

# Corral Canyon Federal #003H

## WORK PLAN

API No. 30-015-42922

Release Date: September 4, 2016

Unit Letter O, Section 5, Township 25 South, Range 39 East

NMOCD Case #: Not Assigned

## September 22, 2016

#### Prepared by:

Laura Flores Environmental Department Diversified Field Service, Inc. 206 W. Snyder Hobbs, NM 88240 Phone: (575)964-8394 Fax: (575)393-8396

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FIGURE

- 1 Site Map
- 2 Proposed Excavation

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- Appendix I Initial C-141
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- Appendix IV Groundwater Study

Heather Patterson Environmental Protection Specialist New Mexico Oil Conservation District 811 S First St Artesia, NM 88210

#### RE: XTO – Corral Canyon Federal #003H – Remediation Work Plan UL/O, Section 5, T25S, R39E API No. 30-015-42922 NMOCD Score: 20

Ms. Patterson,

XTO Energy (XTO) has retained Diversified Environmental (DFSI) to address environmental issues for the site detailed herein.

The site is located southeast of Malaga, NM, in Eddy County. The spill site resulted from a burst polyline, washed into lease road due to heavy rains, and subsequently ran over by lease road traffic. A total of approximately 11.11 barrels of produced water and 16.16 barrels of oil was released with ten barrels of produced water and 15 barrels of oil recovered. An initial C-141 was submitted to NMOCD on September 6, 2016 (Appendix I).

#### Site Assessment

On September 9, 2016 DFSI personnel were on site to obtain samples within the leak area (Figure 1). Four samples were obtained and field sampled for chloride levels, as well as BTEX (Appendix II). The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Due to encountering hard rock, additional samples were unable to be obtained at SP1. Clean field samples were submitted for laboratory analysis at Cardinal Laboratory of Hobbs, NM to obtain confirmation (Appendix III).

DFSI has conducted a groundwater study of the area and has determined, according to the New Mexico Office of the State Engineer, the average depth to groundwater beneath the site is approximately 40 ft bgs (Appendix IV).

#### Conclusion

After careful review DFSI, on behalf of XTO, would like to propose the following:

SP1 will be further delineated until NMOCD and BLM guidelines are met. A clean confirmation sample will be submitted for laboratory analysis.

The area around SP1 will be excavated to a depth of 4' bgs. At the base of the excavation, a 20-mil, reinforced poly liner will be installed and properly seated. The areas around SP2, SP3, and SP4 will be scraped 6" bgs. The excavation and scraped areas will be backfill with clean, imported soil to ground surface and contoured to the surrounding area. The overspray area will be treated with microblaze. The site will be seeded with a blend of native vegetation.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact Mike Burton at 575-390-5454 or me with any questions concerning this remediation plan request.

Sincerely,

Laura Hores

Laura Flores Environmental Report Writer | Diversified Field Services, Inc. 206 West Snyder | Hobbs, NM 88240 Office: (575)964-8394 | Fax: (575)964-8396 | Email: Iflores@diversifiedfsi.com

- Cc: Mike Bratcher, NMOCD Shelly Tucker, BLM
- Figures: Site Diagram Proposed Work
- Appendices: Initial C-141 Site Photos Laboratory Analysis Groundwater Study

### Site Map

A DEALER PROPERTY.	-	SP1	100		and the	100		c	P2		100		1
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Overspray (2939 sq ft)				USDA,	USGS, /	AEX, G	etmappin						
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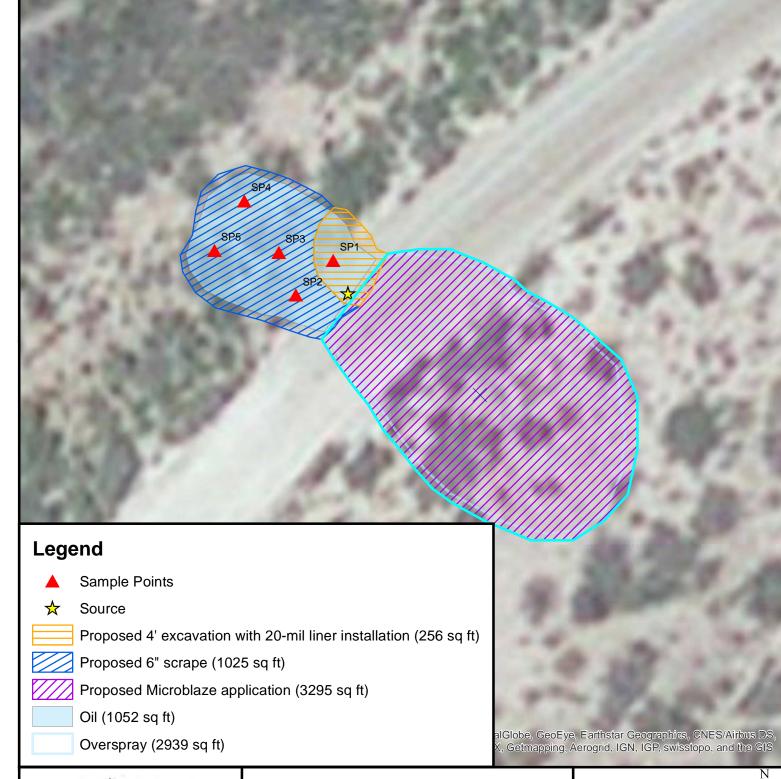
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Feet

