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 April 3, 2017

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.

16308

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

NMOCD
MAR 26 2018
DISTRICT III

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

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 Road 3100 Aztec, New Mexico 87410
Facility or well name: Mountain Ute Gas Com N # 1
API Number: 30-045-29865 OCD Permit Number:
U/L or Qtr/Qtr A Section 10 Township 32N Range 14W County: San Juan
Center of Proposed Design: Latitude 36.92082 Longitude -108.28873 NAD: 83
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 Visable sidewalls, vaulted, automatic high-level shut off
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

* Release Confirmed Additional C-141 Required.

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 Four foot high, steel mesh field fence (hogwire) with pipe top rail

30

6.

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

☐ Screen ☐ Netting ☒ Other Expanded metal or solid vaulted top

☐ 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_2S, 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ 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 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	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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
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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure ~~Plan~~ (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** 3/30/18

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:** 3-12-2018

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

22.

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): Kurt Hoekstra Title: EHS Coordinator

Signature: Kurt Hoekstra Date: 3-15-2018

e-mail address: Kurt_Hoekstra@xtoenergy.com Telephone: 505-333-3100

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

Lease Name: Mountain Ute Gas Com N # 1
API No.: 30-045-29865
Description: Unit A, Section 10, Township 32N, Range 14W, 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 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: March 12th, 2018

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: March 12th, 2018

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
The below grade tank has been removed due to an integrity failure of the pit tank.

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 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	10	**0.00424 mg/kg**
BTEX	EPA SW-846 8021B or 8260B	50	**0.04404 mg/kg**
TPH	EPA 8015M	1000	**614.6 mg/kg**
Chloride	EPA Method 300	250	**83.9 mg/kg**

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 the integrity failure of the pit tank a release has been confirmed for this location.

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 was sampled and results were below NMOCD standards for this site XTO has Registered the below grade tank that will be installed into the existing cellar.

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 Mr. Cory Smith, and Ms. Vanessa Fields with the Aztec office of the OCD via email on February 27th, 2018; see attached email printout.

The surface owner shall be notified of XTO's proposal to close the BGT as per the approved closure plan.
The surface owner was notified on February 27th, 2018 Email has been approved as a means of surface owner notification to the BLM by Brandon Powell, NMOCD Aztec Office.

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 when the well is P & A'd.

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 will be backfilled to match these specifications when the registered BGT cellar is closed.

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.
The location will be reclaimed pursuant to per Tribal, BLM, OCD specifications

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 Tribal, BLM, OCD specifications**
    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 Tribal, BLM, OCD Specifications**
    vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **per Tribal, BLM, OCD specifications**
    viii. Photo documentation of the site reclamation. **attached**

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: Kurt Hoekstra
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3100
Facility Name: Mountain Ute Gas Com N # 1	Facility Type: Gas Well (Paradox)

Surface Owner: Tribal Trust or Indian Allotment	Mineral Owner	API No.: 30-045-29865

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	10	32N	14W	655	FNL	520	FEL	San Juan

Latitude 36.92082 **Longitude** -108.28873

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 5 BBL's	Volume Recovered: 4 BBL's
Source of Release: Pit Tank	Date and Hour of Occurrence: Time: Unknown	Date and Hour of Discovery: 2-26-2018 9:30 am.
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom? N/A	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* On 2-26-2018 at 9:30 am an XTO production foreman found water inside the pit tank cellar on the Mountain Ute Gas Com N # 1 location. A water truck was dispatched & recovered 4 barrels of produced water outside of tank. The spill was contained within the wood cellar and never left location. The site was then ranked according to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The site was ranked a 10 due to an estimated depth to groundwater of greater than 100 feet, greater than 1000 feet from a water source, and distance to an arroyo at 200 feet to 1000 feet. This set the closure standard to 1000 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken. *A release has been confirmed based on an integrity failure of the pit tank.

