

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

15642

- Type of action: ☐ Below grade tank registration (Pre 2008 Existing Tank)  
☐ 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

**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: Berger A 2S  
API Number: 30-045-32985 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr P Section 21 Township 26N Range 11W County: San Juan  
Center of Proposed Design: Latitude 36.46814 Longitude -108.00313 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 \_\_\_\_\_

3.  
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 120 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**)

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

- 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

☐ Yes ☐ No

**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).

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

☐ Yes ☒ No

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

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

☐ Yes ☒ No

**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.)

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

☐ Yes ☐ No

Within 300 feet from a occupied 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 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.

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

☐ Yes ☐ No



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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><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).<br>- 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.<br>- 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.<br>- 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.<br>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   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |



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: 11-8-16

Title: Environmental Spec. 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: August 18, 2016

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): Rex Farnsworth Title: EH &S Technician

Signature:  Date: October 13, 2016

e-mail address: rex\_farnsworth@xtoenergy.com Telephone: (505) 333-3117



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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: Rex Farnsworth	
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3117	
Facility Name: Berger A #2S	Facility Type: Gas Well	
Surface Owner: Tribal Trust	Mineral Owner: Federal	API No. 30-045-32985

**LOCATION OF RELEASE**

Unit Letter P	Section 21	Township 26 N	Range 11W	Feet from the 665	North/South Line FSL	Feet from the 775	East/West Line FEL	County San Juan
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Latitude: N36.46814 Longitude: W-108.00313

**NATURE OF RELEASE**

Type of Release: N/A	Volume of Release:	Volume Recovered:
Source of Release: N/A	Date and Hour of Occurrence: N/A	Date and Hour of Discovery: N/A
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 Berger A #2S well site due to the P&A of this well site. A composite sample was collected beneath location of the on-site BGT, and submitted for laboratory analysis for TPH via USEPA Method 8015 (C6-C36), Benzene and BTEX via USEPA Method 8021, and for total chlorides. The sample returned results below the 'Pit Rule' spill confirmation standards for TPH, Benzene, Total BTEX and total chlorides, confirming that a release has not occurred at this location.

Describe Area Affected and Cleanup Action Taken.\*

No release has been confirmed for 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: Rex Farnsworth	Approved by Environmental Specialist:		
Title: EHS Technician	Approval Date:	Expiration Date:	
E-mail Address: rex_farnsworth@xtoenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: October 13, 2016	Phone: 505-333-3117		

\* Attach Additional Sheets If Necessary

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

**Lease Name: Berger A 2S**

**API No.: 30-045-32985**

**Description: Unit P, Section 21, Township 26N, Range 11W, San Juan 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 obtain approval of this closure plan prior to commencing closure of the below grade tank at this location pursuant to 19.15.17.13.C (1) NMAC

**Approval was granted on June 15, 2016**

2. XTO will notify the surface owner by certified mail, return receipt requested, that the operator plans closure operations at least 72 hours, but no more than one week, prior to any closure operation. Notice will include:
  - a. Well Name
  - b. API #
  - c. Well Location

**The surface owner was notified on July 7, 2016 via email. Email has been approved as a means of surface owner notification to federal entities by Brandon Powell, NMOCD Aztec Office.**

3. XTO will notify the NMOCD Aztec Office by email that the operator plans closure operations at least 72 hours, but no more than one week, prior to any closure operation. Notice will include:
  - a. Well Name
  - b. API #
  - c. Well Location

**Notifications were provided to NMOCD with the Aztec office of the OCD via email on July 7, 2016; see attached email printout.**



4. Within 60 days of cessation of operations, 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:

- a. Soils, tank bottoms, produced sand, pit sludge and other exempt wastes impacted by petroleum hydrocarbons will be disposed of at:

*Envirotech: Permit #NM01-0011 and IEI: Permit # NM01-0010B*

- b. Produced Water will be disposed of at:

*Basin Disposal: Permit #NM01-005 and XTO owned salt water Disposal Facilities*

**All liquids and sludge were removed from the tank prior to closure activities.**

5. Within six (6) months of cessation of operations, 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. If there is any equipment associated with a below-grade tank, then the operator shall remove the equipment, unless the equipment is required for some other purpose.

**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 collect a closure sample of the soil beneath the location of the below grade tank or liner that is being closed. The closure sample will consist of a five-point composite sample to include any obvious stained or wet soils, or other evidence of contamination. The closure sample will be analyzed for all constituents listed in Table I below, including DRO+GRO, Chlorides, TPH (C6-C36), benzene and BTEX.

