

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

16109
45-30545

- 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: McKenzie A 2
API Number: 30-045-30545 OCD Permit Number: _____
U/L or Qtr/Qtr B Section 9 Township 30N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.83153 Longitude -108.10083 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 Visible sidewalls, vaulted, automatic high-level shut off
Liner type: Thickness _____ mil HDPE PVC Other _____

OIL CONS. DIV DIST. 3

OCT 23 2017

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 height, steel mesh field fence (hogwire) with pipe top railing

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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.
Variations 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.*

<u>General siting</u>	
<u>Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.</u> - <input type="checkbox"/> NM Office of the State Engineer - iWATERS database search; <input type="checkbox"/> USGS; <input type="checkbox"/> Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
<u>Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.</u> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No
<u>Below Grade Tanks</u>	
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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
<u>Temporary Pit using Low Chloride Drilling Fluid</u> (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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No

<p>Within 100 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><u>Temporary Pit Non-low chloride drilling fluid</u></p>	
<p>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).</p> <ul style="list-style-type: none"> - Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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;</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><u>Permanent Pit or Multi-Well Fluid Management Pit</u></p>	
<p>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).</p> <ul style="list-style-type: none"> - Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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.</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input type="checkbox"/> 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 H₂S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13. **Proposed Closure:** 19.15.17.13 NMAC

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

- Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fluid Management Pit
 Alternative
- Proposed Closure Method: Waste Excavation and Removal
 Waste Removal (Closed-loop systems only)
 On-site Closure Method (Only for temporary pits and closed-loop systems)
 In-place Burial On-site Trench Burial
 Alternative Closure Method

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

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

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

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

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

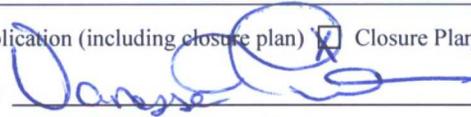
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ 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: 12/7/2017

Title: Environmental Specialist OCD Permit Number: _____

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

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

Closure Completion Date: 9/29/17

20. **Closure Method:**

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

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

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

On-site Closure Location: Latitude _____ Longitude _____ NAD: 1927 1983

Operator Closure Certification:

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

Name (Print): Logan Hixon Title: EHS Coordinator

Signature:  Date: September 25, 2017

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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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

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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**Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application**

- Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
 Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
 Modification to an existing permit
 Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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: MCKENZIE A #2
API Number: 30-045-30545 OCD Permit Number: _____
U/L or Qtr/Qtr B Section 09 Township 30N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.83153 Longitude 108.10083 NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

2.
 Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: Drilling Workover
 Permanent Emergency Cavitation P&A
 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.
 Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
 Drying Pad Above Ground Steel Tanks Haul-off Bins Other _____
 Lined Unlined Liner type: Thickness _____ mil LLDPE HDPE PVC Other _____
Liner Seams: Welded Factory Other _____

4.
 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 Visible sidewalls, vaulted, automatic high-level shut off, no liner
Liner type: Thickness _____ mil HDPE PVC Other _____

5.
 Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6. **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 height, steel mesh field fence (hogwire) with pipe top railing

7. **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)

8. **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 19.15.3.103 NMAC

9. **Administrative Approvals 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:

Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10. **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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

11.

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: _____

12.

Closed-loop Systems 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.

- Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- Siting Criteria Compliance Demonstrations (only for on-site closure) - 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: _____

Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

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 H₂S, 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

14.

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 Closed-loop System
 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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 F 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 I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?

Yes (If yes, please provide the information below) No

Required for impacted areas which will not be used for future service and operations:

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 I of 19.15.17.13 NMAC

Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

18.

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 F of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

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): Kim Champlin Title: Environmental Representative

Signature: *Kim Champlin* Date: 11/18/08

e-mail address: kim_champlin@xtoenergy.com Telephone: (505) 333-3100

20.

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

OCD Representative Signature: *Randee Foyjies* Approval Date: 05Sep17

Title: Hydrologist OCD Permit Number: na

21.