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 "Initial 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: Kurt Hoekstra	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: Kurt Hoekstra		
Title: EHS Coordinator	Approval Date:	Expiration Date:
E-mail Address: Kurt_Hoekstra@xtoenergy.com	Conditions of Approval:	Attached ☐
Date: 3-15-2018 Phone: 505-333-3100		

* Attach Additional Sheets If Necessary

#nCS1808940558

Hoekstra, Kurt

From:	Hoekstra, Kurt
Sent:	Tuesday, February 27, 2018 8:57 AM
To:	Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us); Gordon Hammond (ghammond@utemountain.org); 'sclow@utemountain.org'; (Randolph.Bayliss@state.nm.us)
Cc:	Morrow, Pete; Dawes, Thomas; Trujillo, Marcos; Woolley, Jeff; Weaver, John; Hixon, Logan; Christianson, Bruce; Rensink, Ryan; Barnhill, Matthew; Martin Nee (Martin_Nee@xtoenergy.com); Sam Montoya (Sam_Montoya@xtoenergy.com); Russell, John
Subject:	72 hour notice for BGT Closure at the Mtn Ute Gas Com N # 1

Mr. Smith, Ms. Fields, Mr. Hammond, and Mr. Clow
Please accept this email as the required 72 hour notification for BGT closure activities at the following well site:
Mtn Ute Gas Com N # 1 well site API # (30-045-29865) located in Section 10A, Township 31N, Range 14W, San Juan County, New Mexico.
This BGT is going to be closed due to an integrity failure of the tank. The approved closure plan only has been requested from Mr. Bayless in Santa Fe.
Work is tentatively scheduled for Friday March 2nd , 2018 at approximately 10:00 am.

Thank you for your time in regards to this matter.

Kurt Hoekstra
EHS Coordinator
XTO Energy
505-333-3202 Office
505-486-9543 Cell
Kurt_Hoekstra@xtoenergy.com
An **ExxonMobil Subsidiary**

XTO ENERGY a subsidiary of ExxonMobil

Report generated on 3/20/2018 1:33:45 PM

Division: Denver

Dates: 6/1/2008-3/19/2018

Type: RouteStop

Type Value: MOUNTAIN UTE GAS

Well Below Grade Tank Inspection

Route Name	StopName	Pumper	Foreman	Well Name	API Well Number	Section	Range	Township			
DEN NM Run 48	MOUNTAIN UTE GAS COM N 001	Medrano, Alonso	Morrow, Pete	MOUNTAIN UTE GC N 01	3004529865	10	14W	31N			

Inspector Name	Record Date	Inspection Time	Visible Liner Tears	Visible Liner Tears	Visible Tank Leak Overflow	Collection Of Surface Run	Visible Layer Oil	Visible Leak	Freeboard Est FT	Pit Location	Pit Type	Notes
dr	2/21/2009	08:56	No	No	No	Yes	No	No	5	Well Water	Below Ground	
dr	3/13/2009	08:00	No	No	No	Yes	No	No	5	Well Water	Below Ground	
dr	4/21/2009	10:20	No	No	No	Yes	No	No	5	Well Water	Below Ground	
dr	5/14/2009	12:00	No	No	No	Yes	No	No	5	Well Water	Below Ground	
dr	6/18/2009	01:22	No	No	No	Yes	No	No	5	Well Water	Below Ground	
dr	7/20/2009	08:30	No	No	No	Yes	No	No	4	Well Water	Below Ground	
dr	10/12/2009	02:15	No	No	No	Yes	No	No	4	Well Water	Below Ground	
dr	11/6/2009	01:11	No	No	No	Yes	No	No	4	Well Water	Below Ground	
mth	12/21/2009	12:22	No	No	No	Yes	No	No	4	Well Water	Below Ground	
mth	1/10/2010	12:03	No	No	No	Yes	No	No	4	Well Water	Below Ground	
mth	2/14/2010	12:22	No	No	No	Yes	No	No	4	Well Water	Below Ground	
mth	3/15/2010	02:09	No	No	No	Yes	No	No	4	Well Water	Below Ground	
mth	4/25/2010	01:07	No	No	No	No	No	No	6	Well Water	Below Ground	pit releved, new cellar.
mth	5/30/2010	01:36	No	No	No	No	No	No	6	Well Water	Below Ground	
mth	6/27/2010	01:41	No	No	No	No	No	No	6	Well Water	Below Ground	
mth	7/31/2010	14:14	No	No	No	No	No	No	6	Well Water	Below Ground	
mth	8/27/2010	16:21	No	No	No	No	No	No	6	Well Water	Below Ground	
mth	9/30/2010	14:11	No	No	No	No	No	No	6	Well Water	Below Ground	
mth	11/22/2010	12:38	No	No	No	No	No	No	6	Well Water	Below Ground	
mth	12/15/2010	12:07	No	No	No	No	No	No	6	Well Water	Below Ground	