<b>TABLE I</b> Depth Below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limits	Results
	Chloride	EPA 9056	600 mg/kg	<b>65.5</b>
	TPH (C6-C36)	Method 8015	100 mg/kg	<b>&lt;8.485</b>
	BTEX	Method 8021B	50 mg/kg	<b>&lt;0.1965</b>
	Benzene	Method 8021B	10 mg/kg	<b>&lt;0.0131</b>

7. If any contaminant concentration is higher than the parameters listed in Table I of 19.15.17.13 NMAC, the division may require additional delineation upon review of the results and the operator must receive approval before proceeding with closure. If all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, then the operator can proceed to backfill the pit, pad, or excavation with non-waste containing, uncontaminated, earthen material.

**The pit cellar was backfilled using compacted, non-waste containing earthen material, with a division prescribed soil cover.**

8. After closure has occurred, XTO will reclaim the former BGT area, if it is no longer being used for extraction of oil and gas, by substantially restoring the surface area to the condition that existed prior to oil and gas operations. XTO will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover materials. The soil cover shall consist of the background thickness of topsoil, or one foot of suitable materials to establish vegetation at the site, whichever is greater. All areas will be reclaimed as early as practicable, and as close to their original condition or land use as possible. They shall be maintained in a way as to control dust and minimize erosion.

**The location has been recontoured to match the above specifications.**

9. XTO will complete reclamation of all disturbed areas no longer in use when the ground disturbance activities at the site have been completed. The reseeding shall take place during the first favorable growing season after closure. Reclamation activities will be considered completed when a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels, and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

\*Re-vegetation and reclamation obligations imposed by other applicable federal, state or tribal agencies on lands managed by those agencies shall supersede the above requirements, provided they provide equal or better protection of fresh water, human health and the environment.

**Site has been reclaimed pursuant to the surface owner specification.**

10. XTO will notify the Aztec Office of the NMOCD by C-103 when reclamation and closure activities are completed, unless the site is managed by another regulatory agency whose reclamation requirements provide equal or greater cover than NMOCD requirements. In those instances, the requirements of the other regulatory agency will be followed.

**Site will be reclaimed pursuant to the BLM specifications, therefore no C-103 is required.**

11. Within 60 days of closure, XTO will submit a closure report to the Aztec office of the NMOCD, filed on Form C-144. The report will include the following:
  - a. Proof of closure notice to NMOCD and surface owner **Attached**
  - b. Confirmation sampling analytical results **Attached**
  - c. Soil backfill and cover installation information **Per OCD**
  - d. Photo documentation of site reclamation **Attached**
  - e. Alternative Table I groundwater criteria request, groundwater information and received approval. (If Needed) **Not needed for site.**



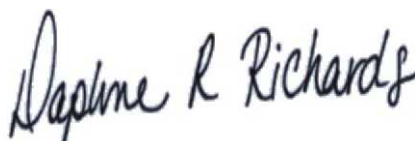
July 20, 2016

## XTO Energy - San Juan Division

Sample Delivery Group: L846406  
Samples Received: 07/12/2016  
Project Number: 30-045-32985  
Description: Berger A #2S

Report To: Rex Farnsworth  
382 County Road 3100  
Aztec, NM 87410

Entire Report Reviewed By:



Daphne Richards  
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



FARF-071116-1234 L846406-01 Solid

Collected by  
Rex Farnsworth

Collected date/time  
07/11/16 12:34

Received date/time  
07/12/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 8015	WG888147	1	07/12/16 19:43	07/13/16 10:49	KLM
Total Solids by Method 2540 G-2011	WG888282	1	07/13/16 09:52	07/13/16 10:06	MEL
Volatile Organic Compounds (GC) by Method 8015	WG889621	1	07/18/16 11:00	07/18/16 19:11	DWR
Volatile Organic Compounds (GC) by Method 8021	WG889621	25	07/18/16 11:00	07/19/16 12:40	DWR
Wet Chemistry by Method 9056A	WG889357	1	07/16/16 12:33	07/16/16 18:42	CM

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards  
Technical Service Representative

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc



FARF-071116-1234

Collected date/time: 07/11/16 12:34

## SAMPLE RESULTS - 01

L846406

ONE LAB. NATIONWIDE.



## Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	07/13/2016 10:06	WG888282

## Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	65.5		10.5	1	07/16/2016 18:42	WG889357

## Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.0131	25	07/19/2016 12:40	WG889621
Toluene	ND		0.131	25	07/19/2016 12:40	WG889621
Ethylbenzene	ND		0.0131	25	07/19/2016 12:40	WG889621
Total Xylene	ND	B	0.0393	25	07/19/2016 12:40	WG889621
TPH (GC/FID) Low Fraction	ND		0.105	1	07/18/2016 19:11	WG889621
(S) a,a,a-Trifluorotoluene(FID)	92.1		59.0-128		07/18/2016 19:11	WG889621
(S) a,a,a-Trifluorotoluene(FID)	96.4		59.0-128		07/19/2016 12:40	WG889621
(S) a,a,a-Trifluorotoluene(PID)	103		54.0-144		07/19/2016 12:40	WG889621
(S) a,a,a-Trifluorotoluene(PID)	98.9		54.0-144		07/18/2016 19:11	WG889621

## Sample Narrative:

8015/8021 L846406-01 WG889621: No bisulfates remain for analysis.

