsite with Geoffrey Leking, New Mexico Oil Conservation Division (NMOCD), David Paschal, XTO Energy, and Clay Tom Cooper, Land owner, to install three (3) test trenches in the north and southeast corners of the excavated area.

Test trench #1 was installed in the southeast corner to five (5) feet inside excavated area, two (2) samples were retrieved from soil pile and one (1) sample was retrieved from a clod of soil from excavation.

Test trench #2 was installed in the northeast corner at four feet eight inches (4'8") inside excavated area, one (1) sample was retrieved from soil pile.

Test trench #3 was installed sixty-five (65) feet west of test trench #2 to a depth of four feet eight inches (4'8") inside excavated area, one (1) sample was retrieved from soil pile.

Sample ID	Cl^- (mg/kg)	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
TT #1 Soil Pile bottom	16	<10.0	173	<0.050	<0.050	<0.050	<0.300
TT #1 Soil Clod	32	67.2	1,100	<0.050	0.559	0.075	0.460
TT #1 Soil Pile bottom	32	<10.0	254	<0.050	<0.050	0.166	1.20
TT #2 Soil Pile Bottom	<16	87.5	1,560	<0.050	<0.050	0.119	0.706
TT #3 Soil Pile Bottom	<16	64.3	463	<0.050	<0.050	<0.050	<0.300

Each of the three (3) test trenches were left opened until 3 pm when Bob Allen and David Boyer with Safety and Environmental Solutions, Inc., Rick Wilson with XTO Energy, Clay Tom Cooper, Land owner, and Geoffrey Leking, NMOCD to verify no standing water in the test trenches.

On June 25, 2010, Safety and Environmental Solutions, Inc. (SESI) was onsite at XTO Energy EMSU-B #923 to install a monitor well on the south side of the location area. This area was drilled to a depth of seventy-six (76) feet below grade surface; water was not

encountered at that depth. The monitor well was then plugged with thirty-eight (38) bags of bentonite.

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.

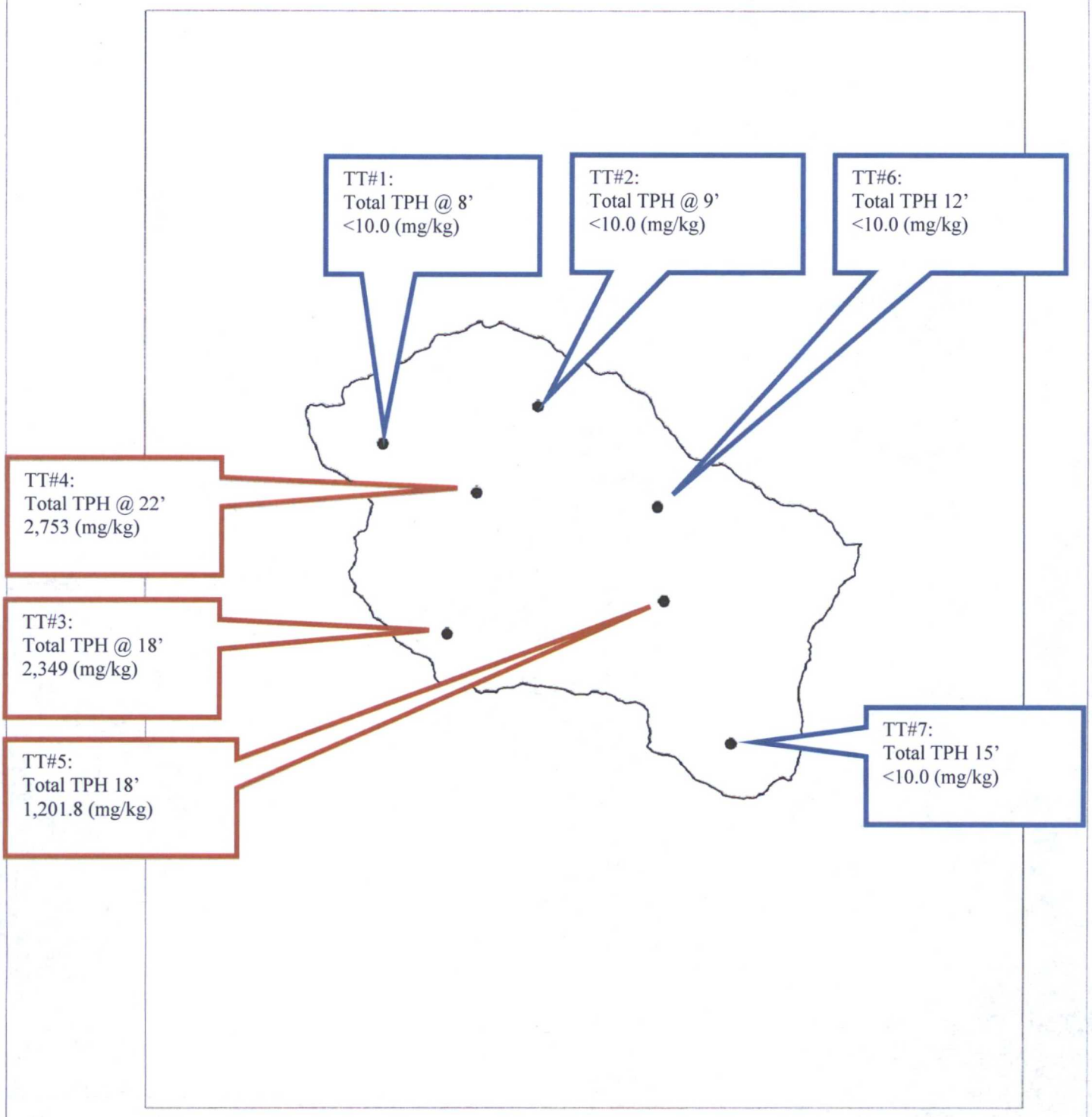
SESI proposes that a total of three (3) boreholes be installed. One (1) borehole each at Test Trench #3, #4, and #5 to determine the vertical extent of contamination in these areas. At a depth of twenty (20) feet below grade surface, samples will be retrieved every five (5) feet and transported to Cardinal Laboratories to be analyzed for Total Petroleum Hydrocarbons (TPH EPA Method 418.1) and Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX EPA Method 8260B).