Closure Report (required within 60 days of closure completion): Subsection K of 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: _____

22.

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.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?

- Yes (If yes, please demonstrate compliance to the items below)
- No

Required for impacted areas which will not be used for future service and operations:

- Site Reclamation (Photo Documentation)
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique

24.

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)
- 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

25.

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

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

Form C-141
Revised August 8, 2011

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

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: McKenzie A 2	Facility Type: Gas Well

Surface Owner: Private	Mineral Owner	API No.: 30-045-30545
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	9	30N	12W	1110	FNL	1790	FEL	San Juan

Latitude 36.83153 Longitude -108.10083

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 22 BBL's	Volume Recovered: 20 BBL's
Source of Release: Pit Tank	Date and Hour of Occurrence: Time: Unknown	Date and Hour of Discovery: September 5, 2017 @ 1300
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? N/A	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.* On September 5, 2017 an XTO lease operator noticed fluid in the cellar of the BGT. Approximately 22 bbls of produced water was released into the pit cellar. Of the approximate 22 bbls released, 20 bbls were recovered. It was found that the pit tank had an integrity failure and leaked produced water into the pit tank cellar. The site was then ranked according to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The site was ranked a 30 due to an estimated depth to groundwater of greater than 50 feet but less than 100 feet, and distance to a drainage of less than 200'. This set the closure standard to 100 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken. *A release has been confirmed at this site.

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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Logan Hixon	Approved by Environmental Specialist:	
Title: EHS Coordinator	Approval Date:	Expiration Date:
E-mail Address: Logan_Hixon@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/25/2017	Phone: 505-333-3100	

* Attach Additional Sheets If Necessary

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

Lease Name: McKenzie A 2

API No.: 30-045-30545

Description: Unit B, Section 9, Township 30N, Range 12W, 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 September 29, 2017
2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
Closure Date is September 29, 2017
3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
Required C-144 Form is attached to this document.
4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
 - Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B
 - Soil contaminated by exempt petroleum hydrocarbons
 - Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes
 - Basin Disposal Permit No. NM01-005
 - Produced water**All liquids and sludge were removed from the tank prior to closure activities.**
5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
XTO has removed the below grade tank, and will dispose of it at a division approved facility, or recycle, reclaim or reuse it in a manner that is approved by the division.

6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose
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	0.2	< 0.10 mg/kg
BTEX	EPA SW-846 8021B or 8260B	50	< 0.40 mg/kg
TPH	EPA 8015M	100	340.20 mg/kg
Chloride	EPA Method 300	250	442 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 excavation was backfilled using compacted, non-waste containing earthen material..

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 September 6, 2017; see attached email printout.

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

The surface owner was notified on September 6, 2017

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 has been backfilled to match these specifications.
13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.
The location will be reclaimed pursuant to per landowner 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 landowner 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 landowner Specifications**
 - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **per landowner specifications**
 - viii. Photo documentation of the site reclamation. **attached**



Analytical Report

Report Summary

Client: XTO Energy Inc.

Chain Of Custody Number:

Samples Received: 9/8/2017 9:58:00AM

Job Number: 98031-0528

Work Order: P709012

Project Name/Location: Mckenzie A #2

Report Reviewed By:

Date: 9/12/17

Walter Hinchman, Laboratory Director

Date: 9/12/17

Tim Cain, Quality Assurance Officer

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



XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckcnzie A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BGT Composite	P709012-01A	Soil	09/08/17	09/08/17	Glass Jar, 4 oz.