Inspector Name	Record Date	Inspection Time	Visible Liner Tears	Visible Liner Tears	Visible Tank Leak Overflow	Collection Of Surface Run	Visible Layer Oil	Visible Leak	Freeboard Est FT	Pit Location	Pit Type	Notes	
mth	1/21/2011	13:44	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	2/15/2011	10:26	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	3/20/2011	13:50	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	4/29/2011	12:33	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	5/11/2011	13:27	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	6/17/2011	11:44	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	7/13/2011	13:15	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	8/18/2011	10:00	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	9/15/2011	13:11	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	10/12/2011	13:46	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	11/11/2011	11:52	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	12/2/2011	11:47	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	1/20/2012	12:32	No	No	No	No	No	No	5	Well Water	Below Ground		
mth	2/7/2012	13:24	No	No	No	No	No	No	5	Well Water	Below Ground		
mth	3/8/2012	12:21	No	No	No	No	No	No	6	Well Water	Below Ground		
mth	4/4/2012	11:31	No	No	No	No	No	No	6	Well Water	Below Ground		
Buster	5/2/2012	13:20	No	No	No	No	No	No	6	Well Water	Below Ground		
Buster	7/2/2012	13:35	No	No	No	No	No	No	6	Well Water	Below Ground		
Buster	4/1/2013	11:30	No	No	No	No	No	No	4	Well Water	Below Ground	0	
garrett	8/25/2015	11:00	No	No	No	No	No	No	4	Well Water	Below Ground	0	
garrett	9/29/2015	12:07	No	No	No	Yes	No	No	4	Well Water	Below Ground	0	
garrett	1/26/2016	12:00	No	No	No	Yes	No	No	4	Well Water	Below Ground	0	
garrett	6/30/2016	11:00	No	No	No	Yes	No	No	5	Well Water	Below Ground	0	
AM	11/8/2016	02:30	No	No	No	Yes	No	No	4	Well Water	Below Ground	0	
AM	2/10/2017	12:10	No	No	No	Yes	No	No	4	Well Water	Below Ground	0	
AM	3/8/2017	01:00	No	No	No	Yes	No	No	5	Well Water	Below Ground	CALL WATER TRUCK	
AM	4/5/2017	08:20	No	No	No	No	No	No	2	Well Water	Below Ground		
AM	5/1/2017	01:00	No	No	No	No	No	No	4	Well Water	Below Ground		
AM	6/15/2017	11:20	No	No	No	No	No	No	5	Well Water	Below Ground		
AM	7/6/2017	01:20	No	No	No	No	No	No	4	Well Water	Below Ground	COLL WATER TRUCK AM	
AM	8/3/2017	12:20	No	No	No	No	No	No	2	Well Water	Below Ground		
AM	9/6/2017	01:30	No	No	No	No	No	No	5	Well Water	Below Ground		
AM	10/4/2017	01:40	No	No	No	No	No	No	3	Well Water	Below Ground		
AM	11/6/2017	12:40	No	No	No	No	No	No	3	Well Water	Below Ground		
AM	12/6/2017	01:45	No	No	No	No	No	No	4	Well Water	Below Ground		
AM	1/2/2018	01:40	No	No	No	No	No	No	4	Well Water	Below Ground		
AM	2/7/2018	01:15	No	No	No	No	No	No	5	Well Water	Below Ground		

ANALYTICAL REPORT

March 12, 2018

XTO Energy - San Juan Division

Sample Delivery Group:	L974596
Samples Received:	03/03/2018
Project Number:	30-045-29865
Description:	Mountain Ute GC N#1
Site:	MOUNTAIN UTE GC N#1
Report To:	Kurt Hoekstra 382 County Road 3100 Aztec, NM 87410

Entire Report Reviewed By: Daphne R Richards

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.

