



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number:** pVF1623529492

**144B - 14593**

**XTO ENERGY, INC**

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

Form C-144  
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.  
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or  
Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Below grade tank registration  
☐ Permit of a pit or proposed alternative method  
☒ Closure of a pit, below-grade tank, or proposed alternative method  
☐ Modification to an existing permit/or registration  
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

**OIL CONS. DIV DIST. 3**  
**AUG 03 2017**

**Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request**

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: XTO Energy, Inc. OGRID #: 5380  
Address: #382 County Road 3100, Aztec, NM 87410  
Facility or well name: Jicarilla Apache CDP  
API Number: No API OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr \_\_\_\_\_ Section 34 Township 26N Range 5W County: San Juan  
Center of Proposed Design: Latitude 36.439136 Longitude -107.347952 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

2.  
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

\* Submit Separate C-141  
For Release

3.  
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 45-Dehy bbl Type of fluid: Produced Water  
Tank Construction material: Steel  
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☐ Other \_\_\_\_\_  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

4.  
☐ **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.  
**Fencing:** Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  
☐ Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet  
☒ Alternate. Please specify 4-Foot Hog-Wire Fencing



6.

**Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☐ Other \_\_\_\_\_
- ☐ Monthly inspections (If netting or screening is not physically feasible)

7.

**Signs:** Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☒ Signed in compliance with 19.15.16.8 NMAC

8.

**Variances and Exceptions:**

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

***Please check a box if one or more of the following is requested, if not leave blank:***

- ☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

***Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.***

**General siting**

**Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

- ☒ NM Office of the State Engineer - iWATERS database search; ☒ USGS; ☐ Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

**Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No  
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

☐ Yes ☐ No

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

☐ Yes ☐ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Within an unstable area. **(Does not apply to below grade tanks)**

☐ Yes ☐ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

**Below Grade Tanks**

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

☐ Yes ☒ No

- Topographic map; Visual inspection (certification) of the proposed site

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

**Temporary Pit using Low Chloride Drilling Fluid** (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

☐ Yes ☐ No

- Topographic map; Visual inspection (certification) of the proposed site

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☐ No

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

☐ Yes ☐ No

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site



Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

### **Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

### **Permanent Pit or Multi-Well Fluid Management Pit**

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

10.

#### **Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

11.

#### **Multi-Well Fluid Management Pit Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ A List of wells with approved application for permit to drill associated with the pit.
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

- ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_



12. **Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13. **Proposed Closure:** 19.15.17.13 NMAC

**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Multi-well Fluid Management Pit  
☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal  
☐ Waste Removal (Closed-loop systems only)  
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)  
☐ In-place Burial ☐ On-site Trench Burial  
☐ Alternative Closure Method

14. **Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	



adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

16.

**On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC  
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.

**Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Logan Hixon Title: EHS Coordinator

Signature: Logan Hixon Date: May 25, 2016

e-mail address: Logan\_Hixon@xtoenergy.com Telephone: (505) 333-3683

18.

**OCD Approval:** ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: [Signature] Approval Date: 9/5/2017

Title: Environmental Specialist OCD Permit Number: \_\_\_\_\_

19.

**Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC

*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

☒ Closure Completion Date: 7/24/17

20.

**Closure Method:**

- ☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)  
☐ If different from approved plan, please explain.

21.

**Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ Proof of Closure Notice (surface owner and division)  
☐ Proof of Deed Notice (required for on-site closure for private land only)  
☐ Plot Plan (for on-site closures and temporary pits)  
☒ Confirmation Sampling Analytical Results (if applicable)  
☐ Waste Material Sampling Analytical Results (required for on-site closure)  
☒ Disposal Facility Name and Permit Number  
☒ Soil Backfilling and Cover Installation  
☒ Re-vegetation Application Rates and Seeding Technique  
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: ☐ 1927 ☐ 1983



**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Logan Hixon Title: EHS coordinator  
Signature: [Signature] Date: 7/28/17  
e-mail address: Logan.Hixon@xtenergy.com Telephone: 505 386 0018

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, Inc.	Contact: Logan Hixon	
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3683	
Facility Name: Jicarilla Apache CDP (Dehy BGT)	Facility Type: CDP	
Surface Owner: Jicarilla Tribe	Mineral Owner	API No. Non Production Facility

**LOCATION OF RELEASE**

Unit Letter	Section 34	Township 26 N	Range 5W	Feet from the	North/South Line	Feet from the	East/West Line	County Rio Arriba
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**Latitude: N36\*.439136 Longitude: W-107\*.347952**