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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com
laboratory@envirotech-inc.com



XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckenzie A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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**BGT Composite
P709012-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		96.2 %		50-150	1736020	09/08/17	09/11/17	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1736020	09/08/17	09/11/17	EPA 8015D	
Diesel Range Organics (C10-C28)	67.2	25.0	mg/kg	1	1736021	09/08/17	09/08/17	EPA 8015D	
Oil Range Organics (C28-C40+)	273	50.0	mg/kg	1	1736021	09/08/17	09/08/17	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.1 %		50-150	1736020	09/08/17	09/11/17	EPA 8015D	
<i>Surrogate: n-Nonane</i>		95.9 %		50-200	1736021	09/08/17	09/08/17	EPA 8015D	
Anions by 300.0									
Chloride	442	20.0	mg/kg	1	1737002	09/11/17	09/11/17	EPA 300.0	

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckenzic A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1736020 - Purge and Trap EPA 5030A

Blank (1736020-BLK1)			Prepared: 08-Sep-17 Analyzed: 11-Sep-17							
Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	7.87		"	8.00		98.4	50-150			

LCS (1736020-BS1)			Prepared: 08-Sep-17 Analyzed: 11-Sep-17							
Benzene	5.05	0.10	mg/kg	5.00	ND	101	70-130			
Toluene	4.96	0.10	"	5.00	ND	99.3	70-130			
Ethylbenzene	4.96	0.10	"	5.00	ND	99.2	70-130			
p,m-Xylene	9.86	0.20	"	10.0	ND	98.6	70-130			
o-Xylene	4.83	0.10	"	5.00	ND	96.7	70-130			
Total Xylenes	14.7	0.10	"	15.0	ND	98.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.89		"	8.00		98.7	50-150			

Matrix Spike (1736020-MS1)			Source: P709011-01		Prepared: 08-Sep-17 Analyzed: 11-Sep-17					
Benzene	5.17	0.10	mg/kg	5.00	ND	103	54.3-133			
Toluene	5.06	0.10	"	5.00	ND	101	61.4-130			
Ethylbenzene	5.06	0.10	"	5.00	ND	101	61.4-133			
p,m-Xylene	10.1	0.20	"	10.0	ND	101	63.3-131			
o-Xylene	4.94	0.10	"	5.00	ND	98.8	63.3-131			
Total Xylenes	15.0	0.10	"	15.0	ND	100	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.90		"	8.00		98.7	50-150			

Matrix Spike Dup (1736020-MSD1)			Source: P709011-01		Prepared: 08-Sep-17 Analyzed: 11-Sep-17					
Benzene	5.14	0.10	mg/kg	5.00	ND	103	54.3-133	0.429	20	
Toluene	5.04	0.10	"	5.00	ND	101	61.4-130	0.364	20	
Ethylbenzene	5.04	0.10	"	5.00	ND	101	61.4-133	0.481	20	
p,m-Xylene	10.0	0.20	"	10.0	ND	100	63.3-131	0.453	20	
o-Xylene	4.92	0.10	"	5.00	ND	98.4	63.3-131	0.403	20	
Total Xylenes	14.9	0.10	"	15.0	ND	99.6	63.3-131	0.437	20	
Surrogate: 4-Bromochlorobenzene-PID	7.83		"	8.00		97.9	50-150			

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckenzie A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1736020 - Purge and Trap EPA 5030A										
Blank (1736020-BLK1)					Prepared: 08-Sep-17 Analyzed: 11-Sep-17					
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.70		"	8.00		96.2	50-150			
LCS (1736020-BS1)					Prepared: 08-Sep-17 Analyzed: 11-Sep-17					
Gasoline Range Organics (C6-C10)	59.4	20.0	mg/kg	60.9		97.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.92		"	8.00		98.9	50-150			
Matrix Spike (1736020-MS1)					Source: P709011-01 Prepared: 08-Sep-17 Analyzed: 11-Sep-17					
Gasoline Range Organics (C6-C10)	59.7	20.0	mg/kg	60.9	ND	98.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.79		"	8.00		97.4	50-150			
Matrix Spike Dup (1736020-MSD1)					Source: P709011-01 Prepared: 08-Sep-17 Analyzed: 11-Sep-17					
Gasoline Range Organics (C6-C10)	57.7	20.0	mg/kg	60.9	ND	94.8	70-130	3.32	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		"	8.00		95.1	50-150			