### **Proposed Work**





хто **Corral Canyon Federal #003H** Unit Letter O, Section 5, T25S, R39E Eddy County, NM API #: 30-015-42922

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Date	e:		09	/15/20	16	5	
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					-		Feet

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# Appendix I

INITIAL C-141

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

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa F	Fe, NM 87505									
Release Notificatio	on and Corrective Actio	n								
	OPERATOR	Initial Report - Final Report								
Name of Company XTO Energy, Inc.	Contact John Robinson									
Address 500 W Illinois, Midland, TX 79701	Telephone No. 575-441-5199									
Facility Name Corral Canyon #3 H	Facility Type Well									
Surface Owner BLM Mineral Owner	BLM	API No.30-015-42922								
LOCATIC	ON OF RELEASE									
		st/West Line County								
O 5 25 S 29 E 170 S	South 2210	East Eddy								
	Longitude									
Latitude		-								
	E OF RELEASE Volume of Release 16.16 barre	Is Volume Recovered 15 barrels oil and 10								
Type of Release Oil and Produced Water	oil and 11.11 barrels produced	barrels produced water.								
	water.									
Source of Release Flow line	Date and Hour of Occurrence	Date and Hour of Discovery								
Source of Release 1 low faile	9-4-16 2:30 pm	9-4-16 2:30 pm								
Was Immediate Notice Given? X Yes 🗌 No 🗌 Not Required	If YES, To Whom? Shelly Tucker With BLM Let	ft voice mail								
By Whom? John Robinson	Date and Hour 7:03 pm									
Was a Watercourse Reached?	If YES, Volume Impacting the V	Vatercourse.								
Yes X No										
Describe Cause of Problem and Remedial Action Taken.*Flow line wa caused a leak. Pumper had all standing fluid cleaned up and hauled to	is washed into road from recent rains corral canyon battery.	and a oil or water hauler ran over flexpipe and								
Describe Area Affected and Cleanup Action Taken.*Affected area was samples. When we get samples back from lab I will get with BLM and	s the road and pasture. Will have env d clean up accordingly.	ironmental company map area and take								
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 an regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endange 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 liabili should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human he 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.										
$\rho \downarrow \rho \bar{\rho}$	OIL CONSERVATION DIVISION									
Signature: John Holin	Approved by Environmental Specialist:									
Printed Name: John Robinson										
Title: Maintenance Foreman	Approval Date:	Expiration Date:								
E-mail Address: john_robinson@xtoenergy.com	Conditions of Approval:	Attached								
Date: 9-6-16 Phone: 575-441-5199										

\* Attach Additional Sheets If Necessary

# Appendix II

SITE PHOTOS

## CORRAL CANYON FEDERAL #003H

### PHOTO PAGE



Site prior

09/07/2016



Site prior

09/07/2016



Site prior

09/07/2016



Site prior

09/07/2016



Site prior

09/07/2016



Site prior

09/07/2016



Site prior

09/07/2016



Site prior

09/07/2016

# Appendix III

LABORATORY ANALYSIS



September 16, 2016

MIKE BURTON

DIVERSIFIED FIELD SERVICES, INC.

P. O. BOX 5966

HOBBS, NM 88241

RE: CORRAL CANYON #3

Enclosed are the results of analyses for samples received by the laboratory on 09/15/16 10:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC. MIKE BURTON P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/15/2016	Sampling Date:	09/12/2016
Reported:	09/16/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON #3	Sampling Condition:	Cool & Intact
Project Number:	20629	Sample Received By:	Jodi Henson
Project Location:	ХТО		

#### Sample ID: SP 2 @ 1' (H602071-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/15/2016	ND	2.01	101	2.00	0.0950	
Toluene*	0.062	0.050	09/15/2016	ND	2.04	102	2.00	0.0251	
Ethylbenzene*	0.074	0.050	09/15/2016	ND	1.95	97.3	2.00	0.114	
Total Xylenes*	0.283	0.150	09/15/2016	ND	5.85	97.6	6.00	0.135	
Total BTEX	0.419	0.300	09/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/15/2016	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/16/2016	ND	182	91.0	200	5.31	
DRO >C10-C28	80.4	10.0	09/16/2016	ND	192	95.8	200	7.89	
Surrogate: 1-Chlorooctane	84.8	% 35-147	7						

