



# Hudson 1 Federal Well #007

## CLOSURE REQUEST

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API No. 30-015-31513

Release Date: October 6, 2016

Unit Letter F, Section 1, Township 23 South, Range 30 East

NMOCD Case #: 2R-3955

December 13, 2017

**Prepared by:**

Michael Alves

Diversified Field Service, Inc.

206 W. Snyder

Hobbs, NM 88240

Phone: (575)964-8394

Fax: (575)393-8396

XTO ENERGY

12/13/2017

RE: **XTO – Hudson 1 Federal Well #007**  
**Closure Request**  
UL/F, Section 1, T23S, R30E  
API No. 30-015-31513  
NMOCD Case #: 2R-3955  
NMOCD Score: 0

Mrs. Ruth,

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

The site is located northwest of Loving, NM, in Eddy County. The spill site resulted from a ruptured poly line, releasing a total of approximately 2 barrels of oil and 8 barrels of produced water, with 2 barrels of produced water and no oil recovered. An initial C-141 was submitted to NMOCD on October 21, 2016 and approved on October 24, 2016 (Appendix I).

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 this site is approximately 105 ft (Appendix II).

### Site Assessment

June 16, 2017 DFSI personnel were on site to obtain samples at regular intervals within the release area (Figure 1). Three samples were obtained and field tested for chloride levels, as well as BTEX. The samples were screened using a Mini Rae Photoionization Detector (PID). Clean field samples were submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM to obtain confirmation (Appendix III).

Beginning September 29, 2017, the release area was excavated to a depth of 4' bgs (Appendix IV) with excavated soil being properly disposed of at an approved NMOCD facility. Eight side wall samples were obtained and taken to Cardinal Laboratories to confirm all contaminants within the release area were removed (Figure 2/Appendix III). At the base of the excavation, a 20-mil, reinforced poly liner was installed and properly seated. Excavation was backfilled with clean, imported top soil to ground surface and contoured to the surrounding area. Due to season and limitation of growth, seeding will commence during the first few weeks of spring.

XTO ENERGY

12/13/2017

## Conclusion

Due to the completion of approved corrective remediation work, DFSI, on behalf of XTO Energy, submits the final C-141 (Appendix V) and respectfully requests the closure of the regulatory file for this site.

Please feel free to contact us with any questions concerning this remediation request.

Sincerely,



Michael Alves  
Environmental Supervisor | Diversified Field Service, Inc.  
206 West Snyder | Hobbs, NM 88240  
Office: (575)964-8394 | Mobile: (575)631-3364  
Fax: (575)964-8396 | Email: malves@diversifiedfsi.com

Cc: Shelly Tucker, BLM: Mike Bratcher, NMOCD

Figures: Site Diagram  
Site Sidewall Diagram

Appendix I	Initial C-141
Appendix II	Groundwater Study
Appendix III	Laboratory Analysis
Appendix IV	Site Photos
Appendix V	Final C-141