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckenzie A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Notes
Batch 1736021 - DRO Extraction EPA 3570										
Blank (1736021-BLK1)				Prepared & Analyzed: 08-Sep-17						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0	"							
Surrogate: n-Nonane	48.7		"	50.0		97.5	50-200			
LCS (1736021-BS1)				Prepared & Analyzed: 08-Sep-17						
Diesel Range Organics (C10-C28)	453	25.0	mg/kg	500	ND	90.6	38-132			
Surrogate: n-Nonane	47.6		"	50.0		95.1	50-200			
Matrix Spike (1736021-MS1)				Source: P709011-01		Prepared & Analyzed: 08-Sep-17				
Diesel Range Organics (C10-C28)	467	25.0	mg/kg	500	ND	93.5	38-132			
Surrogate: n-Nonane	47.4		"	50.0		94.8	50-200			
Matrix Spike Dup (1736021-MSD1)				Source: P709011-01		Prepared & Analyzed: 08-Sep-17				
Diesel Range Organics (C10-C28)	476	25.0	mg/kg	500	ND	95.2	38-132	1.88	20	
Surrogate: n-Nonane	48.2		"	50.0		96.4	50-200			

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckenzie A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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Anions by 300.0 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1737002 - Anion Extraction EPA 300.0										
Blank (1737002-BLK1)				Prepared & Analyzed: 11-Sep-17						
Chloride	ND	20.0	mg/kg							
LCS (1737002-BS1)				Prepared & Analyzed: 11-Sep-17						
Chloride	255	20.0	mg/kg	250		102	90-110			
Matrix Spike (1737002-MS1)				Source: P709012-01 Prepared & Analyzed: 11-Sep-17						
Chloride	713	20.0	mg/kg	250	442	108	80-120			
Matrix Spike Dup (1737002-MSD1)				Source: P709012-01 Prepared & Analyzed: 11-Sep-17						
Chloride	704	20.0	mg/kg	250	442	105	80-120	1.28	20	

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XTO Energy Inc. 382 CR 3100 Aztec NM, 87410	Project Name: Mckenzie A #2 Project Number: 98031-0528 Project Manager: Otto Naegele	Reported: 12-Sep-17 15:45
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Notes and Definitions

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

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Hixon, Logan

From: Hixon, Logan
Sent: Wednesday, September 06, 2017 6:40 AM
To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; BRANDON POWELL (brandon.powell@state.nm.us)
Cc: Dawes, Thomas (Thomas_Dawes@xtoenergy.com); Weaver, John (John_Weaver@xtoenergy.com); Morrow, Pete (Pete_Morrow@xtoenergy.com); McDaniel, James (James_McDaniel@xtoenergy.com); Hoekstra, Kurt; Naegele, Otto (Otto_Naegele@xtoenergy.com); Montoya, Sam (Sam_Montoya@xtoenergy.com); Nee, Martin (Martin_Nee@xtoenergy.com); Gusdorf, Matthew; Logan, Michael (Michael_Logan@xtoenergy.com)
Subject: BGT Closure: McKenzie A 2 Leak
Attachments: 2017-9-5 Approved Permit.pdf

All,

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

-McKenzie A 2 (API 30-045-30545) located in Section 9 (B), Township 30N, Range 12W, and San Juan County, New Mexico.

On September 5, 2017 it was found there was a leak in the below grade tank allowing produced water to be contained within the cellar. Approximately 22 bbls of produced water was released and of the 22 bbls released 20 bbls were recovered. This BGT is being closed and brought above grade due to not meeting sighting criteria for a pit be placed back in the same spot.

The closure plan was approved on September 5, 2017.

Work is tentatively scheduled for Friday September 8, 2017 at approximately 0900 MST.

If there is any unforeseen delays in closure activities with this BGT and it will not be initiated within a week's time (September 15, 2017), a follow up email notification will be made for the change.