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: Unknown
Source of Release: BGT	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: July 12, 2017
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	
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.\*


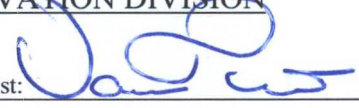
Describe Cause of Problem and Remedial Action Taken.\*

The below grade tank was taken out of service at the Jicarilla Apache CDP site due to facility modifications. A composite sample was collected beneath the location of the on-site BGT, and submitted for laboratory analysis for TPH via USEPA Method 8015 (C6-C40), Benzene and BTEX via USEPA Method 8021, and for total chlorides. The sample returned results below the 'Pit Rule' spill confirmation standards for chlorides and Benzene, but above the 'pit rule' standards for TPH, and Total BTEX confirming that a release has occurred at this location. The site was then ranked according to the NMOCD Pit rule Table 1 Standards. The site has an estimated depth of ground water greater than 50 feet but less than 100 feet below the tank surface. This set the closure standard to 1,000 ppm TPH, 10 ppm benzene, 10,000 ppm chloride, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken.\*

Based on BTEX results of 191ppm, and TPH results of 3,840 ppm a release has been confirmed at this location.

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Logan Hixon	Approved by Environmental Specialist: 	
Title: EHS Coordinator	Approval Date: 9/15/2017	Expiration Date:
E-mail Address: Logan_Hixon@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7/28/17	Phone: 505-333-3683	

\* Attach Additional Sheets If Necessary

NVF 1724836056



**XTO Energy Inc.  
San Juan Basin  
Below Grade Tank  
Closure Report**

**Lease Name:** Jicarilla Apache CDP

**API No.:** Non-Production Facility

**Description:** Section 34, Township 26N, Range 5W, Rio Arriba County

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.  
**Closure Date is July 24, 2017**
2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.  
**Closure Date is July 24, 2017**
3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.  
**Required C-144 Form is attached to this document.**
4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
  - Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B
    - Soil contaminated by exempt petroleum hydrocarbons
    - Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes
  - Basin Disposal Permit No. NM01-005
    - Produced water**All liquids and sludge were removed from the tank prior to closure activities.**
5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.  
**XTO has removed the below grade tank, and will dispose of it at a division approved facility, or recycle, reclaim or reuse it in a manner that is approved by the division.**

6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.

**All equipment has been removed due facility upgrades made to the site.**

7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.

**A five point composite sample was taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)( 1 )(b). (Sample results attached).**

Components	Test Method	Limit (mg/Kg)	Results (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2	4.46
BTEX	EPA SW-846 8021B or 8260B	50	191
TPH	EPA 8015	100	3,974
Chloride		250	<20.0

8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.

**Due to TPH results of 3,974 PPM and BTEX results of 191 ppm, a release has been confirmed for this location. A C-141 Release Notification form will be sent outlining any remediation activities taken regarding this release.**

9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.

**The pit cellar will be backfilled and reclaimed.**

10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally.

The notification will include the following:

- i. Operator's name
- ii. Well Name and API Number
- iii. Location by Unit Letter, Section, Township, and Range

**Notification was provided to the Aztec office of the OCD via email on June, 26, 2017; see attached email printout.**

The surface owner shall be notified of XTO's proposal to close the BGT as per the approved closure plan using certified mail, return receipt requested.



**The surface owner was notified June 26, 2017 via email & phone call to Hobson Sandoval (JAEPO).**

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.  
**The location will be recontoured to match the above specifications, after abandoning of the site, which will not occur at this time.**
  12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.  
**The site has been backfilled to match these specifications.**
  13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.  
**Site will not be reclaimed at this time due to continuous operation of the site.**
  14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
    - i. Proof of closure notice to division and surface owner; **attached**
    - ii. Details on capping and covering, where applicable; **per OCD Specification**
    - iii. Inspection reports; **attached**
    - iv. Confirmation sampling analytical results; **attached**
    - v. Disposal facility name(s) and permit number(s); **see above**
    - vi. Soil backfilling and cover installation; **per OCD Specification**
    - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **per surface owner Specification**
    - viii. Photo documentation of the site reclamation. **Attached**
13. BGT inspections were not obtainable for this site. XTO will strive to improve inspection frequency going forward.



## Analytical Report

### Report Summary

Client: XTO Energy Inc.

Chain Of Custody Number:

Samples Received: 7/10/2017 3:45:00PM

Job Number: 98031-0528

Work Order: P707011

Project Name/Location: Jicarilla Apache CDP

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman'.