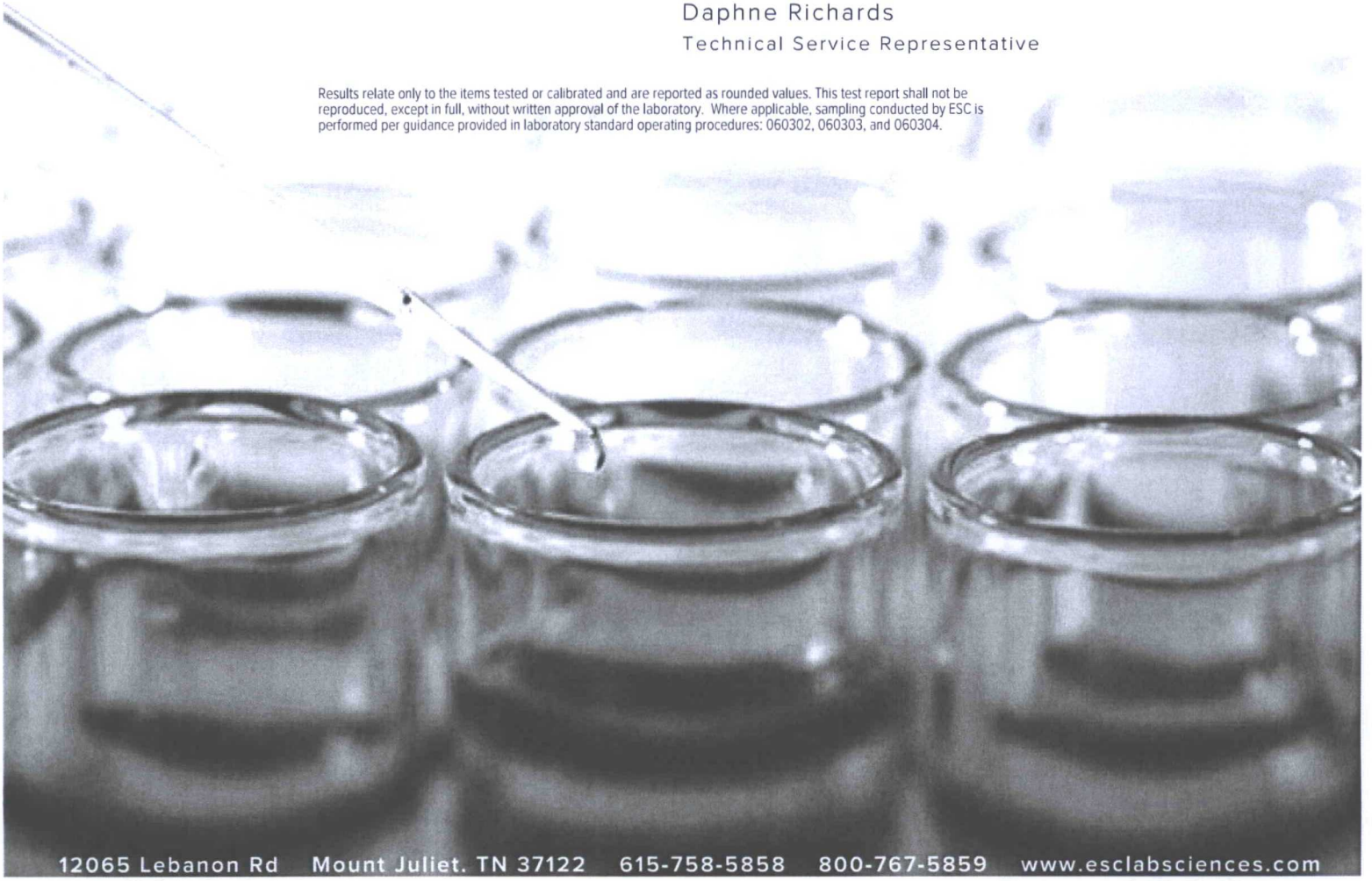

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

MTN UTE GC N#1 L974596-01 Solid

Collected by	Collected date/time	Received date/time
Kurt Hoekstra	03/02/18 12:15	03/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1082552	1	03/09/18 14:30	03/09/18 14:42	JD
Wet Chemistry by Method 9056A	WG1080320	1	03/05/18 14:47	03/05/18 19:17	MAJ
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1080524	25	03/03/18 16:46	03/05/18 18:06	BMB
Volatile Organic Compounds (GC) by Method 8021B	WG1080816	1	03/03/18 16:46	03/06/18 17:42	BMB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1082350	5	03/08/18 11:41	03/09/18 17:06	DMW

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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 R Richards

Daphne Richards
Technical Service Representative

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.7		1	03/09/2018 14:42	WG1082552

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	83.9		11.9	1	03/05/2018 19:17	WG1080320

Volatile Organic Compounds (GC) by Method 8015D/8021B/GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.00424		0.000597	1	03/06/2018 17:42	WG1080816
TPH (GC/FID) Low Fraction	11.6		2.99	25	03/05/2018 18:06	WG1080524
Toluene	0.00836		0.00597	1	03/06/2018 17:42	WG1080816
Ethylbenzene	0.00224	B	0.000597	1	03/06/2018 17:42	WG1080816
Total Xylene	0.0292		0.00179	1	03/06/2018 17:42	WG1080816
(S) a,a,a-Trifluorotoluene(FID)	*98.7*		*77.0-120*		*03/05/2018 18:06*	WG1080524
(S) a,a,a-Trifluorotoluene(PID)	*98.4*		*75.0-128*		*03/06/2018 17:42*	WG1080816

