

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
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
July 21, 2008

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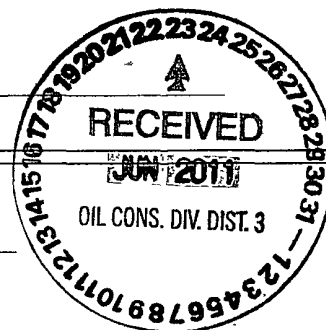
**Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application**

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
Existing BGT ☒ 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: <u>XTO Energy, Inc.</u> OGRID #: <u>5380</u>	
Address: <u>#382 County Road 3100, Aztec, NM 87410</u>	
Facility or well name: <u>Canyon # 17</u>	
API Number: <u>30-045-21508</u> OCD Permit Number: _____	
U/L or Qtr/Qtr <u>A</u> Section <u>25</u> Township <u>25N</u> Range <u>11W</u> County: <u>San Juan</u>	
Center of Proposed Design: Latitude <u>36.37701</u> Longitude <u>107.94876</u> NAD: <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983	
Surface Owner: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Tribal Trust or Indian Allotment	
2.	
<input type="checkbox"/> Pit: Subsection F or G of 19.15.17.11 NMAC	
Temporary: <input type="checkbox"/> Drilling <input type="checkbox"/> Workover	
<input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input type="checkbox"/> Cavitation <input type="checkbox"/> P&A	
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
<input type="checkbox"/> String-Reinforced	
Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____	
3.	
<input type="checkbox"/> Closed-loop System: Subsection H of 19.15.17.11 NMAC	
Type of Operation: <input type="checkbox"/> P&A <input type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)	
<input type="checkbox"/> Drying Pad <input type="checkbox"/> Above Ground Steel Tanks <input type="checkbox"/> Haul-off Bins <input type="checkbox"/> Other _____	
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____	
4.	
<input checked="" type="checkbox"/> Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume: <u>120</u> bbl Type of fluid: <u>Produced Water</u>	
Tank Construction material: <u>Steel</u>	
<input type="checkbox"/> Secondary containment with leak detection <input type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
<input type="checkbox"/> Visible sidewalls and liner <input type="checkbox"/> Visible sidewalls only <input checked="" type="checkbox"/> Other <u>Visible sidewalls, vaulted, automatic high-level shut off, no liner</u>	
Liner type: Thickness _____ mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
5.	
<input type="checkbox"/> 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.	<p>Fencing: Subsection D of 19.15.17.11 NMAC (<i>Applies to permanent pits, temporary pits, and below-grade tanks</i>)</p> <p><input type="checkbox"/> Chain link, six feet in height, two strands of barbed wire at top (<i>Required if located within 1000 feet of a permanent residence, school, hospital, institution or church</i>)</p> <p><input type="checkbox"/> Four foot height, four strands of barbed wire evenly spaced between one and four feet</p> <p><input checked="" type="checkbox"/> Alternate. Please specify <u>Four foot height, steel mesh field fence (hogwire) with pipe top railing</u></p>																				
7.	<p>Netting: Subsection E of 19.15.17.11 NMAC (<i>Applies to permanent pits and permanent open top tanks</i>)</p> <p><input type="checkbox"/> Screen <input type="checkbox"/> Netting <input checked="" type="checkbox"/> Other <u>Expanded metal or solid vaulted top</u></p> <p><input type="checkbox"/> Monthly inspections (If netting or screening is not physically feasible)</p>																				
8.	<p>Signs: Subsection C of 19.15.17.11 NMAC</p> <p><input type="checkbox"/> 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers</p> <p><input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC</p>																				
9.	<p>Administrative Approvals and Exceptions:</p> <p>Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</p> <p>Please check a box if one or more of the following is requested, if not leave blank:</p> <p><input type="checkbox"/> Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.</p> <p><input type="checkbox"/> Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</p>																				
10.	<p>Siting Criteria (regarding permitting): 19.15.17.10 NMAC</p> <p>Instructions: <i>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.</i></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 85%; vertical-align: top;"> <p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p style="margin-left: 20px;">- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p> </td> <td style="width: 15%; text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <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> <p style="margin-left: 20px;">- Topographic map; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>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>)</p> <p style="margin-left: 20px;">- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA </td> </tr> <tr> <td style="vertical-align: top;"> <p>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>)</p> <p style="margin-left: 20px;">- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA </td> </tr> <tr> <td style="vertical-align: top;"> <p>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.</p> <p style="margin-left: 20px;">- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>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.</p> <p style="margin-left: 20px;">- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within 500 feet of a wetland.</p> <p style="margin-left: 20px;">- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within the area overlying a subsurface mine.</p> <p style="margin-left: 20px;">- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within an unstable area.</p> <p style="margin-left: 20px;">- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> <tr> <td style="vertical-align: top;"> <p>Within a 100-year floodplain.</p> <p style="margin-left: 20px;">- FEMA map</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </td> </tr> </table>	<p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <p style="margin-left: 20px;">- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<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> <p style="margin-left: 20px;">- Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. 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(<i>Applies to permanent pits</i>)</p> <p style="margin-left: 20px;">- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	<p>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.</p> <p style="margin-left: 20px;">- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>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.</p> <p style="margin-left: 20px;">- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Within 500 feet of a wetland.</p> <p style="margin-left: 20px;">- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Within the area overlying a subsurface mine.</p> <p style="margin-left: 20px;">- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Within an unstable area.</p> <p style="margin-left: 20px;">- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Within a 100-year floodplain.</p> <p style="margin-left: 20px;">- FEMA map</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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<p>Within a 100-year floodplain.</p> <p style="margin-left: 20px;">- FEMA map</p>	<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 NMAC
☐ 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 indentify 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