Date: 7/12/17

Walter Hinchman, Laboratory Director

A handwritten signature in black ink, appearing to read 'Tim Cain' with 'TC' written to the right.

Date: 7/12/17

Tim Cain, Quality Assurance Officer

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.





XTO Energy Inc.  
382 CR 3100  
Aztec NM, 87410

Project Name: Jicarilla Apache CDP  
Project Number: 98031-0528  
Project Manager: Logan Hixon

Reported:  
12-Jul-17 16:41

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Sep BGT	P707011-01A	Soil	07/10/17	07/10/17	Glass Jar, 4 oz.
Dehy BGT	P707011-02A	Soil	07/10/17	07/10/17	Glass Jar, 4 oz.

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XTO Energy Inc.  
382 CR 3100  
Aztec NM, 87410

Project Name: Jicarilla Apache CDP  
Project Number: 98031-0528  
Project Manager: Logan Hixon

Reported:  
12-Jul-17 16:41

**Dehy BGT**  
**P707011-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	4.46	0.10	mg/kg	1	1728003	07/10/17	07/10/17	EPA 8021B	
Toluene	46.1	1.00	mg/kg	10	1728003	07/10/17	07/10/17	EPA 8021B	
Ethylbenzene	11.0	0.10	mg/kg	1	1728003	07/10/17	07/10/17	EPA 8021B	
p,m-Xylene	101	2.00	mg/kg	10	1728003	07/10/17	07/10/17	EPA 8021B	
o-Xylene	28.0	1.00	mg/kg	10	1728003	07/10/17	07/10/17	EPA 8021B	
Total Xylenes	129	1.00	mg/kg	10	1728003	07/10/17	07/10/17	EPA 8021B	
Total BTEX	191	1.00	mg/kg	10	1728003	07/10/17	07/10/17	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		98.3 %		50-150	1728003	07/10/17	07/10/17	EPA 8021B	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	1150	200	mg/kg	10	1728003	07/10/17	07/10/17	EPA 8015D	
Diesel Range Organics (C10-C28)	2690	25.0	mg/kg	1	1727004	07/11/17	07/11/17	EPA 8015D	
Oil Range Organics (C28-C40+)	134	50.0	mg/kg	1	1727004	07/11/17	07/11/17	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		104 %		50-150	1728003	07/10/17	07/10/17	EPA 8015D	
Surrogate: n-Nonane		194 %		50-200	1727004	07/11/17	07/11/17	EPA 8015D	
<b>Anions by 300.0</b>									
Chloride	ND	20.0	mg/kg	1	1728004	07/11/17	07/11/17	EPA 300.0	

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Jicarilla Apache CDP Project Number: 98031-0528 Project Manager: Logan Hixon	Reported: 12-Jul-17 16:41
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### Volatile Organics by EPA 8021 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 1728003 - Purge and Trap EPA 5030A

<b>Blank (1728003-BLK1)</b>				Prepared & Analyzed: 10-Jul-17						
Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	7.97		"	8.00		99.6	50-150			

<b>LCS (1728003-BS1)</b>				Prepared & Analyzed: 10-Jul-17						
Benzene	5.37	0.10	mg/kg	5.00		107	70-130			
Toluene	5.25	0.10	"	5.00		105	70-130			
Ethylbenzene	5.23	0.10	"	5.00		105	70-130			
p,m-Xylene	10.4	0.20	"	10.0		104	70-130			
o-Xylene	5.11	0.10	"	5.00		102	70-130			
Total Xylenes	15.5	0.10	"	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.02		"	8.00		100	50-150			

<b>Matrix Spike (1728003-MS1)</b>				Source: P707008-01		Prepared & Analyzed: 10-Jul-17				
Benzene	5.09	0.10	mg/kg	5.00	ND	102	54.3-133			
Toluene	4.99	0.10	"	5.00	ND	99.8	61.4-130			
Ethylbenzene	4.95	0.10	"	5.00	ND	99.0	61.4-133			
p,m-Xylene	9.84	0.20	"	10.0	ND	98.5	63.3-131			
o-Xylene	4.90	0.10	"	5.00	ND	98.0	63.3-131			
Total Xylenes	14.7	0.10	"	15.0	ND	98.3	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.88		"	8.00		98.6	50-150			

