

RECEIVED

By Kellie Jones at 8:39 am, Jan 07, 2016

APPROVED

By Kellie Jones at 8:40 am, Jan 07, 2016

**XTO Energy, Inc.
Bridges State 120 Battery
Closure Report
Lea County, New Mexico
December 22, 2015**



Prepared for:

**XTO Energy, Inc.
200 North Loraine Street, Suite 800
Midland, Texas 79701**

Prepared by:

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

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December 22, 2015

Lea County New Mexico

I. Company Contacts

NAME	Company	Telephone	E-mail
Gene Hudson	XTO Energy, Inc.	575-441-1634	Richard_Hudson@xtoenergy.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by XTO Energy, Inc. to perform cleanup services at the Bridges State 120 Battery. This is an active battery located in Section 14, T17S, R34E, Lea county New Mexico. The spill was caused by the overflow of a tank, due to corrosion. Approximately 124 barrels of produced fluid was released inside the bermed area and leached through the southeast corner of the berm, therefore staining the surface area of the lease road. Approximately 35 bbls were recovered. Mr. Geoff Leking, a representative for New Mexico Oil Conservation Division (NMOCD) was contacted and notified by telephone of the incident (Appendix C).

III. Groundwater

The nearest groundwater record is listed with the New Mexico State of Engineer is in Section 13 Range 34 East and Township 17 South, which is located 0.7 miles northeast of the site. The depth to groundwater was reported at 70 feet in October 1955.

IV. Characterization

On July 10, 2012 a Delineation Report and Work Plan was submitted to the NMOCD. The following is a recap of delineation efforts and the proposed remediation plan:

2' of impacted soils were removed from the interior of the bermed area and stockpiled northeast of the location for future removal. Test trenches were excavated before the commencing of delineation efforts in order to determine the vertical extent of the impact. Two test trenches were excavated and representative surface soil samples were retrieved. The backhoe encountered bucket refusal and was not able to penetrate past 6"- 8" bgs. in depth on test trenches #1 and #2. Representative soil samples were not retrieved due to the rock like nature of the soil. However, there was visible staining and odors that remained at this depth in these respective trenches.

On May 31, SESI was onsite with Atkins Engineering, whereby a soil bore was advanced to a depth of 20' bgs. Representative soil samples were retrieved at 5' bgs. intervals. All samples were properly preserved and transported under Chain of Custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA Method 4500-Cl-B) Total Petroleum Hydrocarbons (EPA Method 8015M), and BTEX (EPA Method 8021). The analytical results are as follows:

Sample ID	Cl- (mg/kg)	TPH (mg/kg)		Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
		DRO C ₆ -C ₁₀	GRO >C ₁₀ -C ₂₈				
Analysis Date:	06/04/12	06/04/12	06/04/12	06/04/12	06/04/12	06/04/12	06/04/12
BH-1 5' bgs	528	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150
BH-1 10' bgs	400	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150
BH-1 15' bgs	384	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150
BH-1 20' bgs	96.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150

V. Work Performed

Based on the above analytical results: SESI personnel returned to the site on July 18, 2012. A layer of fresh topsoil was placed in the excavation and lined. On July 20, 2012 SESI personnel revisited the site and supervised the backfilling of the lined area. The pad area was restored to grade, insuring the pad thickness to be 6"-7" in thickness.

VI. Conclusion

All impacted soils were removed to an NMOCD approved facility. This is an active tank battery and it is requested that the spill report be closed with no further action required. Based on the remediation activities of this site that were based on NMOCD guidelines, SESI on behalf of XTO Energy respectfully requests closure of the regulatory file as it relates to this incident.