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	603	J3 V	23.9	5	03/09/2018 17:06	WG1082350
C28-C40 Oil Range	ND		23.9	5	03/09/2018 17:06	WG1082350
(S) o-Terphenyl	*99.0*		*18.0-148*		*03/09/2018 17:06*	WG1082350

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

Method Blank (MB)

(MB) R3292138-1 03/09/18 14:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

L974572-05 Original Sample (OS) • Duplicate (DUP)

(OS) L974572-05 03/09/18 14:42 • (DUP) R3292138-3 03/09/18 14:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	90.6	91.2	1	0.623		5

Laboratory Control Sample (LCS)

(LCS) R3292138-2 03/09/18 14:42

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

Method Blank (MB)

(MB) R3290768-1 03/05/18 18:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Chloride	1.57	J	0.795	10.0

L974655-02 Original Sample (OS) • Duplicate (DUP)

(OS) L974655-02 03/05/18 19:34 • (DUP) R3290768-4 03/05/18 19:42

Analyte	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chloride	1270	1070	1	16.5	J3	15

L974687-01 Original Sample (OS) • Duplicate (DUP)

(OS) L974687-01 03/06/18 00:26 • (DUP) R3290768-8 03/06/18 00:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chloride	1540	1600	5	3.80		15

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

(LCS) R3290768-2 03/05/18 18:43 • (LCSD) R3290768-3 03/05/18 18:51

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Chloride	200	198	197	98.8	98.6	80.0-120			0.158	15

L974668-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L974668-06 03/05/18 20:51 • (MS) R3290768-5 03/05/18 20:59 • (MSD) R3290768-6 03/05/18 21:08

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	512	52.4	605	597	108	106	1	80.0-120			1.30	15

Method Blank (MB)

(MB) R3291303-5 03/05/18 12:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*

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

(LCS) R3291303-3 03/05/18 11:43 • (LCSD) R3291303-4 03/05/18 12:06

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	4.84	4.97	87.9	90.3	70.0-136			2.66	20
(S) a,a,a-Trifluorotoluene(FID)				*99.7*	*100*	*77.0-120*				

Method Blank (MB)

(MB) R3291264-5 03/06/18 11:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000178	J	0.000120	0.000500
Toluene	0.000389	J	0.000150	0.00500
Ethylbenzene	0.000212	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
(S) α,α,α-Trifluorotoluene(PID)	*105*			*75.0-128*

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

(LCS) R3291264-1 03/06/18 09:54 • (LCSD) R3291264-2 03/06/18 10:17

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	0.0522	0.0523	104	105	71.0-121			0.148	20
Toluene	0.0500	0.0515	0.0508	103	102	72.0-120			1.37	20
Ethylbenzene	0.0500	0.0507	0.0510	101	102	76.0-121			0.706	20
Total Xylene	0.150	0.150	0.152	100	101	75.0-124			1.06	20
(S) α,α,α-Trifluorotoluene(PID)				*102*	*103*	*75.0-128*				

L974613-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L974613-01 03/06/18 18:04 • (MS) R3291264-6 03/06/18 19:33 • (MSD) R3291264-7 03/06/18 19:55

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	0.000661	0.0108	0.0180	20.2	34.7	1	10.0-146		J3	50.3	29
Toluene	0.0500	ND	0.0282	0.0343	56.5	68.6	1	10.0-143			19.4	30
Ethylbenzene	0.0500	0.00726	0.0106	0.0126	6.60	10.8	1	10.0-147	J6		17.9	31
Total Xylene	0.150	0.0857	0.236	0.265	100	119	1	10.0-149	J5 J6	J5 J6	11.5	30
(S) α,α,α-Trifluorotoluene(PID)					*96.0*	*96.4*		*75.0-128*				

Method Blank (MB)

(MB) R3292066-1 03/09/18 16:20

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	*97.5*			*18.0-148*

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

(LCS) R3292066-2 03/09/18 16:36 • (LCSD) R3292066-3 03/09/18 16:52

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	50.0	42.4	41.3	84.8	82.6	50.0-150			2.59	20
(S) o-Terphenyl				*96.9*	*95.5*	*18.0-148*				

L974596-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L974596-01 03/09/18 17:06 • (MS) R3292066-4 03/09/18 17:21 • (MSD) R3292066-5 03/09/18 17:35

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 %
C10-C28 Diesel Range	59.7	603	699	ND	161	0.000	5	50.0-150	V	J3 V	200	20
(S) o-Terphenyl					*125*	*110*		*18.0-148*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a 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.