<b>Matrix Spike Dup (1728003-MSD1)</b>				Source: P707008-01		Prepared & Analyzed: 10-Jul-17				
Benzene	5.16	0.10	mg/kg	5.00	ND	103	54.3-133	1.36	20	
Toluene	5.05	0.10	"	5.00	ND	101	61.4-130	1.34	20	
Ethylbenzene	5.03	0.10	"	5.00	ND	101	61.4-133	1.61	20	
p,m-Xylene	10.0	0.20	"	10.0	ND	100	63.3-131	1.64	20	
o-Xylene	4.96	0.10	"	5.00	ND	99.3	63.3-131	1.35	20	
Total Xylenes	15.0	0.10	"	15.0	ND	99.8	63.3-131	1.54	20	
Surrogate: 4-Bromochlorobenzene-PID	7.90		"	8.00		98.8	50-150			

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XTO Energy Inc.  
382 CR 3100  
Aztec NM, 87410

Project Name: Jicarilla Apache CDP  
Project Number: 98031-0528  
Project Manager: Logan Hixon

Reported:  
12-Jul-17 16:41

### Nonhalogenated Organics by 8015 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1727004 - DRO Extraction EPA 3570</b>										
<b>Blank (1727004-BLK1)</b>				Prepared: 10-Jul-17 Analyzed: 11-Jul-17						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0	"							
Surrogate: n-Nonane	54.2		"	50.0		108	50-200			
<b>LCS (1727004-BS1)</b>				Prepared & Analyzed: 10-Jul-17						
Diesel Range Organics (C10-C28)	489	25.0	mg/kg	500		97.9	38-132			
Surrogate: n-Nonane	54.9		"	50.0		110	50-200			
<b>Matrix Spike (1727004-MS1)</b>				Source: P706043-01 Prepared & Analyzed: 10-Jul-17						
Diesel Range Organics (C10-C28)	5650	250	mg/kg	500	5060	118	38-132			
Surrogate: n-Nonane	60.6		"	50.0		121	50-200			
<b>Matrix Spike Dup (1727004-MSD1)</b>				Source: P706043-01 Prepared & Analyzed: 10-Jul-17						
Diesel Range Organics (C10-C28)	5690	250	mg/kg	500	5060	125	38-132	0.635	20	
Surrogate: n-Nonane	61.3		"	50.0		123	50-200			

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Project Name: Jicarilla Apache CDP  
Project Number: 98031-0528  
Project Manager: Logan Hixon

Reported:  
12-Jul-17 16:41

### Nonhalogenated Organics by 8015 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1728003 - Purge and Trap EPA 5030A</b>										
<b>Blank (1728003-BLK1)</b>				<b>Prepared &amp; Analyzed: 10-Jul-17</b>						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.35		"	8.00		104	50-150			
<b>LCS (1728003-BS1)</b>				<b>Prepared &amp; Analyzed: 10-Jul-17</b>						
Gasoline Range Organics (C6-C10)	64.2	20.0	mg/kg	60.9		105	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.11		"	8.00		101	50-150			
<b>Matrix Spike (1728003-MS1)</b>				<b>Source: P707008-01 Prepared &amp; Analyzed: 10-Jul-17</b>						
Gasoline Range Organics (C6-C10)	64.8	20.0	mg/kg	60.9	ND	106	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.49		"	8.00		106	50-150			
<b>Matrix Spike Dup (1728003-MSD1)</b>				<b>Source: P707008-01 Prepared &amp; Analyzed: 10-Jul-17</b>						
Gasoline Range Organics (C6-C10)	64.8	20.0	mg/kg	60.9	ND	106	70-130	0.00	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.36		"	8.00		104	50-150			

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Aztec NM, 87410

Project Name: Jicarilla Apache CDP  
Project Number: 98031-0528  
Project Manager: Logan Hixon

Reported:  
12-Jul-17 16:41

**Anions by 300.0 - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1728004 - Anion Extraction EPA 300.0</b>										
<b>Blank (1728004-BLK1)</b>				Prepared & Analyzed: 11-Jul-17						
Chloride	ND	20.0	mg/kg							
<b>LCS (1728004-BS1)</b>				Prepared & Analyzed: 11-Jul-17						
Chloride	257	20.0	mg/kg	250		103	90-110			
<b>Matrix Spike (1728004-MS1)</b>				Source: P707011-01 Prepared & Analyzed: 11-Jul-17						
Chloride	285	20.0	mg/kg	250	25.5	104	80-120			
<b>Matrix Spike Dup (1728004-MSD1)</b>				Source: P707011-01 Prepared & Analyzed: 11-Jul-17						
Chloride	281	20.0	mg/kg	250	25.5	102	80-120	1.26	20	