Figures & Appendices

Figure 1 – Vicinity Map

Figure 2 – Site Plan

Appendix A –Analytical Results

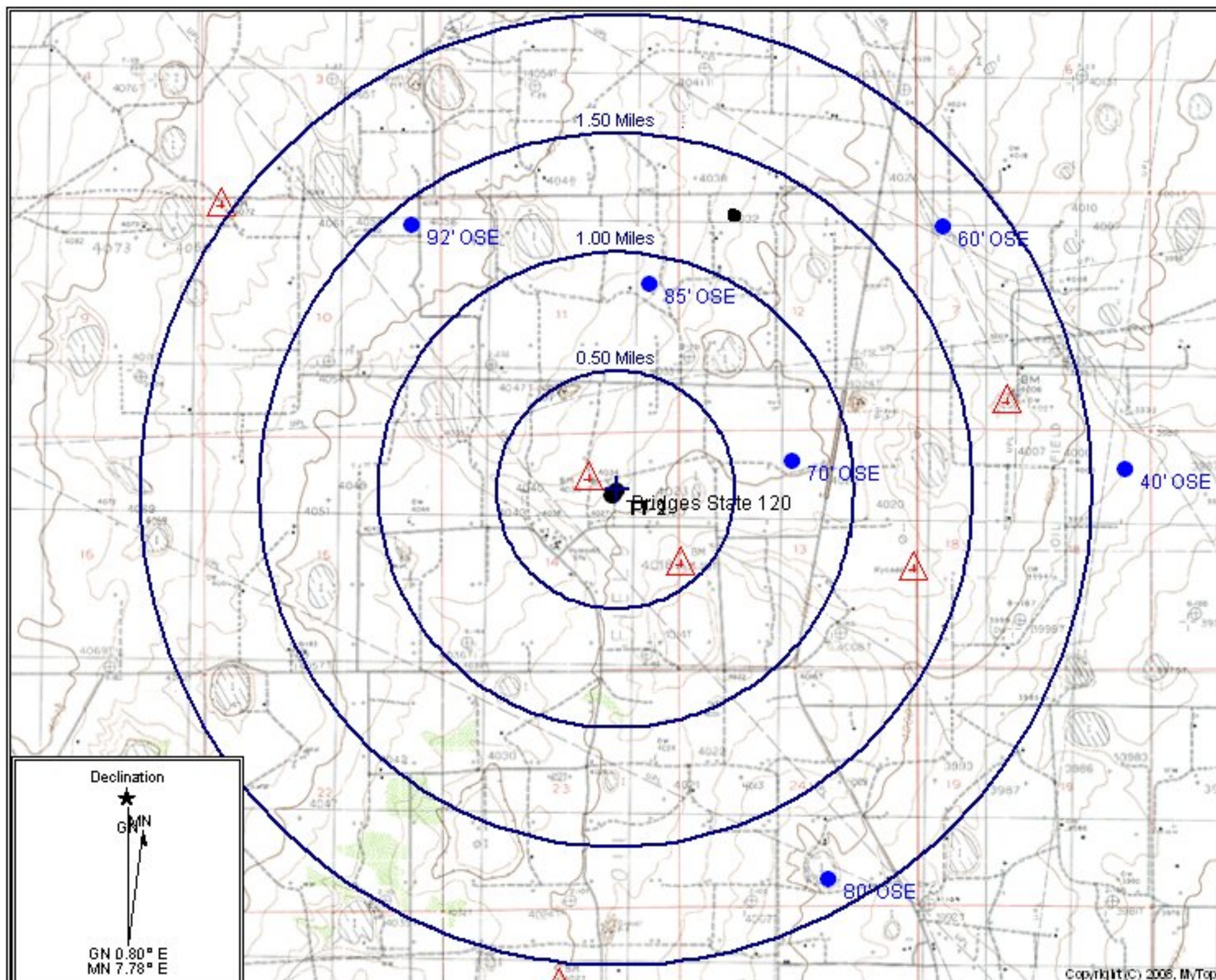
Appendix B – Site Photos

Appendix C – Logs of Boring

Appendix D – C-141

Figure 1

Site Map



Map Name: BUCKEYE,
Scale: 1 inch = 3,500 ft.

Map Center: 032.8384225° N 103.5272626° W
Map Type: Topographic

Point_genera #



Berm #1

Sample Point #3

Sample Point #4

© 2015 Google

Google earth

Appendix A

Analytical Results

June 07, 2012

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: XT0-12-001

Enclosed are the results of analyses for samples received by the laboratory on 06/04/12 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through 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 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 06/04/2012
Reported: 06/07/2012
Project Name: XT0-12-001
Project Number: BRIDGES STATE 120
Project Location: BUCKEYE, NM

Sampling Date: 05/31/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BH - 1 5' BGS (H201240-01)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2012	ND	2.24	112	2.00	5.15	
Toluene*	<0.050	0.050	06/04/2012	ND	2.05	102	2.00	5.34	
Ethylbenzene*	<0.050	0.050	06/04/2012	ND	1.95	97.5	2.00	4.62	
Total Xylenes*	<0.150	0.150	06/04/2012	ND	5.94	99.0	6.00	4.01	

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	06/04/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/04/2012	ND	183	91.3	200	1.58	
DRO >C10-C28	<10.0	10.0	06/04/2012	ND	187	93.7	200	3.90	

Surrogate: 1-Chlorooctane 86.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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 the 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.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

Received: 06/04/2012
 Reported: 06/07/2012
 Project Name: XT0-12-001
 Project Number: BRIDGES STATE 120
 Project Location: BUCKEYE, NM

Sampling Date: 05/31/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BH - 1 10' BGS (H201240-02)

BTEx 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2012	ND	2.24	112	2.00	5.15	
Toluene*	<0.050	0.050	06/04/2012	ND	2.05	102	2.00	5.34	
Ethylbenzene*	<0.050	0.050	06/04/2012	ND	1.95	97.5	2.00	4.62	
Total Xylenes*	<0.150	0.150	06/04/2012	ND	5.94	99.0	6.00	4.01	