Once vertical extent is determined, it is requested that the bottom of the excavation be ripped to a depth of two to three feet to allow the site to aerate. After aeration, the bottom of the excavation will be sampled to document any contaminants being left in place, then the sides of the excavation will be pushed in toward the middle and contoured.

VI. Figures & Appendices

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


Dynegy
EMSU #872
53' OSE
20' OSE
Windmill
50' OSE
35' OSE
35' OSE
35' OSE
Windmill
35' OSE
EMSU #923
Landfarm
170' OSE
Windmill
8
Image © 2009 DigitalGlobe
© 2009 Europa Technologies
© 2009 Google
2009 Google
7103 ft
Imagery Date: May 28, 2004
32°33'42.83" N 103°18'06.33" W elev 3539 ft
Eye alt 28186 ft



EMSU-B 923

Lat/Long
WGS 1984

N

Scale 1:1,000
0 0.020
Miles

site map.cor

GPS Pathfinder® Office
Trimble™

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

May 11, 2010

Bob Allen
Safety & Environmental Solutions, Inc.
703 East Clinton, #103
Hobbs, NM 88240

Re: EMSU B #923 (XTO-09-004)

Enclosed are the results of analyses for sample number H19857, received by the laboratory on 05/07/10 at 4:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	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: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 05/07/10
Reporting Date: 05/11/10
Project Owner: XTO (XTO-09-004)
Project Name: EMSU B #923
Project Location: MONUMENT, NM

Sampling Date: 05/07/10
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: JH
Analyzed By: AB/ZL/HM

LAB NO.	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE:		05/10/10	05/10/10	05/10/10	05/10/10	05/10/10	05/10/10	05/10/10
H19857-1	TT-1, SOIL PILE BOTTOM	<10.0	173	<0.050	<0.050	<0.050	<0.300	16
H19857-2	TT-1, SOIL CLOD	67.2	1,100	<0.050	<0.050	0.075	0.460	32
H19857-3	TT-2, SOIL PILE BOTTOM	87.5	1,560	<0.050	<0.050	0.119	0.706	< 16
H19857-4	TT-3, SOIL PILE BOTTOM	64.3	463	<0.050	<0.050	0.166	1.20	< 16
H19857-5	TT-1, SOIL PILE BOTTOM	<10.0	254	<0.050	<0.050	<0.050	<0.300	32
Quality Control		491	476	0.020	0.023	0.022	0.064	500
True Value QC		500	500	0.020	0.020	0.020	0.060	500
% Recovery		98.2	95.2	100	115	110	107	100
Relative Percent Difference		1.7	1.8	7.0	2.0	2.0	3.1	<0.1

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; Cl-: Std. Methods 4500-Cl-B
*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.
TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Not accredited for GRO/DRO and Chloride.