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Project Name: Jicarilla Apache CDP  
Project Number: 98031-0528  
Project Manager: Logan Hixon

Reported:  
12-Jul-17 16:41

#### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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Client: XTO  
 Project: Jicarilla Apache CDP  
 Sampler: Logan H  
 Phone: \_\_\_\_\_  
 Email(s): James, Kurt, Logan  
 Project Manager: \_\_\_\_\_

RUSH?  
☒ 1d  
☐ 3d

Lab Use Only		Analysis and Method							Lab Only	
Lab WO# <u>P707011</u>		<u>MPO</u> GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TCLP Metals	CO Table 910-1	TDS	Lab Number	Correct Cont/Presv (s) Y/N
Job Number <u>98031-0528</u>										

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TCLP Metals	CO Table 910-1	TDS	Lab Number	Correct Cont/Presv (s) Y/N
<u>Scp Bgt</u>	<u>7-10</u>	<u>1230</u>	<u>S</u>	<u>1 - 4oz</u>	<u>X</u>	<u>X</u>		<u>X</u>				<u>1</u>	<u>Y</u>
<u>Deby Bgt</u>	<u>7-10</u>	<u>1245</u>	<u>S</u>	<u>1 - 4oz</u>	<u>X</u>	<u>X</u>		<u>X</u>				<u>2</u>	<u>Y</u>

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>7-10</u>	Time <u>1544</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>7/10/17</u>	Time <u>15:48</u>	Lab Use Only **Received on Ice <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1 <u>4.0</u>	T2 <u>4.0</u> T3 _____
						AVG Temp °C <u>4.0</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

☐ Sample(s) dropped off after hours to a secure drop off area. Chain of Custody Notes/Billing Info: Visible ice in cooler

Page 10 of 10



## Hixon, Logan

---

**From:** Hixon, Logan  
**Sent:** Friday, July 21, 2017 4:47 PM  
**To:** 'orsonharrison@jicarillaoga.com'; Thomas, Leigh (l1thomas@blm.gov); Bryce Hammond (BryceHammond@jicarillaoga.com); Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; BRANDON POWELL (brandon.powell@state.nm.us); Hobson Sandoval (Hsandoval\_99@yahoo.com); 'jasonsandoval@jicarillaoga.com'; 'kurt.sandoval@bia.gov'; 'deedra.mike@bia.gov'; 'marlena.reval@bia.gov'  
**Cc:** Hopper, Terry; Tucker, Wes (Wes\_Tucker@xtoenergy.com); Weaver, John (John\_Weaver@xtoenergy.com); Percell, Bob; Jaquez, Robert; Weber, Justin; McDaniel, James (James\_McDaniel@xtoenergy.com); Hoekstra, Kurt; Gusdorf, Matthew; Marriott, Mike (Mike\_Marriott@xtoenergy.com); Nee, Martin (Martin\_Nee@xtoenergy.com)  
**Subject:** RE: 2017-6-26 72 Hour BGT Closure Notification, 2017/7/10-2017/7/17, Jicarilla Apache CDP (API: NPF)  
**Attachments:** 2017-7-21 Final Results.pdf

Good Evening All,

Attached are the final sample results collected from the south wall after the excavation had reached the extent of 20' E-W x 30' N-S x 11' deep where a sandstone layer exists.

The one (1) composite sample of the S. Wall collected was analyzed for TPH (GRO/DRO/MRO) via USEPA method 8015, and BTEX via USEPA method 8021.

The sample returned results below standards for this site. This BGT will be backfilled to meet the standards set forth by NMOCD, Jicarilla Tribe, and continued operations at this site not utilizing a BGT.

A final report will be submitted for the Comp BGT and the Dehy BGT along with remediation activities taken for the Dehy BGT to this group.

Backfill of the excavations will begin on Monday July 21, 2017.

Thank you all for your time and if you have any questions do not hesitate to contact us at any time.

Have a good weekend!