## Site Diagram

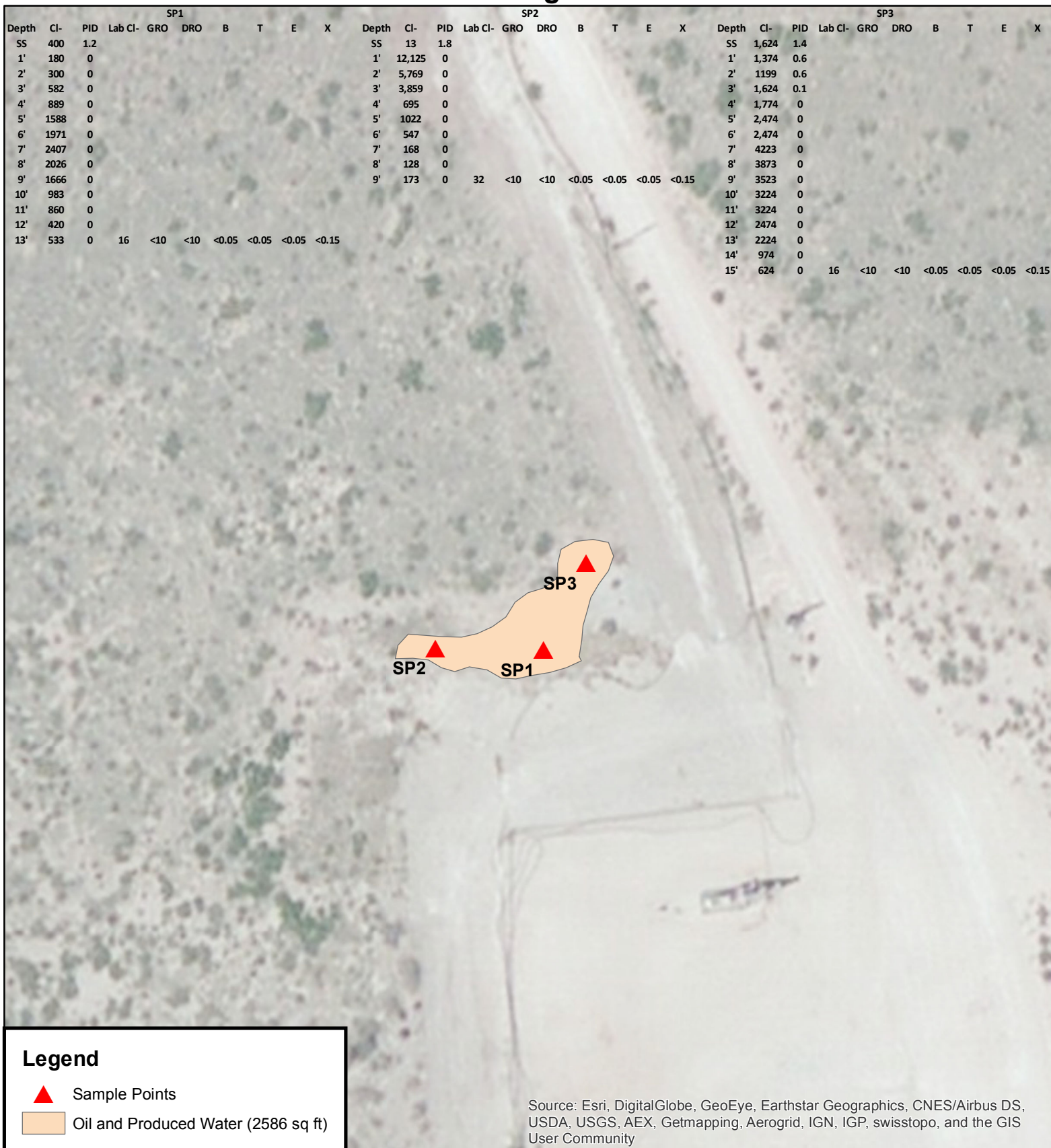
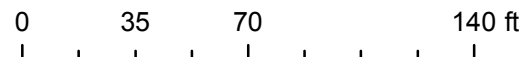