#### Cardinal Laboratories

\*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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DIVERSIFIED FIELD SERVICES, INC. MIKE BURTON P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/15/2016	Sampling Date:	09/12/2016
Reported:	09/16/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON #3	Sampling Condition:	Cool & Intact
Project Number:	20629	Sample Received By:	Jodi Henson
Project Location:	ХТО		

#### Sample ID: SP 3 @ 1' (H602071-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/15/2016	ND	2.01	101	2.00	0.0950	
Toluene*	<0.050	0.050	09/15/2016	ND	2.04	102	2.00	0.0251	
Ethylbenzene*	<0.050	0.050	09/15/2016	ND	1.95	97.3	2.00	0.114	
Total Xylenes*	<0.150	0.150	09/15/2016	ND	5.85	97.6	6.00	0.135	
Total BTEX	<0.300	0.300	09/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/15/2016	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/16/2016	ND	182	91.0	200	5.31	
DRO >C10-C28	12.5	10.0	09/16/2016	ND	192	95.8	200	7.89	
Surrogate: 1-Chlorooctane	94.2	% 35-147	7						
Surrogate: 1-Chlorooctadecane	96.9	% 28-171							

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC. MIKE BURTON P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/15/2016	Sampling Date:	09/12/2016
Reported:	09/16/2016	Sampling Type:	Soil
Project Name:	CORRAL CANYON #3	Sampling Condition:	Cool & Intact
Project Number:	20629	Sample Received By:	Jodi Henson
Project Location:	ХТО		

#### Sample ID: SP 4 @ 1' (H602071-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/15/2016	ND	2.01	101	2.00	0.0950	
Toluene*	<0.050	0.050	09/15/2016	ND	2.04	102	2.00	0.0251	
Ethylbenzene*	0.053	0.050	09/15/2016	ND	1.95	97.3	2.00	0.114	
Total Xylenes*	0.163	0.150	09/15/2016	ND	5.85	97.6	6.00	0.135	
Total BTEX	<0.300	0.300	09/15/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/15/2016	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/16/2016	ND	182	91.0	200	5.31	
DRO >C10-C28	<10.0	10.0	09/16/2016	ND	192	95.8	200	7.89	
Surrogate: 1-Chlorooctane	89.2	% 35-147	,						
Surrogate: 1-Chlorooctadecane	95.2	% 28-171							

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\*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

- 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

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



1 post

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	(575) 393-2326 FAX (575) 393-			-	-	-		BILL TO						ANALYSIS REQUEST						_
Company Name:							F	P.O. #: 70679												
roject Manager	: John Robertson						_	_			iversit	ed				11				
ddress:	State:	Zip						Attn:	N	R	noton									
ity:	Fax #:	Lip							ress											
hone #:	Project Ov	unor.						City:												
roject #:	Project of	vilei.			_			State			Zip:									
roject Name:	C . C . C	2					-		ne #											
roject Location	: Corral Canyon &	£)	_	-	_	_	-	Fax												
FOR LAB USE ONLY	ATTEN KANON	X			M	ATRI	_	-	RES	ERV.	SAMPL	NG	1							
Lab I.D. 1607071 2 3	Sample I.D.	COMP (G)RAB OR (C)OMP		GROUNDWATER	WASTEWATER	OIL OIL	SLUDGE	OTHER :	ACID/BASE:	OTHER:	DATE 9-12-16 9-12-16	TIME 9:05	TO XXX	HOL XXX	< × × B TEX					
	and Damages. Cardina's liability and clerit's exclusive rei ding those for negligence and any other cause whatsoever	4				X	contract		shall (	De limite	9-12-16	U:36	for the							

atiliates or successors ansing out of or related to the performa Relinquished By: Relinquished By: Relinquished By:	Pate:     Pate:	Phone Result: Yes No Add'l Phone #: Fax Result: Yes No Add'l Fax #: REMARKS: Limail to: I Florese diversifiedEsi.con Malves Mourton
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	1,42 Sample Condition Cool Intact Pres Pres No No	IN PATELSON

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

# Appendix IV

**GROUNDWATER STUDY** 



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced O=orphaned, C=the file is closed)	(quar					IE 3=SW largest)	,	3 UTM in meters)		(In feet	)
POD Number	POD Sub- Code basin (	County	Q Q 64 16		Sec	Tws	Rng	x	Y	-	-	Water Column
	C	ED				25S	-	592161	3558605*	85	40	45
<u>C 01880</u>	C	ED	33	Ζ	00	255	29E	592101	300000	60	40	40
<u>C 02518</u>	С	ED	3	4	80	25S	29E	593895	3556300* 🌍	462		
									Average Depth to	<b>40</b> fe	eet	
									Minimum	<b>40</b> fe	eet	
									Maximum	<b>40</b> fe	eet	
Record Count: 2												

PLSS Search:

Section(s): 4, 5, 6, 7, 8, 9

Township: 25S

Range: 29E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.