L974596 1090

XTO ENERGY
Western Division

Quote Number	Page ___ of ___	
XTO Contact: Kurt	XTO Contact Phone #: 505-486-9543	
Email Results to: Kurt		
Well Site/Location: Mountain Ute GC N#1	API Number: 30-045-29865	Saturday Delivery (Y) N
Collected By: Kurt	Samples on Ice (Y) N	Turnaround: X Standard; ___ Next Day; ___ Two Day; ___ Three Day; ___ Same Day; Date Needed ___
Company: XTO	Test Reason: BGT Closure	
Signature: Kurt Hutchins	Gray Areas for Lab Use Only!	

Analysis/Container: TPH 8015 DRO, GRO, ORO; BTEX 8021; CHLORIDE

Information: G012

Office Abbreviations
Farmington = FAR
Durango = DUR
Bakken = BAK
Raton = RAT
Piceance = PC
Roosevelt = RSV
La Barge = LB
Orangeville = OV

Sample ID	Sample Name	Media	Date	Time	Preservative	No. of Conts.	Sample Number
MTN UTE GC N#1	BGT CELLAR	S	3-2	12:15	ON ICE	1 JAR	01

Media: Filter = F Soil = S Wastewater = WW Groundwater = GW Drinking Waster = DW Sludge = SG Surface Water = SW Air = A Drill Mud = DM Other = OT

Relinquished By: (Signature) Kurt Hutchins	Date: 3-2-18	Time: 2:00	Received By: (Signature)	Number of Bottles	Sample Condition
Relinquished By: (Signature)	Date:	Time:		Temperature: 2.8°	Other Information
Relinquished By: (Signature)	Date:	Time:	Received for Lab by: (Signature) B. Shuey	Date: 3.3.18 Time: 945	

Comments: 6127 6749 4468

* Sample ID will be the office and sampler-date-military time FARJM-MMDDYY-1200

ESC LAB SCIENCES
Cooler Receipt Form

Client: XTUR NM	SDG#	L974596
Cooler Received/Opened On: 3/3 /18	Temperature:	2.0
Received By: **Branford Shaw**		
Signature:		

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

January 27, 2015

Mr. Cory Smith
Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, New Mexico 87410

Email: cory.smith@state.nm.us
Phone (505) 334-6178 Ext 115

RE: VARIANCE REQUEST FOR 19.15.17 NMAC TABLE I AND TABLE II

Mr. Smith,

Please accept this letter as a variance request as outlined in 19.15.17.15(A) NMAC. XTO Energy would like to request the replacement of USEPA Method 418.1 for the analysis of Total Petroleum Hydrocarbons (TPH) for USEPA Method 8015M, measuring carbon ranges C6-C36, for all sampling associated with closures and confirmations samples in relation to 19.15.17 NMAC, both in Table I and Table II (2103) and the 'pit rule' passed in 2008.

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_8 through C_{40}. (*Reference: American Petroleum Institute*). The attached table demonstrates the carbon ranges, and the typical hydrocarbon products that can be found in those ranges. As you can see, lube oil ranges from C_{28}-C_{35}. Analytical Method USEPA 418.1 extends past lube oils from C_{35} through C_{40}. 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_6-C_{10} for GRO, C_{10}-C_{28} for DRO, and C_{28}-C_{36} 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_6, 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_{36}-C_{40}, 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. With your acceptance of this variance request, XTO Energy will begin utilizing USEPA Method 8015M in place of USEPA Method 418.1 for all sampling activities associated with 19.15.17 NMAC, both from the rules passed in 2008 and 2013.

Respectfully Submitted,

James McDaniel, CHMM #15676
EH&S Supervisor
XTO Energy, Inc.
Western Division

Carbon Ranges of Typical Hydrocarbons

Hydrocarbon	Carbon Range
Condensate	C2-C12
Aromatics	C5-C7
Gasoline	C7-C11
Kerosene	C6-C16
Diesel Fuel	C8-C21
Fuel Oil #1	C9-C16
Fuel Oil #2	C11-C20
Heating Oil	C14-C20
Lube Oil	C28-C35