☐ Yes ☐ No
☐ 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

☐ 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 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 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 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

☐ 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 500 feet of a wetland.

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

☐ 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

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: 01/02/2009

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: [Signature] Approval Date: 2/15/11

Title: Environmental Engineer Compliance Officer OCD Permit Number: 81912011

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: 3/18/11

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

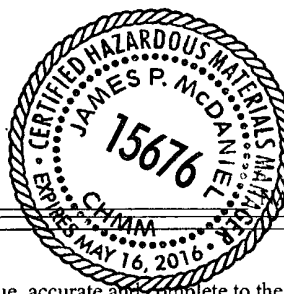
Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

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 _____

Year: ☐ 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): James McDaniel, CHMM #15676 Title: EH&S Supervisor

Signature: [Signature] Date: 6/22/11

e-mail address: James.McDaniel@xtoenergy.com Telephone: 505-333-3701

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
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 October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

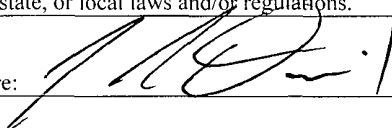
Name of Company: XTO Energy, Inc.	Contact: James McDaniel	
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3701	
Facility Name: Canyon #17 (30-045-21508)	Facility Type: Gas Well (Bisti Lower Gallup)	
Surface Owner: Navajo	Mineral Owner:	Lease No.:

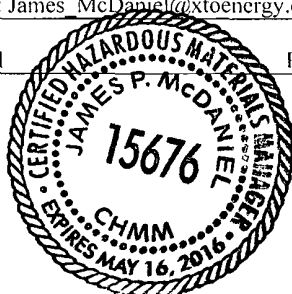
LOCATION OF RELEASE

Unit Letter A	Section 25	Township 25N	Range 11W	Feet from the 800	North/South Line FNL	Feet from the 800	East/West Line FEL	County San Juan
------------------	---------------	-----------------	--------------	----------------------	-------------------------	----------------------	-----------------------	--------------------