The surface owner was notified via certified mail.

Thank you and have a good day

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

Thank You!

EHS Coordinator

Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 | Cell: 505-386 8018 |
Home: 505-320-6133 | Logan_Hixon@xtoenergy.com
XTO ENERGY INC., an ExxonMobil subsidiary

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Logan Hixon
EHS Coordinator
XTO Energy Inc.
382 Road 3100
Aztec, NM 87410
(505)333-3683
(505)386-8018 Cell

September 6, 2017

ATTN: Christina Corporation
3109 Palomas Cir
Farmington, NM 87401

Re: McKenzie A 2

Unit B, Section 9, Township 30N, Range 12W, San Juan County, New Mexico

Greetings,

This submittal is pursuant to Rule 19.15.17.13 requiring operators to notify surface owners of the closure of a below grade tank pit. XTO Energy, Inc. (XTO) is hereby providing written documentation of our proposal to close the below grade tank pit associated with the above mentioned well site by excavation and removal.

Should you have questions or require additional information, please feel free to contact me at your convenience at (505) 333-3100. Thank you for your time in regards to this matter.

Respectfully Submitted,

A handwritten signature in black ink that reads 'Logan Hixon'.

Logan Hixon

EHS Coordinator
XTO Energy, Inc.
Western Division

Inspector Name	Stop Name	Record Date	Inspection Time	Foreman	Well Name	AP# Well Number	Section	Range	Township	Visible Tank	Leak Overflow	Tars	Visible Liner	MCKENZIE A 02	300453045	Collection Of	Oil	Visible Layer	Leak	Visible	Freeboard	Est FT	Pit Location	Pit Type	Notes
mb	8/20/2008	02:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
mb	9/15/2008	10:30	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
mb	10/25/2008	10:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	11/14/2008	16:30	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	1/28/2008	12:30	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	1/29/2008	14:10	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	2/8/2008	10:30	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	3/1/2008	10:45	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	4/1/2008	12:40	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	5/24/2008	11:25	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	11/6/2008	13:45	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SD	3/29/2010	13:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SCOTT JOHNSON	4/28/2010	13:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SCOTT JOHNSON	6/22/2010	13:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SCOTT JOHNSON	10/28/2010	13:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SCOTT JOHNSON	11/19/2010	13:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
SCOTT JOHNSON	12/21/2010	13:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	5	0	Well Water Pit	Below Ground	0
mg	4/28/2011	08:56	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
mg	5/18/2011	08:56	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
mg	6/6/2011	08:56	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
mg	7/7/2011	12:22	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
mg	8/11/2011	12:22	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
mg	9/28/2011	12:22	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
mg	9/28/2011	08:56	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
mg	12/10/2011	12:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
mg	1/8/2012	12:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
mg	2/28/2012	12:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
mg	3/19/2012	12:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
gf	5/30/2012	03:10	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
gf	10/23/2012	08:05	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
jm	10/1/2015	08:52	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
jm	11/13/2015	12:01	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
jm	1/5/2016	12:39	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
B.S.	2/2/2016	14:43	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	3/1/2016	13:23	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0
B.S.	4/4/2016	10:13.23	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	5/1/2016	11:47	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	6/1/2016	12:23	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	7/5/2016	10:42	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	8/2/2016	14:00	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	9/1/2016	12:03	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	3	0	Well Water Pit	Below Ground	0
B.S.	10/2/2016	08:43	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	4	0	Well Water Pit	Below Ground	0

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 C₈ through C₄₀. (*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 C₂₈-C₃₅. Analytical Method USEPA 418.1 extends past lube oils from C₃₅ through C₄₀. 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 C₆-C₁₀ for GRO, C₁₀-C₂₈ for DRO, and C₂₈-C₃₆ for extended analysis. This information was provided by Environmental Science Corporation Laboratories. As the information demonstrates, the 8015M analytical method reports as low as C₆, 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, C₃₆-C₄₀, 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