Lab Director

05/11/10
Date

H19857 TBCL SESI

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name: SESI	BILL TO PO #:
Project Manager: Bob Allen	Company: SAME
Address: 703 E. CLINTON, #103	Attn: Randi
City: HOBBS State: NM Zip: 88240	Address:
Phone #: (505) 397-0510	City:
Fax #: (505) 393-4388	State: Zip:
Project #: XTO-07004 Project Owner:	Phone #:
Project Name: EMSU B #923	Fax #:
Project Location: Monument	

FOR LAB USE ONLY LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRES.: ACID	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX	TPH (GRO + DRO)	Chlorides
H19857-1	TT-1, Soil/Pile bottom	G	1			X					X		5/7	0915	X	X	X
2	TT-1, Soil/Cod	G	1			X					X		"	0920	"	"	"
3	TT-2, Soil/Pile bottom	G	1			X					X		"	0925	"	"	"
4	TT-3, Soil/Pile bottom	G	1			X					X		"	0940	"	"	"
5	TT-1, Soil/Pile bottom	G	1			X					X		5/7	1520	X	X	X

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 the client for the 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 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.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 5/7	Received By:	Phone Result ☐ Yes ☒ No Additional Fax #:
	Time: 1650		Fax Result: ☐ Yes ☒ No
Relinquished By:	Date:	Received By: (Lab Staff)	REMARKS: email results to SESI lgbadger@SESI-NM.com office2@SESI-NM.com
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool: ☐ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

December 22, 2009

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

Re: EMSU # 923 (XTO-09-004)

Enclosed are the results of analyses for sample number H18912, received by the laboratory on 12/18/09 at 2:30 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	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: 5 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE:		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 Control		551	567
True Value QC		500	500
% Recovery		110	113
Relative Percent Difference		<0.1	2.8

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

Lab Director

12/22/09
Date

H18912T SESI

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

12/22/09
Date

H18912 BTEX SESI

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

LAB NO.	SAMPLE ID	Cl^- (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-Cl^-B

Note: Analysis performed on a 1:4 w:v aqueous extract.
Not accredited for Chloride.

Chemist

12/22/09
Date

H18912 SESI

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page_____ of _____

Company Name:	SESI
Project Manager:	Bob Allen
Address:	703 E Clinton
City:	Hobbs State: NM Zip: 88240
Phone #:	575-397-0510 Fax #:
Project #:	XTO-09-004 Project Owner: XTO
Project Name:	EMSU #923
Project Location:	Monument, NM
Sampler Name:	Isaac Kincaid

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

TPH 8015
BTEX
Cl- added as per Isaac 12/21/09

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
H18912-1	TT #4 6' BGS	G	1		✓						✓		12/18/09	0855
-2	TT #4 18' bgs	G	1		✓						✓			0900
-3	TT #4 20' bgs	G	1		✓						✓			0908
-4	TT #4 22' bgs	G	1		✓						✓		↓	0915

Sampler Relinquished:	Date: 12/18/09 Time: 1430	Received By:	
Relinquished By:	Date: Time:	Received By:	

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Temp. 6°C

Sample Condition: Cool ☒ Yes ☐ No; Intact ☒ Yes ☐ No

CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:

REMARKS:
Email results to office2@SESI-NM.com

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

therm #26

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

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

METHOD: Standard Methods	4500-Cl^-B

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

Chemist

Date 12/14/09

H18845 SESI

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page_____ of _____

Company Name:	SESI
Project Manager:	Bob Allen
Address:	703 E Clinton
City:	Hobbs State: NM Zip: 88240
Phone #:	575-397-0510 Fax #:
Project #:	XTO-09-004 Project Owner:
Project Name:	EMSU #923
Project Location:	Monument, NM
Sampler Name:	Isaac Kincaid

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

Chlorides ✓

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
H18845-1	Bottom 8' Composite	C	1			✓					✓		12/9/09	1330

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 the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental 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.

Sampler Relinquished:	Date: 12/9/09 Time: 1615	Received By: Misty LeBeau	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 22.5°C	Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) MCBB

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS: ikincaid@sesi-nm.com

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

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

LAB NO.	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (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
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.