Latitude: 36.37701 Longitude: -107.94876

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: None
Source of Release: Below Grade Tank	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: NA
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken. The below grade tank was taken out of service at the Canyon #17 well site due to the plugging and abandoning of this well site. A composite sample was collected beneath the location of the on-site BGT, and submitted for laboratory analysis for TPH via USEPA Method 418.1 and 8015, benzene and BTEX via USEPA Method 8021, and for total chlorides. The sample returned results below the 'Pit Rule' spill confirmation standards for benzene, total BTEX and chlorides, but above the 100 ppm TPH standard at 10,000 ppm (via 418.1). This confirmed that a release had occurred at this location. The site was then ranked a 0 pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases due to an estimated depth to ground water of greater than 100 feet below ground surface. This set the closure standards to 5,000 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.		
Describe Area Affected and Cleanup Action Taken.* The sample was analyzed for DRO/GRO via USEPA Method 8015, returning results of 2,000 ppm total TPH. All results were below the regulatory standards determined for this site. No excavation is required.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: James McDaniel, CHMM # 15676	Approved by District Supervisor:	
Title: EH&S Supervisor	Approval Date:	Expiration Date:
E-mail Address: James_McDaniel@xtoenergy.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 6/22/2011	Phone: 505-333-3701	



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

Lease Name: Canyon #17

API No.: 30-045-21508

Description: Unit A, Section 25, Township 25N, Range 11W, San Juan County

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

General Plan

1. XTO will 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 18, 2011
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 18, 2011
3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
Required C-144 Form is attached to this document.
4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
 - Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B
 - Soil contaminated by exempt petroleum hydrocarbons
 - Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes
 - Basin Disposal Permit No. NM01-005
 - Produced water**All liquids and sludge were removed from the tank prior to closure activities.**
5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
XTO has removed the below grade tank, and will dispose of it at a division approved facility, or recycle, reclaim or reuse it in a manner that is approved by the division.

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

All equipment has been removed due to the plugging and abandoning of the Canyon #17 well site.

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

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

Components	Test Method	Limit (mg/Kg)	Results
Benzene	EPA SW-846 8021B or 8260B	0.2	BDL mg/kg
BTEX	EPA SW-846 8021B or 8260B	50	BDL mg/kg
TPH	EPA SW-846 418.1	100	10,000 mg/kg
Chlorides	EPA 300.1	250 or background	150 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.

A release was confirmed at this location due TPH results of 10,000 ppm (via USEPA Method 418.1). TPH results via USEPA Method 8015 (2,000 ppm) were below the regulatory standards outlined in the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases for this site. No further action is necessary.

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 backfilled using compacted, non-waste containing earthen material, with a division prescribed soil cover.

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. Brandon Powell with the Aztec office of the OCD via email on March 15, 2011; 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 March 17, 2011; see attached letter and return receipt.

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 has been recontoured to match the above specifications.

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 has been reclaimed pursuant to the BLM MOU.

14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:

- i. Proof of closure notice to division and surface owner; **attached**
- ii. Details on capping and covering, where applicable; **per OCD 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 OCD Specifications**
- vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **Per BLM MOU**
- viii. Photo documentation of the site reclamation. **attached**



James McDaniel /FAR/CTOC
03/15/2011 06:30 AM

To brandon.powell@state.nm.us

cc

bcc

Subject BGT Closure Canyon #17

Brandon,

Please accept this email as the required notification for BGT closure activities at the Canyon #17 well site (api # 30-045-31508) located in Unit A, Section 25, Township 25N, range 11W, San Juan County, New Mexico. This BGT is being closed due to the plugging and abandoning of this well location. Thank you for your time in regards to this matter.