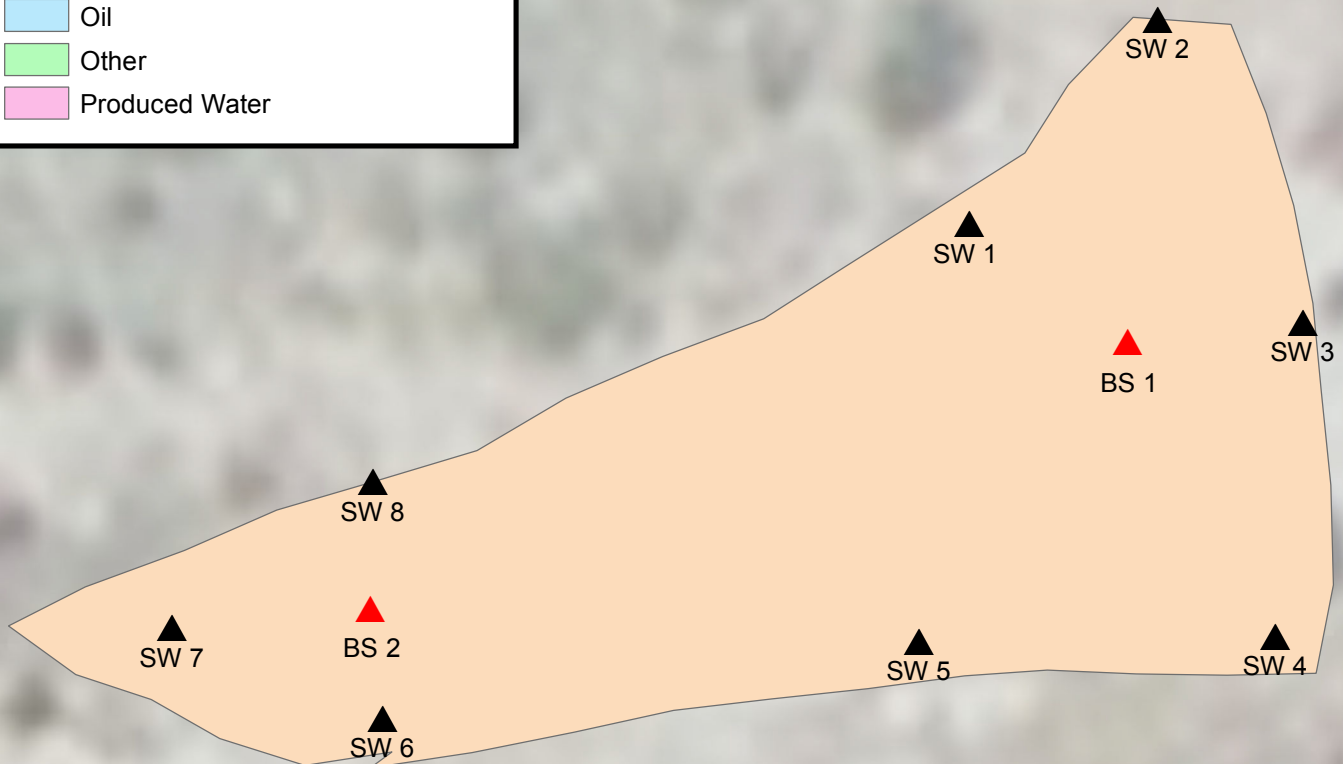
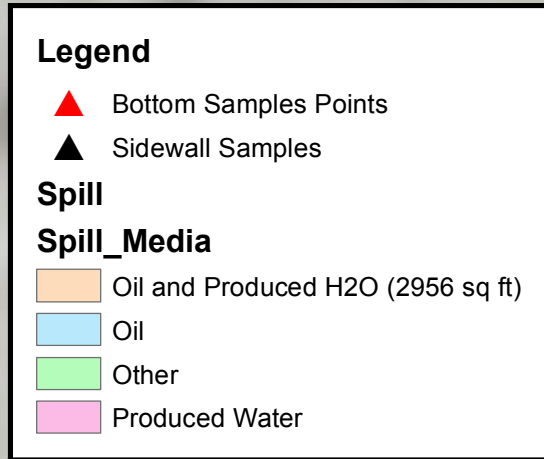
Figure 1



**Hudson 1 Federal #007**  
**Unit Letter F, Section 1, T23S, R30E**  
**Eddy County, NM**  
**API #: 30-015-31513**  
**NMOCD Case #: 2R-3955**



## Site Diagram



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**Hudson Federal 007**  
**Unit Letter F , Section 1 , T23S, R30E**  
**Eddy County, NM**  
**API #: 30-015-31513**  
**NMOCD Case #: 2R-3955**



Mapped: 10/31/2017 A.V  
Drafted by: A. Vargas

0 5 10 20 Feet

A horizontal scale bar with markings at 0, 5, 10, and 20 feet.

# Appendix I

INITIAL C-141

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394



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

## NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141  
Revised August 8, 2011

OCT 21 2016

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

RECEIVED

## Release Notification and Corrective Action

NAB1629852113

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BOPCO, L.P.	260737	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220		Telephone No. 575-887-7329
Facility Name: Hudson 1 Federal well #7		Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-31513
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## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	1	23S	30E	1500	North	1800	West	Eddy

Latitude 32.337062° Longitude -103.837058°

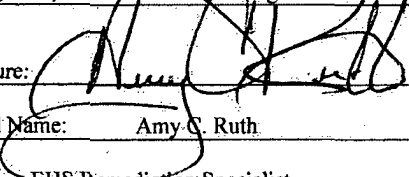
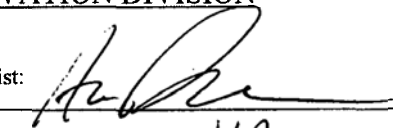
## NATURE OF RELEASE