Chuck S. Keene
Lab Director

10/13/09
Date

H18446 TPHBTEX SESI

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name:	SESI
Project Manager:	Bob Allen
Address:	703 E Clinton
City:	Hobbs State: NM Zip: 88240
Phone #:	575-397-0510 Fax #:
Project #:	XTO-09-004 Project Owner: XTO
Project Name:	XTO EMSU-B, S23
Project Location:	Monument, NM
Sampler Name:	Isaac Kincaid

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	Same
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	TPH 80.15	BTEX
H18446- 1	TT#1 5'	G	1			✓					✓		10/8/09	0810	✓	✓
2	TT#2 5'													0820		
3	TT#3 10'													0823		
4	TT#3 14'													0834		
5	TT#3 18'													0900		
6	TT#4 11'													0826		
7	TT#4 15'													0833		
8	TT#5 10'													0920		
9	TT#5 15'													0925		
10	TT#5 18'													0930		

Sampler Relinquished:	Date: 10/8/09 Time: 1550	Received By:	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 4.5 °C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) CK

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

ikincaid@sesi-nm.com
office2@sesi-nm.com

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

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name:	SESI
Project Manager:	Bob Allen
Address:	703 E Clinton
City:	Hobbs State: NM Zip: 88240
Phone #:	575-397-0510 Fax #:
Project #:	XTO-09-004 Project Owner: XTO
Project Name:	Emsu-923
Project Location:	Monument, NM
Sampler Name:	Isaac Encard

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	Same
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST: TPH 80.15; BTEX

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME
H18446-11	TT#6 10'	G	1			✓					✓		10/8/09	0935
12	TT#6 12'													0952
13	TT#7 9'													1000
14	TT#7 12'													1015
15	TT#7 15'													1020

Sampler Relinquished:	Date: 10/8/09	Received By:	
	Time: 1550		
Relinquished By:	Date:	Received By:	
	Time:		
Delivered By: (Circle One)	Temp.	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	4.5°C		CK

Phone Result:	☐	No	Add'l Phone #:
Fax Result:	☐	No	Add'l Fax #:
REMARKS:			

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

XTO EMSU-923 Site Photos 10-8-09

Excavated area

Test trench #1 8'

Test Trench #2 9'

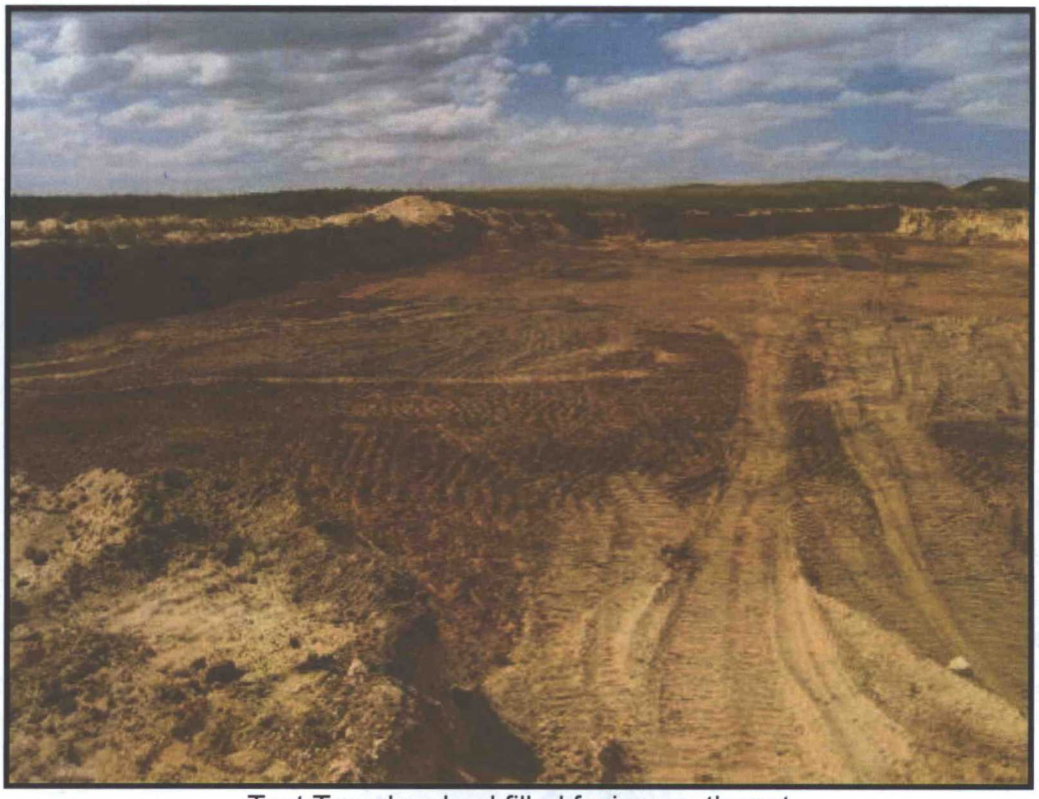
Test trench #3 10'