James McDaniel
EH&S Specialist
XTO Energy, Inc.
Office # 505-333-3701
Cell # 505-787-0519



March 15, 2011

Arvin Trujillo
Navajo Nation
PO Box 9000
Window Rock, Arizona 86515

Re: Canyon #17 – API #30-045-21508
Unit A, Section 25, Township 25N, Range 11W, San Juan County, New Mexico

Dear Mr. Trujillo,


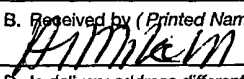
This submittal is pursuant to Rule 19.15.17.13 requiring operators to notify surface owners of the closure of a below grade tank pit. XTO Energy, Inc. (XTO) is hereby providing written documentation of our proposal to close the below grade tank pit associated with the above mentioned well site by waste 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, appearing to read "J. McDaniel", written over a horizontal line.

James McDaniel
EH&S Specialist
XTO Energy, Inc.
San Juan Division

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 		A. Signature X  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
		B. Received by (Printed Name)  C. Date of Delivery 3-17-11	
1. Article Addressed to: <div style="text-align: center;"> ARVIN TRUJILLO NAVAJO NATION P O BOX 9000 WINDOW ROCK AZ 86515 </div>		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
2. Article Number: (Transfer from service label)		7010 0780 0001 6436 9680	

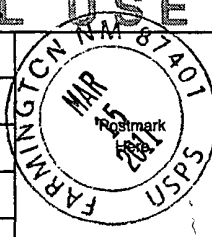
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7010 0780 0001 6436 9680

U.S. Postal Service TM Canyon 17
CERTIFIED MAIL TM RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$	
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total		



Sent
Street or PO
City

ARVIN TRUJILLO
NAVAJO NATION
P O BOX 9000
WINDOW ROCK AZ 86515

ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com



COVER LETTER

Tuesday, February 22, 2011

James McDaniel
XTO Energy
382 County Road 3100
Aztec, NM 87410

TEL: (505) 787-0519

FAX (505) 333-3280

RE: Canyon 17

Order No.: 1102626

Dear James McDaniel:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 2/21/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX



4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: 22-Feb-11

CLIENT: XTO Energy
Lab Order: 1102626
Project: Canyon 17
Lab ID: 1102626-01

Client Sample ID: BGT Closure Comp
Collection Date: 2/17/2011 4:36:00 PM
Date Received: 2/21/2011
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 418.1: TPH						Analyst: JB
Petroleum Hydrocarbons, TR	10000	400		mg/Kg	20	2/22/2011

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Estimated value
J Analyte detected below quantitation limits
NC Non-Chlorinated
PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: XTO Energy
 Project: Canyon 17

Work Order: 1102626

Analyte	Result	Units	PQL	SPK Val	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	---------	---------	------	----------	-----------	------	----------	------

Method: EPA Method 418.1: TPH

Sample ID: MB-25699		MBLK				Batch ID: 25699	Analysis Date: 2/22/2011				
Petroleum Hydrocarbons, TR	ND	mg/Kg	20								
Sample ID: LCS-25699		LCS				Batch ID: 25699	Analysis Date: 2/22/2011				
Petroleum Hydrocarbons, TR	98.08	mg/Kg	20	100	0	98.1	81.4	118			
Sample ID: LCSD-25699		LCSD				Batch ID: 25699	Analysis Date: 2/22/2011				
Petroleum Hydrocarbons, TR	99.50	mg/Kg	20	100	0	99.5	81.4	118	1.44	8.58	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name XTO ENERGY

Date Received:

2/21/2011

Work Order Number 1102626

Received by: DAM

Checklist completed by:

Signature

Sample ID labels checked by:

Initials

Date

Matrix:

Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - Preservation labels on bottle and cap match?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Container/Temp Blank temperature?	2.3°	<6° C Acceptable If given sufficient time to cool.	

Number of preserved bottles checked for pH:

<2 >12 unless noted below.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by

Regarding:

Comments:

Corrective Action



12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I D 62-0814289

Est. 1970

James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

Report Summary

Friday February 25, 2011

Report Number: L502723

Samples Received: 02/19/11

Client Project:

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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

Note The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences
Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures 060302, 060303, and 060304.