Type of Release	Crude Oil and Produced Water	Volume of Release	2 bbls Oil 8 bbls PW	Volume Recovered	2 bbls PW
Source of Release	Poly flow line	Date and Hour of Occurrence	10/6/2016 time unknown	Date and Hour of Discovery	10/6/2016 approx. 10 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	N/A		
By Whom?	N/A	Date and Hour	N/A		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		
If a Watercourse was Impacted, Describe Fully.*	N/A				

Describe Cause of Problem and Remedial Action Taken.\*  
Poly flow line from well ruptured in area of pasture. Pumping unit was shut down and valves were closed for repairs.

Describe Area Affected and Cleanup Action Taken.\*  
The leak affected approximately 8,170 square feet of pasture (most of area misted) located north of the well. Free standing fluids were recovered.

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: Amy C. Ruth	Approved by Environmental Specialist: 	
Title: EHS Remediation Specialist	Approval Date: 10/24/16	Expiration Date: N/A
E-mail Address: ACRuth@basspet.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 11/26/16	
Date: 10/21/2016 Phone: 432-661-0571	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

2RP-3955

# Appendix II

## GROUNDWATER STUDY

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394





(In feet)

Average Depth to Water: **0 feet**

Minimum Depth: **0 feet**

Maximum Depth: **0 feet**

**\*UTM location was derived from PLSS - see Help**

WATER COLUMN/ AVERAGE DEPTH TO  
WATER



# 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)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
<a href="#">C 02492</a>			ED	4	4	4	06	23S	31E	612056	3577320*	135	85	50
<a href="#">C 02492 POD2</a>		C	ED	3	2	2	07	23S	31E	611767	3576996	400	125	275
<a href="#">C 02865</a>			ED	4	4	4	06	23S	31E	612056	3577320*	174		
<a href="#">C 03520 POD1</a>		C	ED	3	1	1	07	23S	31E	610733	3576905	500		

Average Depth to Water: **105 feet**

Minimum Depth: **85 feet**

Maximum Depth: **125 feet**

**Record Count:** 4

### PLSS Search:

**Section(s):** 6, 7

**Township:** 23S

**Range:** 31E

\*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.

11/9/17 4:26 PM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER









(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q				Tws	Rng	X	Y	DepthWell	DepthWater	Water Column	
		64		16	4	Sec									
<a href="#">C_02638</a>			ED	4	3	3	35	22S	30E	607558	3578948*		528		
<a href="#">C_03561</a> <a href="#">POD1</a>		CUB	ED	3	2	3	36	22S	30E	609288	3579393		30	0	30
<a href="#">C_03561</a> <a href="#">POD2</a>		CUB	ED	3	2	3	36	22S	30E	609314	3579424		25	0	25
<a href="#">C_03561</a> <a href="#">POD3</a>		CUB	ED	3	2	3	36	22S	30E	609393	3579425		25	0	25
<a href="#">C_03561</a> <a href="#">POD4</a>		CUB	ED	3	2	3	36	22S	30E	609419	3579425		25	0	25
<a href="#">C_03561</a> <a href="#">POD5</a>		CUB	ED	3	2	3	36	22S	30E	609419	3579425		20	0	20

Average Depth to Water: 0 feet

Minimum Depth: 0 feet

Maximum Depth: 0 feet

**Record Count: 6**

**PLSS Search:**

**Section(s):** 35, 36

**Township:** 22S

**Range:** 30E

**\*UTM location was derived from PLSS - see Help**

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11/9/17 4:26 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**PLSS Search:**

**Section(s):** 31

**Township:** 22S

**Range:** 31E

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.

11/9/17 4:27 PM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

# Appendix III

## LABORATORY ANALYSIS

---

Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394



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

---

June 20, 2017

MICHAEL ALVES

DIVERSIFIED FIELD SERVICES, INC.

P. O. BOX 5966

HOBBS, NM 88241

RE: HUDSON 7

Enclosed are the results of analyses for samples received by the laboratory on 06/19/17 8:25.