***If you have any questions do not hesitate to contact us.***

***Thank You!***

***EHS Coordinator***

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

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**From:** Hixon, Logan

**Sent:** Wednesday, July 19, 2017 2:00 PM

**To:** 'orsonharrison@jicarillaoga.com' <orsonharrison@jicarillaoga.com>; Thomas, Leigh (l1thomas@blm.gov) <l1thomas@blm.gov>; Bryce Hammond (BryceHammond@jicarillaoga.com) <BryceHammond@jicarillaoga.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; BRANDON POWELL (brandon.powell@state.nm.us) <brandon.powell@state.nm.us>; Hobson Sandoval (Hsandoval\_99@yahoo.com) <Hsandoval\_99@yahoo.com>; 'jasonsandoval@jicarillaoga.com' <jasonsandoval@jicarillaoga.com>

**Cc:** Hopper, Terry <Terry\_Hopper@xtoenergy.com>; Tucker, Wes (Wes\_Tucker@xtoenergy.com) <Wes\_Tucker@xtoenergy.com>; Weaver, John (John\_Weaver@xtoenergy.com) <John\_Weaver@xtoenergy.com>; Percell, Bob <Bob\_Percell@xtoenergy.com>; Jaquez, Robert <Robert\_Jaquez@xtoenergy.com>; Weber, Justin <Justin\_Weber@xtoenergy.com>; McDaniel, James (James\_McDaniel@xtoenergy.com) <James\_McDaniel@xtoenergy.com>; Hoekstra, Kurt <Kurt\_Hoekstra@xtoenergy.com>; Gusdorf, Matthew <Matthew\_Gusdorf@xtoenergy.com>; Marriott, Mike (Mike\_Marriott@xtoenergy.com) <Mike\_Marriott@xtoenergy.com>

**Subject:** RE: 2017-6-26 72 Hour BGT Closure Notification, 2017/7/10-2017/7/17, Jicarilla Apache CDP (API: NPF)

Good Afternoon,

Attached are the rush sample results collected from the south wall after the excavation had reached the extent of 20' E-W x 22' N-S x 11' deep where a sandstone layer exists.

The one (1) composite S. wall sample collected was analyzed for TPH (GRO/DRO/MRO) via USEPA method 8015, and BTEX via USEPA method 8021.

The sample returned results above the standards set for this site for TPH, benzene, and BTEX.

Additional excavation of the south wall will continue on Thursday July 20, 2017 at approximately 0900.

If you have any questions or concerns do not hesitate to contact us at any time.

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

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**From:** Hixon, Logan

**Sent:** Friday, July 14, 2017 2:23 PM

**To:** 'orsonharrison@jicarillaoga.com' <orsonharrison@jicarillaoga.com>; Thomas, Leigh (l1thomas@blm.gov) <l1thomas@blm.gov>; Bryce Hammond (BryceHammond@jicarillaoga.com) <BryceHammond@jicarillaoga.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; BRANDON POWELL (brandon.powell@state.nm.us) <brandon.powell@state.nm.us>; Hobson Sandoval (Hsandoval\_99@yahoo.com) <Hsandoval\_99@yahoo.com>; 'jasonsandoval@jicarillaoga.com' <jasonsandoval@jicarillaoga.com>

**Cc:** Hopper, Terry <Terry\_Hopper@xtoenergy.com>; Tucker, Wes (Wes\_Tucker@xtoenergy.com) <Wes\_Tucker@xtoenergy.com>; Weaver, John (John\_Weaver@xtoenergy.com) <John\_Weaver@xtoenergy.com>;



Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Jaquez, Robert <[Robert\\_Jaquez@xtoenergy.com](mailto:Robert_Jaquez@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; McDaniel, James ([James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)) <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>  
**Subject:** RE: 2017-6-26 72 Hour BGT Closure Notification, 2017/7/10-2017/7/17, Jicarilla Apache CDP (API: NPF)

Good Afternoon All,  
Attached are results from the excavation activities that occurred on 6/12/2017.

The Dehy pit was excavated to the extent of 20' east to west by 17' north to south, and to a depth of 11' where a hard sandstone was encountered. The (5) five samples collected were analyzed for TPH (GRO/DRO/MRO) via USEPA method 8015, BTEX via USEPA method 8021, and for chlorides.

The sample from the north wall, east wall, west wall, and bottom all returned results below standards set for this site outlined in the email below. The sample from the south wall returned results below the standards set for this site for TPH, Benzene, and chlorides, but returned results above the standards set for this site for BTEX.

Additional excavation activities will continue on the south wall to the proposed standards outlined below on Tuesday July 18, 2017, starting at approximately 0900.

If you have any questions or concerns please let us know.

Have a good weekend everyone!