12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I D 62-0814289

Est. 1970

REPORT OF ANALYSIS

February 25, 2011

James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

ESC Sample # : L502723-01

Date Received : February 19, 2011
Description :

Site ID : CANYON 17

Sample ID : BGT CLOSURE 1FT

Project # :

Collected By : James McDaniel
Collection Date : 02/17/11 16:36

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil
Chloride	150	12	mg/kg	9056	02/24/11	1
Total Solids	85.		%	2540G	02/25/11	1
Benzene	BDL	0.0029	mg/kg	8021/8015	02/22/11	5
Toluene	BDL	0.029	mg/kg	8021/8015	02/22/11	5
Ethylbenzene	BDL	0.0029	mg/kg	8021/8015	02/22/11	5
Total Xylene	BDL	0.0088	mg/kg	8021/8015	02/22/11	5
TPH (GC/FID) Low Fraction	0.66	0.59	mg/kg	GRO	02/22/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.8		% Rec.	8021/8015	02/22/11	5
a,a,a-Trifluorotoluene(PID)	96.0		% Rec.	8021/8015	02/22/11	5
TPH (GC/FID) High Fraction	2000	94	mg/kg	3546/DRO	02/24/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	02/24/11	20

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

This report shall not be reproduced, except in full, without the written approval from ESC

The reported analytical results relate only to the sample submitted

Reported: 02/25/11 12:41 Printed: 02/25/11 12:41

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L502723-01	WG522933	SAMP	o-Terphenyl	R1587169	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound. Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/25/11 at 12:41:23

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L502723-01 Account: XTORNM Received: 02/19/11 09:30 Due Date: 02/25/11 00:00 RPT Date: 02/25/11 12:41



YOUR LAB OF CHOICE

XTO Energy - San Juan Division
James McDaniel
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L502723

12065 Lebanon Rd
Mt Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I D 62-0814289

Est. 1970

February 25, 2011

Analyte	Result	Laboratory Blank Units % Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/kg		WG522693	02/22/11 15:34
Ethylbenzene	< .0005	mg/kg		WG522693	02/22/11 15:34
Toluene	< .005	mg/kg		WG522693	02/22/11 15:34
TPH (GC/FID) Low Fraction	< .1	mg/kg		WG522693	02/22/11 15:34
Total Xylene	< .0015	mg/kg		WG522693	02/22/11 15:34
a,a,a-Trifluorotoluene (FID)		% Rec 94.52	59-128	WG522693	02/22/11 15:34
a,a,a-Trifluorotoluene (PID)		% Rec 95.13	54-144	WG522693	02/22/11 15:34
TPH (GC/FID) High Fraction	< 4	ppm		WG522933	02/24/11 04:06
o-Terphenyl		% Rec 93.57	50-150	WG522933	02/24/11 04:06
Total Solids	< 1	%		WG523014	02/25/11 10:56
Chloride	< 10	mg/kg		WG522980	02/24/11 12:35

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	85.0	84.9	0.472	5	L502723-01	WG523014
Chloride	mg/kg	46.0	43.0	5.65	20	L502837-03	WG522980

Analyte	Units	Laboratory Control Sample Known Val Result	% Rec	Limit	Batch
Benzene	mg/kg	.05	0.0482	96.5	76-113 WG522693
Ethylbenzene	mg/kg	.05	0.0487	97.5	78-115 WG522693
Toluene	mg/kg	.05	0.0499	99.8	76-114 WG522693
Total Xylene	mg/kg	.15	0.149	99.0	81-118 WG522693
a,a,a-Trifluorotoluene (FID)				92.60	59-128 WG522693
a,a,a-Trifluorotoluene (PID)				96.48	54-144 WG522693
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.18	94.3	67-135 WG522693
a,a,a-Trifluorotoluene (FID)				105.1	59-128 WG522693
a,a,a-Trifluorotoluene (PID)				107.1	54-144 WG522693
TPH (GC/FID) High Fraction	ppm	60	51.2	85.3	50-150 WG522933
o-Terphenyl				86.30	50-150 WG522933
Total Solids	%	50	49.9	99.9	85-155 WG523014
Chloride	mg/kg	200	210	105	85-115 WG522980