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.19	1	07/13/2016 10:49	WG888147
C28-C40 Oil Range	ND		4.19	1	07/13/2016 10:49	WG888147
(S) o-Terphenyl	91.4		50.0-150		07/13/2016 10:49	WG888147

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

XTO Energy - San Juan Division

PROJECT:

30-045-32985

SDG:

L846406

DATE/TIME:

07/20/16 16:35

PAGE:

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WG888282

Total Solids by Method 2540 G-2011

## QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE



L846406-01

## Method Blank (MB)

(MB) R3149582-1 07/13/16 10:06

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Qc

## L846405-03 Original Sample (OS) • Duplicate (DUP)

(OS) L846405-03 07/13/16 10:06 • (DUP) R3149582-3 07/13/16 10:06

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	92.2	91.7	1	0.537		5

7 Gl

8 Al

9 Sc

## Laboratory Control Sample (LCS)

(LCS) R3149582-2 07/13/16 10:06

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

ACCOUNT:

XTO Energy - San Juan Division

PROJECT:

30-045-32985

SDG:

L846406

DATE/TIME:

07/20/16 16:35

PAGE:

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WG889357

Wet Chemistry by Method 9056A

## QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



L846406-01

## Method Blank (MB)

(MB) R3150350-1 07/16/16 14:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

## L846393-01 Original Sample (OS) • Duplicate (DUP)

(OS) L846393-01 07/16/16 17:56 • (DUP) R3150350-4 07/16/16 18:19

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	18.1	18.3	1	1		15

## L846635-10 Original Sample (OS) • Duplicate (DUP)

(OS) L846635-10 07/16/16 22:09 • (DUP) R3150350-5 07/16/16 22:32

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	71.2	71.1	1	0		15

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3150350-2 07/16/16 15:01 • (LCSD) R3150350-3 07/16/16 15:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	200	200	199	100	100	80-120			1	15

## L846635-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L846635-12 07/16/16 22:55 • (MS) R3150350-6 07/17/16 00:03 • (MSD) R3150350-7 07/17/16 00:26

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	566	73.7	624	663	97	104	1	80-120			6	15

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

## Method Blank (MB)

(MB) R3150564-3 07/18/16 14:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000626	J	0.000150	0.00500
Ethylbenzene	0.000225	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0275	J	0.0217	0.100
(S) o,a,a-Trifluorotoluene(FID) 94.9				59.0-128
(S) o,a,a-Trifluorotoluene(PID) 102				54.0-144

## Method Blank (MB)

(MB) R3150703-3 07/19/16 09:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000290	J	0.000150	0.00500
Ethylbenzene	0.000212	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0525	J	0.0217	0.100
(S) o,a,a-Trifluorotoluene(FID) 95.1				59.0-128
(S) o,a,a-Trifluorotoluene(PID) 102				54.0-144

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3150564-1 07/18/16 13:28 • (LCSD) R3150564-2 07/18/16 13:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.97	5.94	109	108	63.5-137			0.480	20
(S) o,a,a-Trifluorotoluene(FID)				105	105	59.0-128				
(S) o,a,a-Trifluorotoluene(PID)				112	112	54.0-144				

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3150703-1 07/19/16 08:08 • (LCSD) R3150703-2 07/19/16 08:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0436	0.0464	87.3	92.7	70.0-130			6.03	20
Toluene	0.0500	0.0444	0.0460	88.8	91.9	70.0-130			3.50	20
Ethylbenzene	0.0500	0.0449	0.0472	89.8	94.3	70.0-130			4.90	20
Total Xylene	0.150	0.138	0.144	92.2	95.7	70.0-130			3.78	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc



WG889621

## QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE

Volatile Organic Compounds (GC) by Method 8015/8021

L846406-01

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3150703-1 07/19/16 08:08 • (LCSD) R3150703-2 07/19/16 08:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) a,a,a-Trifluorotoluene(FID)				95.2	95.0	59.0-128				
(S) a,a,a-Trifluorotoluene(PID)				101	100	54.0-144				

## L847320-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847320-01 07/18/16 16:13 • (MS) R3150564-4 07/18/16 16:35 • (MSD) R3150564-5 07/18/16 16:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	ND	0.0456	0.0468	91.1	93.7	1	49.7-127			2.74	23.5
Toluene	0.0500	ND	0.0439	0.0452	87.1	89.6	1	49.8-132			2.85	23.5
Ethylbenzene	0.0500	0.000513	0.0431	0.0445	85.1	88.0	1	40.8-141			3.27	23.8
Total Xylene	0.150	ND	0.129	0.134	85.6	88.4	1	41.2-140			3.22	23.7
(S) a,a,a-Trifluorotoluene(FID)					94.9	93.6		59.0-128				
(S) a,a,a-Trifluorotoluene(PID)					101	99.4		54.0-144				