***If you have any questions do not hesitate to contact us.***

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |  
Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)  
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**From:** Hixon, Logan

**Sent:** Tuesday, July 11, 2017 4:46 PM

**To:** 'orsonharrison@jicarillaoga.com' <[orsonharrison@jicarillaoga.com](mailto:orsonharrison@jicarillaoga.com)>; Thomas, Leigh ([l1thomas@blm.gov](mailto:l1thomas@blm.gov)) <[l1thomas@blm.gov](mailto:l1thomas@blm.gov)>; Bryce Hammond ([BryceHammond@jicarillaoga.com](mailto:BryceHammond@jicarillaoga.com)) <[BryceHammond@jicarillaoga.com](mailto:BryceHammond@jicarillaoga.com)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; BRANDON POWELL ([brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)) <[brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)>; Hobson Sandoval ([Hsandoval\\_99@yahoo.com](mailto:Hsandoval_99@yahoo.com)) <[Hsandoval\\_99@yahoo.com](mailto:Hsandoval_99@yahoo.com)>

**Cc:** Hopper, Terry <[Terry\\_Hopper@xtoenergy.com](mailto:Terry_Hopper@xtoenergy.com)>; Tucker, Wes ([Wes\\_Tucker@xtoenergy.com](mailto:Wes_Tucker@xtoenergy.com)) <[Wes\\_Tucker@xtoenergy.com](mailto:Wes_Tucker@xtoenergy.com)>; Weaver, John ([John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)) <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Jaquez, Robert <[Robert\\_Jaquez@xtoenergy.com](mailto:Robert_Jaquez@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; McDaniel, James ([James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)) <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>

**Subject:** RE: 2017-6-26 72 Hour BGT Closure Notification, 2017/7/10-2017/7/17, Jicarilla Apache CDP (API: NPF)

Good Afternoon All,



Attached are the sample results from the BGT confirmation sampling that occurred on July 10, 2017.

The results attached indicate that the Comp/Sep BGT returned results below the closure standards per Table 1 for 51'-100' estimated distance to groundwater. This BGT will be backfilled to meet the standards set forth by NMOCD, Jicarilla Tribe, and continued operations at this site not utilizing a BGT.

The sample collected from the Dehy BGT returned results above the standards set forth per NMOCD Table 1 for 51'-100' estimated distance to groundwater. The depth to groundwater is estimated to be deeper than 51', but less than 100'. We propose to utilize the NMOCD Table 1 standards listed:

- Chlorides of 10,000 ppm
- TPH of 2,500 ppm via 8015M (DRO, GRO, MRO)
- GRO & DRO of 1,000 ppm via 8015
- BTEX of 50 ppm via 8021
- Benzene of 10 ppm via 8021.

We will begin excavation work on Wednesday July 12, 2017 on the Dehy BGT, and I will contact Hobson in the morning by phone.

Please let us know if you have any questions or concerns

Thanks!

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

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**From:** Hixon, Logan

**Sent:** Monday, June 26, 2017 1:56 PM

**To:** 'orsonharrison@jicarillaoga.com' <[orsonharrison@jicarillaoga.com](mailto:orsonharrison@jicarillaoga.com)>; Thomas, Leigh ([l1thomas@blm.gov](mailto:l1thomas@blm.gov)) <[l1thomas@blm.gov](mailto:l1thomas@blm.gov)>; Bryce Hammond ([BryceHammond@jicarillaoga.com](mailto:BryceHammond@jicarillaoga.com)) <[BryceHammond@jicarillaoga.com](mailto:BryceHammond@jicarillaoga.com)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; BRANDON POWELL ([brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)) <[brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)>; Hobson Sandoval ([Hsandoval\\_99@yahoo.com](mailto:Hsandoval_99@yahoo.com)) <[Hsandoval\\_99@yahoo.com](mailto:Hsandoval_99@yahoo.com)>

**Cc:** Hopper, Terry <[Terry\\_Hopper@xtoenergy.com](mailto:Terry_Hopper@xtoenergy.com)>; Tucker, Wes ([Wes\\_Tucker@xtoenergy.com](mailto:Wes_Tucker@xtoenergy.com)) <[Wes\\_Tucker@xtoenergy.com](mailto:Wes_Tucker@xtoenergy.com)>; Weaver, John ([John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)) <[John\\_Weaver@xtoenergy.com](mailto:John_Weaver@xtoenergy.com)>; Percell, Bob <[Bob\\_Percell@xtoenergy.com](mailto:Bob_Percell@xtoenergy.com)>; Jaquez, Robert <[Robert\\_Jaquez@xtoenergy.com](mailto:Robert_Jaquez@xtoenergy.com)>; Weber, Justin <[Justin\\_Weber@xtoenergy.com](mailto:Justin_Weber@xtoenergy.com)>; McDaniel, James ([James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)) <[James\\_McDaniel@xtoenergy.com](mailto:James_McDaniel@xtoenergy.com)>; Hoekstra, Kurt <[Kurt\\_Hoekstra@xtoenergy.com](mailto:Kurt_Hoekstra@xtoenergy.com)>