Test Trench #4 11'

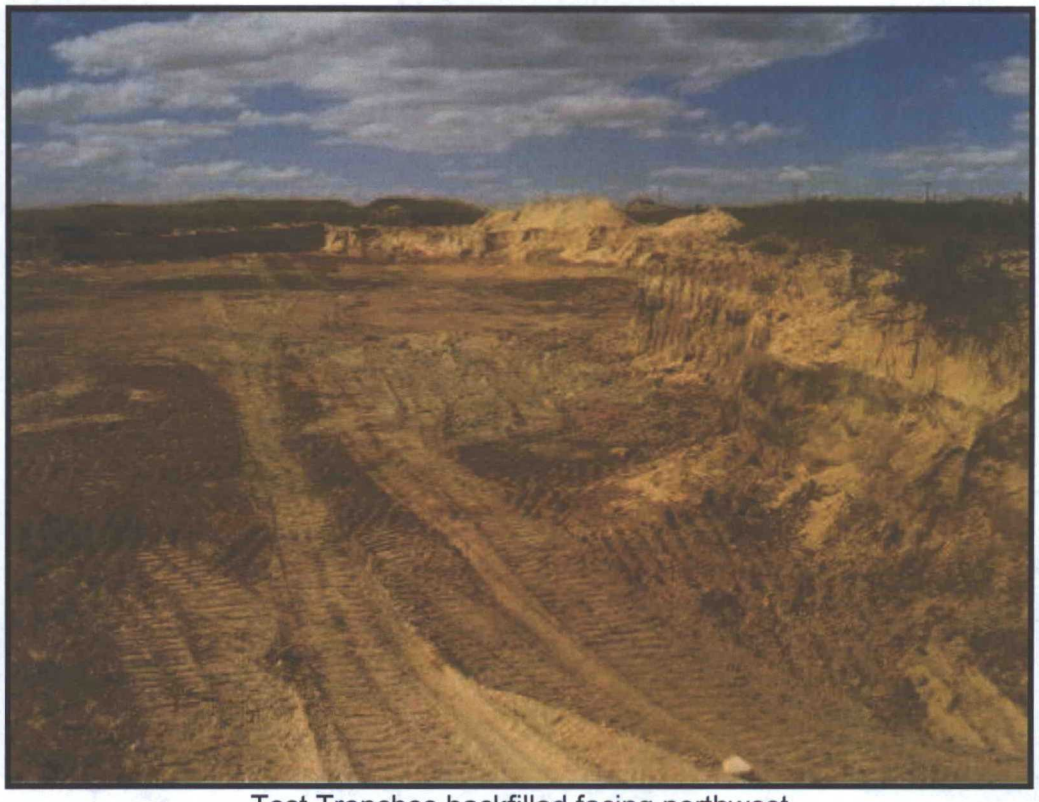
Test Trench #5 18'

Test Trench #6 12'