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	06/19/2017	Sampling Date:	06/16/2017
Reported:	06/20/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

**Sample ID: SP1 @ 13' (H701574-01)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/19/2017	ND	1.98	99.2	2.00	0.678	
Toluene*	<0.050	0.050	06/19/2017	ND	1.88	93.9	2.00	2.14	
Ethylbenzene*	<0.050	0.050	06/19/2017	ND	1.98	98.8	2.00	0.672	
Total Xylenes*	<0.150	0.150	06/19/2017	ND	5.31	88.4	6.00	0.551	
Total BTX	<0.300	0.300	06/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/19/2017	ND	432	108	400	3.64		

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	06/19/2017	ND	187	93.7	200	3.52	
DRO >C10-C28	<10.0	10.0	06/19/2017	ND	192	96.2	200	3.54	

Surrogate: 1-Chlorooctane 87.3 % 28.3-164

Surrogate: 1-Chlorooctadecane 70.7 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 06/19/2017  
 Reported: 06/20/2017  
 Project Name: HUDSON 7  
 Project Number: NONE GIVEN  
 Project Location: EDDY CO NM

Sampling Date: 06/16/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP2 @ 9' (H701574-02)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/19/2017	ND	1.98	99.2	2.00	0.678		
Toluene*	<0.050	0.050	06/19/2017	ND	1.88	93.9	2.00	2.14		
Ethylbenzene*	<0.050	0.050	06/19/2017	ND	1.98	98.8	2.00	0.672		
Total Xylenes*	<0.150	0.150	06/19/2017	ND	5.31	88.4	6.00	0.551		
Total BTEx	<0.300	0.300	06/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/19/2017	ND	432	108	400	3.64	

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	06/19/2017	ND	187	93.7	200	3.52	
DRO >C10-C28	<10.0	10.0	06/19/2017	ND	192	96.2	200	3.54	

Surrogate: 1-Chlorooctane 78.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 66.2 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 06/19/2017  
 Reported: 06/20/2017  
 Project Name: HUDSON 7  
 Project Number: NONE GIVEN  
 Project Location: EDDY CO NM

Sampling Date: 06/16/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SP3 @ 15' (H701574-03)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/19/2017	ND	1.98	99.2	2.00	0.678	
Toluene*	<0.050	0.050	06/19/2017	ND	1.88	93.9	2.00	2.14	
Ethylbenzene*	<0.050	0.050	06/19/2017	ND	1.98	98.8	2.00	0.672	
Total Xylenes*	<0.150	0.150	06/19/2017	ND	5.31	88.4	6.00	0.551	
Total BTEx	<0.300	0.300	06/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/19/2017	ND	432	108	400	3.64	

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	06/19/2017	ND	187	93.7	200	3.52	
DRO >C10-C28	<10.0	10.0	06/19/2017	ND	192	96.2	200	3.54	

Surrogate: 1-Chlorooctane 81.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 68.2 % 34.7-157

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



---

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

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### 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

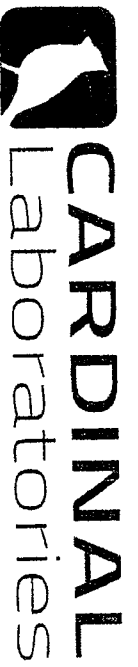
\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

<b>Company Name:</b> <u>XTO Energy</u> <b>Project Manager:</b> <u>Hudson COY</u> <b>Amy Ruth</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b> <b>Project #:</b> <b>Project Owner:</b> <b>Project Name:</b> <b>Project Location:</b> <u>Hudson COY</u> <b>Sample Name:</b> <u>H. ALU</u> <u>Edm. CO</u>		<b>P.O. #:</b> <b>Company:</b> <u>XTO</u> <b>Attn:</b> <u>Amy Ruth</u> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>	
<b>Lab I.D.</b> <u>#761579-</u> <b>Sample I.D.</b> 1 <u>SA. 100 13'</u> 2 <u>SP. 20 9'</u> 3 <u>SP. 30 15'</u>		<b>BILL TO</b> <b>ANALYSIS REQUEST</b>	
<b>PLEASE NOTE:</b> Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising under this contract or test, 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. Limitations of liability such claim is barred upon any of the above stated reasons or otherwise.		<b>MATRIX</b> (G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER ACID/BASE: ICE / COOL OTHER <b>SAMPLING</b> DATE TIME 6/16/17 8:30 6/16/17 9:30 6/16/17 10:30	
<b>Relinquished By:</b> <u>[Signature]</u> <b>Date:</b> <u>6/16/17</u> <b>Relinquished By:</b> <u>[Signature]</u> <b>Date:</b> <u>6/16/17</u> <b>Time:</b> <u>8:35 AM</u> <b>Received By:</b> <u>[Signature]</u>		<b>Sample Condition</b> Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>CHECKED BY:</b> <u>[Signature]</u>	
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other: <u>#75 -3.10c</u>		<b>REMARKS:</b> E-mail Results To: <u>Ngaldan@diversifiedfi.com</u> <u>malvas</u> <u>Rpons@diversifiedfi.com</u> <u>1floras</u>	