Surrogate: 4-Bromofluorobenzene (PID) 100 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	06/04/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/04/2012	ND	183	91.3	200	1.58	
DRO >C10-C28	<10.0	10.0	06/04/2012	ND	187	93.7	200	3.90	

Surrogate: 1-Chlorooctane 79.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 90.2 % 63.6-154

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 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

 Received: 06/04/2012
 Reported: 06/07/2012
 Project Name: XT0-12-001
 Project Number: BRIDGES STATE 120
 Project Location: BUCKEYE, NM

 Sampling Date: 05/31/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BH - 1 15' BGS (H201240-03)

BTEx 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2012	ND	2.24	112	2.00	5.15	
Toluene*	<0.050	0.050	06/04/2012	ND	2.05	102	2.00	5.34	
Ethylbenzene*	<0.050	0.050	06/04/2012	ND	1.95	97.5	2.00	4.62	
Total Xylenes*	<0.150	0.150	06/04/2012	ND	5.94	99.0	6.00	4.01	

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	06/04/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/04/2012	ND	183	91.3	200	1.58	
DRO >C10-C28	<10.0	10.0	06/04/2012	ND	187	93.7	200	3.90	

Surrogate: 1-Chlorooctane 84.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.3 % 63.6-154

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Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received: 06/04/2012
Reported: 06/07/2012
Project Name: XT0-12-001
Project Number: BRIDGES STATE 120
Project Location: BUCKEYE, NM

Sampling Date: 05/31/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: BH - 1 20' BGS (H201240-04)

BTEx 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2012	ND	2.24	112	2.00	5.15	
Toluene*	<0.050	0.050	06/04/2012	ND	2.05	102	2.00	5.34	
Ethylbenzene*	<0.050	0.050	06/04/2012	ND	1.95	97.5	2.00	4.62	
Total Xylenes*	<0.150	0.150	06/04/2012	ND	5.94	99.0	6.00	4.01	

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	06/04/2012	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/04/2012	ND	183	91.3	200	1.58	
DRO >C10-C28	<10.0	10.0	06/04/2012	ND	187	93.7	200	3.90	

Surrogate: 1-Chlorooctane 84.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.1 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

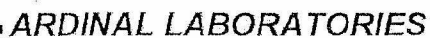
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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page. of

[illegible]

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

Appendix B

Site Photos

Site Photographs April 18, 2012



Spill Area



Spill area facing southwest



Spill area facing west



West end of spill area



Staining on lease road facing south



Staining on road facing southeast



Test trench-1: Surface



Test trench-1: 6-8 inches



Test trench-2: Surface



Test trench-2: 6-8 inches



Lined excavation



Liner Installation

Appendix C

Boring Logs



Log of Boring: Test Hole 1

SAFETY ENVIRONMENTAL
P.O. Box 1613
Hobbs, NM 88241-1613

Contact: Sergio Contreras

Job: SESIBRI_DRL_12

Drilling Date : 05/31/2012
Site Location : Bridges State #120 (SW of Lovington, NM)
Boring Location : 32.838439, 103.527497
Auger Type : 3¼ Hollow Stem
Logged By : Kenny Bates

Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION	TH-1
0				Caliche, hard, dry, tannish-white	
5					
10				Caliche w/ clay, firm, dry, white-tan	
15					
20				Total Depth 20'	



Bentonite Seal

Appendix D

C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

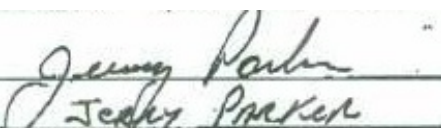
Name of Company: XTO Energy	Contact: Jerry Parker	
Address:	Telephone No. 575-396-0541	
Facility Name: Bridge State 120 Battery	Facility Type: Tank Battery	
Surface Owner State	Mineral Owner Federal	Lease No. B-1521-1

LOCATION OF RELEASE

Unit Letter G	Section: 14	Township: 17S	Range 34E	Feet from the 195	North/South Line North	Feet from the 2080	East/West Line East	County: Lea
------------------	----------------	------------------	--------------	----------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32 deg 10' 49.931"N **Longitude** 103 deg 44' 4.25" W

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 61 bbls	Volume Recovered 35bbls
Source of Release 500 Gallon Steel Tank	Date and Hour of Occurrence 9:30 AM	Date and Hour of Discovery 9:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeff Leking NMOCD	
By Whom? Larry Meinich	Date and Hour: 9:45 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* 500 Gallon steel tank had internal corrosion.		
Describe Area Affected and Cleanup Action Taken.* Caliche pad and road. Backhoe was used to pick up and dispose of contaminated soil. SESI was contacted to remediation the site according to NMOCD guidelines.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: <u>Jerry Parker</u>	Approved by Environmental Specialist:	
Title: <u>Production Foreman</u>	Approval Date:	Expiration Date:
E-mail Address: Jerry_Parker@XTOEnergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12/22/15 Phone: 575-748-1844		

* Attach Additional Sheets If Necessary