## L847320-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L847320-01 07/18/16 16:13 • (MS) R3150564-6 07/18/16 17:19 • (MSD) R3150564-7 07/18/16 17:42

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	4.56	4.22	81.4	75.2	1	28.5-138			7.74	23.6
(S) a,a,a-Trifluorotoluene(FID)					101	100		59.0-128				
(S) a,a,a-Trifluorotoluene(PID)					108	108		54.0-144				

WG888147

## QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Semi-Volatile Organic Compounds (GC) by Method 8015

L846406-01

## Method Blank (MB)

(MB) R3149479-1 07/13/16 08:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	99.3			50.0-150

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3149479-2 07/13/16 09:11 • (LCSD) R3149479-3 07/13/16 09:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.0	44.7	43.3	74.5	72.2	50.0-150			3.21	20
(S) o-Terphenyl				82.3	80.2	50.0-150				

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc





## Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
-----------	-------------

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> GI<sup>8</sup> AI<sup>9</sup> Sc

# ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.  
 \* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

## State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	923	Ohio-VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

## Third Party & Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA	100789
A2LA - ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>14</sup> Accreditation not applicable

## Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

Al

<sup>9</sup> Sc





**From:** Hixon, Logan  
**To:** Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; Katherina Diemer (kdiemer@blm.gov)  
**Cc:** McDaniel, James (James\_McDaniel@xtoenergy.com); Hoekstra, Kurt; Farnsworth, Rex (Rex\_Farnsworth@xtoenergy.com); Clement, Jeff (Jeff\_Clement@xtoenergy.com); Dawes, Thomas  
**Subject:** 2016-7-7, 72 Hour BGT Closure Notification 2016/7/8-2016/7/15, Berger A 2S (API: 30-045-32985)  
**Date:** Thursday, July 07, 2016 8:50:00 AM

---

Mr. Smith & Mrs. Diemer,

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

*-Berger A 2S (API 30-045-32985) located in Section 21P, Township 26N, Range 11W, San Juan County, New Mexico.*

This BGT is being closed due to plugging and abandoning of this well site.

The registration was approved on June 15, 2016.

Work is tentatively scheduled for Monday July 11, 2016 at approximately 1200 MST.

If there is any unforeseen delays in closure activities with this BGT and it will not be initiated within a week's time (July 15, 2016), 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/OIMS 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)

**XTO ENERGY INC.**, an ExxonMobil subsidiary

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## Well Below Tank Inspection Report

7/20/2016

Division Denver

Dates - 07/01/2008 - 07/19/2016

Type Route Stop

Type Value B

RouteName StopName

InspectorN Inspection D Inspection T Visible Liner

Pumper Blackburn, VisibleTant

Foreman Unassigne Collection

WellName BERGER A 025 (PA)

APIWellNumber 3C+09

Section 21 11W

Range 26N

Township 26N

Notes

4 Well Water Below Ground

2 Well Water Below Ground

4 Well Water Below Ground

4 Well Water Below Ground

5 Well Water Below Ground

4 Well Water Below Ground

5 Well Water Below Ground

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Billy Pennit	6/11/2010	12:15	No	No	No	No	No	No	4 Well Water Below Ground
Billy Pennit	6/11/2010	12:15	No	No	No	No	No	No	4 Well Water Below Ground
Billy Pennit	1/23/2010	11:34	No	No	No	No	No	No	4 Well Water Below Ground
Billy Pennit	2/19/2010	12:43	No	No	No	No	No	No	4 Well Water Below Ground
Billy Pennit	3/21/2010	12:03	No	No	No	No	No	No	2 Well Water Below Ground
Billy Pennit	4/11/2010	9:49	No	No	No	No	No	No	3 Well Water Below Ground
Billy Pennit	5/29/2010	11:33	No	No	No	No	No	No	5 Well Water Below Ground
Billy Pennit	6/11/2010	12:15	No	No	No	No	No	No	4 Well Water Below Ground
Billy Pennit	6/11/2010	12:15	No	No	No	No	No	No	4 Well Water Below Ground



**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.  
Berger A #2S (30-045-32985)  
Section 21 (P), Township 26N, Range 11W  
Closure Date: August 18, 2016

Photo 1: Berger A #2S



Photo 2: Berger A #2S





XTO Energy Inc.  
Berger A #2S (30-045-32985)  
Section 21 (P), Township 26N, Range 11W  
Closure Date: August 18, 2016

Photo #3: Berger A #2S



Photo #4: Berger A #2S