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



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October 31, 2017

MICHAEL ALVES

DIVERSIFIED FIELD SERVICES, INC.

P. O. BOX 5966

HOBBS, NM 88241

RE: HUDSON 7

Enclosed are the results of analyses for samples received by the laboratory on 10/25/17 8:00.

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW1 NORTHEAST @4' (H702906-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.1	2.00	0.774	
Toluene*	<0.050	0.050	10/28/2017	ND	1.72	85.8	2.00	0.184	
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	0.0198	
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.15	85.8	6.00	0.319	
Total BTEX	<0.300	0.300	10/28/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	157	78.6	200	6.02	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	171	85.6	200	7.78	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 76.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 84.7 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW2 EAST @ 2' (H702906-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.1	2.00	0.774		
Toluene*	<0.050	0.050	10/28/2017	ND	1.72	85.8	2.00	0.184		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	0.0198		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.15	85.8	6.00	0.319		
Total BTEX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	157	78.6	200	6.02	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	171	85.6	200	7.78	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 80.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.6 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW3 SOUTHEAST @ 1' (H702906-03)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82	QR-03	
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27	QR-03	
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10	QR-03	
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50	QR-03	
Total BTEX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 87.9 % 28.3-164

Surrogate: 1-Chlorooctadecane 87.1 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW4 SOUTH @ 2' (H702906-04)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTEX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 89.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 88.4 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW5 SOUTHWEST @ 6' (H702906-05)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 99.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 101 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW6 WEST @ 3' (H702906-06)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 99.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 98.0 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW7 NORTHWEST @ 2' (H702906-07)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTEx	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 94.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 92.8 % 34.7-157

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: SW8 NORTH @ 7' (H702906-08)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 85.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.8 % 34.7-157

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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: BS #1 (H702906-09)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTEX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 92.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 94.8 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	10/25/2017	Sampling Date:	10/23/2017
Reported:	10/31/2017	Sampling Type:	Soil
Project Name:	HUDSON 7	Sampling Condition:	Cool & Intact
Project Number:	SIDEWALLS & BOTTOM SAMPLES	Sample Received By:	Tamara Oldaker
Project Location:	XTO - EDDY CO NM		

**Sample ID: BS #2 (H702906-10)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/28/2017	ND	1.72	86.2	2.00	1.82		
Toluene*	<0.050	0.050	10/28/2017	ND	1.75	87.4	2.00	1.27		
Ethylbenzene*	<0.050	0.050	10/28/2017	ND	1.71	85.6	2.00	2.10		
Total Xylenes*	<0.150	0.150	10/28/2017	ND	5.11	85.2	6.00	2.50		
Total BTX	<0.300	0.300	10/28/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1580	16.0	10/26/2017	ND	448	112	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	10/26/2017	ND	200	100	200	1.39	
DRO >C10-C28	<10.0	10.0	10/26/2017	ND	218	109	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	10/26/2017	ND					

Surrogate: 1-Chlorooctane 90.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 87.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager





**CARDINAL**  
Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <b>KTO Energy</b> Project Manager: <b>Amy Ruth</b>		<b>BILL TO</b> P.O. #:		Company: <b>KTO Energy</b> Attn: <b>Amy Ruth</b>		ANALYSIS REQUEST			
Address:		State:      Zip:		Address:		State:      Zip:			
City:		Fax #:		City:		State:      Zip:			
Project #:		Project Owner:		Phone #:		Fax #:			
Project Name:		Project Location:		Sample Name:		FOR LAB USE ONLY			
Subsurface & Bottom Samples Huber # 007 M. Alva		Eddy, CO		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER ACID/BASE ICE / COOL OTHER		MATRIX PRESERV SAMPLING			
Lab I.D.		Sample I.D.		DATE		TIME			
H7D2906		1 Su1 Northeast @ 4' 2 Su2 East @ 2' 3 Su3 Southeast @ 1' 4 Su4 South @ 2' 5 Su5 Southeast @ 6' 6 Su6 West @ 3' 7 Su7 Northeast @ 2' 8 Su8 North @ 7' 9 BS #1 10 BS #2		10/23/17 10/23/17 10/23/17 10/23/17 10/23/17 10/23/17 10/23/17 10/23/17 10/23/17 10/23/17		9:00am 9:15am 9:30am 9:45am 10:00am 10:15am 10:30am 10:45am 11:00am 11:15am		CL TP4 EXT	
Relinquished By:		Date:		Received By:		Date:			
Relinquished By:		10/24/17		Received By:		10/24/17			
Delivered By: (Circle One)		1.0		Sample Condition		Checked By:			
Sampler - UPS - Bus - Other		1.25		Cool Intact Yes Yes No No		(Initials) YES-775			
E-mail Results To:		Phone Result:		Fax Result:		Add'l Phone #:			
E-mail Results To:		Yes No		Yes No		Add'l Phone #:			
REMARKS:		REMARKS:		REMARKS:		REMARKS:			



# Appendix IV

## SITE PHOTOS

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394

# HUDSON 1 FEDERAL WELL #007

## PHOTO PAGE



Site Prior



Site Prior



Site Prior



Site Prior



Began excavating process.



Excavating





Excavating to a depth of 4' bgs.



Stockpile contaminated soil.



Load and export contaminated soil.



Stockpile contaminated material on liner.



Continue Excavating







Install T-Post to hold lines.



Imported top soil.



Continue exporting contaminated soil.



Stockpile top soil.



Continue installing T Post and excavating under lines.







Excavating under lines.



Exporting contaminated soil.



Completed excavating release area.



Began installing and backfilling 20 ml liner in sections.



Began installing and backfilling 20 ml liner in sections.



Backfilling excavated area.



Continue backfilling.



Continue importing topsoil for backfill process.



Completed site.



Completed site.





Site completed.

# Appendix V

FINAL C-141

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Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394



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: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329
Facility Name: Hudson Federal Well #007	Facility Type: Exploration and Production
Surface Owner: Federal	Mineral Owner: Federal
API No. 30-015-31513	

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from	East/West Line	County
F	1	23S	30E	1500	North	1800	West	Eddy

Latitude: 32.337062 Longitude: -103.837058

### NATURE OF RELEASE

Type of Release: Crude Oil and Produced Water	Volume of Release: 2 bbls oil and 8 bbls PW	Volume Recovered: 0 bbls oil and 2 bbls PW
Source of Release: Poly flow line	Date and Hour of Occurrence 10/6/2016 Time unknown	Date and Hour of Discovery 10/6/2016 approx. 10 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom?	Date and Hour: N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Poly flow line from well ruptured in area of pasture. Pumping unit was shut down and valves were closed for repairs.		
Describe Area Affected and Cleanup Action Taken.  Beginning September 29, 2017, the release area was excavated to a depth of 4' bgs with excavated soil being properly disposed of at an approved NMOCD facility. Eight side wall samples were obtained and taken to Cardinal Laboratory to confirm all contaminants within the release area were removed. At the base of the excavation, a 20-mil, reinforced poly liner was installed and properly seated. Excavation was backfilled with clean, imported top soil to ground surface and contoured to the surrounding area. Due to season and limitation of growth, seeding will commence during the first few weeks of spring.		
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:	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Amy C. Ruth	Approved by Environmental Specialist: <i>Buttan Hall</i>	
Title:	Approval Date: 2/28/2023	Expiration Date: N/A
E-mail Address:	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Phone:	None	

\* Attach Additional Sheets If Necessary

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 191336

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 191336
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	2/28/2023