Test Trench #7' 15

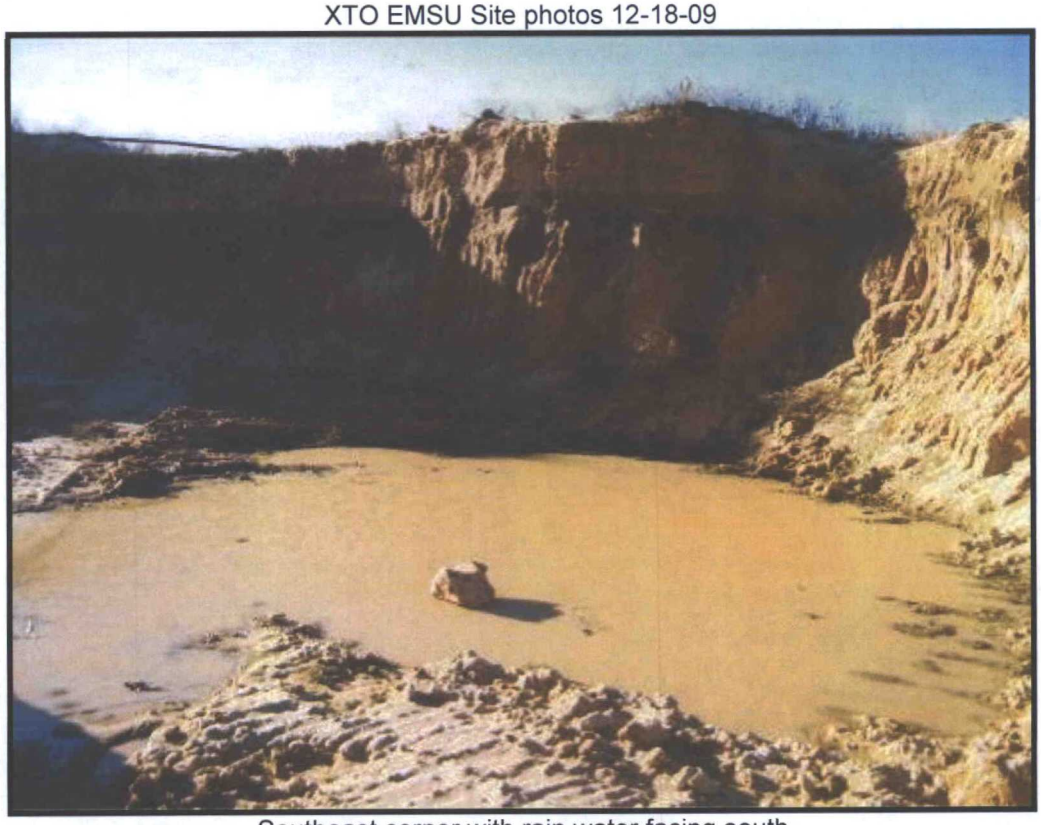


Test Trenches backfilled facing southwest



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 ½' dry facing north

Northeast corner north wall facing north

North wall facing north

Test Trench #4 @ 16'bgs facing west

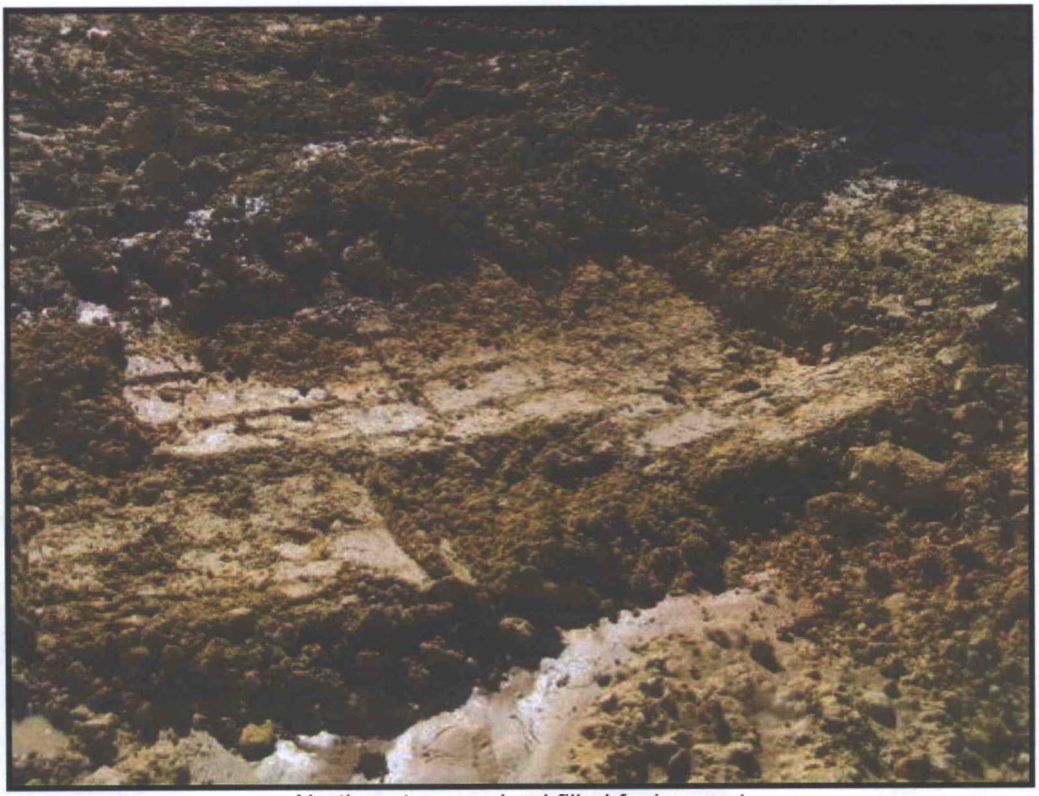
Test Trench #4 @ 18'bgs facing west

Test Trench #4 @ 20'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