**Subject:** 2017-6-26 72 Hour BGT Closure Notification, 2017/7/10-2017/7/17, Jicarilla Apache CDP (API: NPF)



Please accept this email as the required 72 hour notification for BGT closure activities (2 BGT) at the following site:

*-Jicarilla Apache CDP (API NPF) located in Section 34, Township 26N, Range 5W, San Juan County, New Mexico.*

The BGT's are being closed due to upgrades being made to this site.

The registrations were approved on August 22, 2016.

Work is tentatively scheduled for Monday July 10, 2017 at approximately 11:00 MST.

If there is any unforeseen delays in closure activities with this BGT's and it will not be initiated within a week's time (July 17, 2017), a follow up email notification will be made for the change.

Thank you and have a good day

*If you have any questions do not hesitate to contact us.*

**Thank You!**

**EHS Coordinator**

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |

Home: 505-320-6133 | [Logan\\_Hixon@xtoenergy.com](mailto:Logan_Hixon@xtoenergy.com)

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**XTO Energy Inc.**  
**San Juan Basin**  
**Below Grade Tank**  
**Variance Page**

In accordance with Rule 19.15.17.15 NMAC, the following outlines all variances that are being requested for below grade tanks at XTO facilities. All variances requested provide equal or better protection of fresh water, public health and the environment.

**Closure Requirements**

XTO requests a variance on rule 19.15.17.13.C(3)(a) NMAC which requires operators to analyze closure samples for the constituents listed in Table I of 19.15.17.13 NMAC. XTO instead requests to replace the USEPA analytical method 300.0 for total chloride to USEPA Method 9056. The SW846 9056 method Determination of Inorganic Anions By Ion Chromatography, from *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, which also contains methods for the analysis of groundwater, is customarily used to comply with RCRA regulations. EPA Method 300.0 Determination of Inorganic Anions by Ion Chromatography is taken from *Methods for Chemical Analysis of Waters and Wastes*, and includes test procedures that are approved for monitoring under the Safe Drinking Water Act (SDWA) and the National Pollutant Discharge Elimination System (NPDES). The Scope of Application for each method is the same, and both methods utilize ion chromatograph instrumentation. Following either procedure, steps for instrument calibration and data calculation are equivalent. Sample preservation, holding time, handling and storage is identical between the two methods. It is expected that data produced from either method should be consistent.

XTO Energy is requesting this variance on the grounds that USEPA Method 418.1 is an outdated analytical method that reports a full range of hydrocarbons from C<sub>8</sub> through C<sub>40</sub>. (*Reference: American Petroleum Institute*). This range of hydrocarbons is above the range that can reasonably be expected to be found in our field in both drilling pits and beneath below grade tanks. USEPA Method 8015M (GRO/DRO + extended analysis) will report hydrocarbons ranging from C<sub>6</sub>-C<sub>10</sub> for GRO, C<sub>10</sub>-C<sub>28</sub> for DRO, and C<sub>28</sub>-C<sub>36</sub> for extended analysis. This information was provided by Environmental Science Corporation Laboratories. As the information demonstrates, the 8015M analytical method reports as low as C<sub>6</sub>, reporting lower than USEPA Method 418.1. Utilizing analytical method 8015M, lighter range hydrocarbons will be reported instead of higher range, heavy hydrocarbons that may not be reasonably expected to be found in our field. Utilization of USEPA Method 8015M will better protect groundwater resources by identifying lighter, more mobile hydrocarbons that USEPA Method 418.1 cannot identify. The heavier range hydrocarbons, C<sub>36</sub>-C<sub>40</sub>, that are not identified by USEPA Method 8015M are not a mobile form of hydrocarbon, and are not a threat to human health and the environment.

XTO requests a variance on rule 19.15.17.13.E(2) requiring that operators notify the appropriate division office verbally AND in writing at least 72 hours prior to any closure operation. XTO instead requests that the verbal notification be waived, as suggested by the local division office. XTO will provide written notification to the division office in the form of an email at least 72 hours prior to beginning closure activities.



XTO Energy, Inc.  
Jicarilla Apache CDP  
Section 34, Township 26N, Range 5W  
Closure Date: July 21, 2017



Photo 1: Jicarilla Apache CDP (Dehy) after backfill