Analyte	Units	Laboratory Control Sample Duplicate Result Ref %Rec	Limit	RPD	Limit	Batch
Benzene	mg/kg	0.0451 0.0482 90.0	76-113	6.80	20	WG522693
Ethylbenzene	mg/kg	0.0457 0.0487 91.0	78-115	6.31	20	WG522693
Toluene	mg/kg	0.0464 0.0499 93.0	76-114	7.19	20	WG522693
Total Xylene	mg/kg	0.139 0.149 93.0	81-118	6.37	20	WG522693
a,a,a-Trifluorotoluene (FID)			97.42			WG522693
a,a,a-Trifluorotoluene (PID)			103.4			WG522693
TPH (GC/FID) Low Fraction	mg/kg	5.21 5.18 95.0	67-135	0.580	20	WG522693

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers'



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Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
a,a,a-Trifluorotoluene (FID)				106.3	59-128			
a,a,a-Trifluorotoluene (PID)				108.0	54-144			
TPH (GC/FID) High Fraction	ppm	56.8	51.2	95.0	50-150	10.4	25	WG522933
o-Terphenyl				95.59	50-150			WG522933
Chloride	mg/kg	200	210	100	85-115	4.88	20	WG522980

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.310	0.0590	0.05	100	32-137	L502744-01	WG522693
Ethylbenzene	mg/kg	0.282	0.0540	0.05	91.3	10-150	L502744-01	WG522693
Toluene	mg/kg	0.558	0.350	0.05	83.4	20-142	L502744-01	WG522693
Total Xylene	mg/kg	1.30	0.700	0.15	80.3	16-141	L502744-01	WG522693
a,a,a-Trifluorotoluene (FID)					79.78	59-128		WG522693
a,a,a-Trifluorotoluene (PID)					88.60	54-144		WG522693
TPH (GC/FID) Low Fraction	mg/kg	29.9	15.0	5.5	54.0*	55-109	L502744-01	WG522693
a,a,a-Trifluorotoluene (FID)					104.0	59-128		WG522693
a,a,a-Trifluorotoluene (PID)					112.2	54-144		WG522693
Chloride	mg/kg	550	47.0	500	101	80-120	L503017-02	WG522980

Analyte	Units	Matrix Spike Duplicate				Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec						
Benzene	mg/kg	0.295	0.310	94.2		32-137	5.09	39	L502744-01	WG522693
Ethylbenzene	mg/kg	0.281	0.282	90.9		10-150	0.330	44	L502744-01	WG522693
Toluene	mg/kg	0.499	0.558	59.6		20-142	11.2	42	L502744-01	WG522693
Total Xylene	mg/kg	1.28	1.30	77.4		16-141	1.71	46	L502744-01	WG522693
a,a,a-Trifluorotoluene (FID)				95.06		59-128				WG522693
a,a,a-Trifluorotoluene (PID)				99.71		54-144				WG522693
TPH (GC/FID) Low Fraction	mg/kg	35.8	29.9	75.6		55-109	18.1	20	L502744-01	WG522693
a,a,a-Trifluorotoluene (FID)				106.3		59-128				WG522693
a,a,a-Trifluorotoluene (PID)				115.5		54-144				WG522693
Chloride	mg/kg	550	550	101		80-120	0	20	L503017-02	WG522980

Batch number / Run number / Sample number cross reference

WG522693 R1584629 L502723-01
WG522933 R1587169 L502723-01
WG523014 R1588433 L502723-01
WG522980 R1588509 L502723-01

* * Calculations are performed prior to rounding of reported values
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address XTO Energy, Inc. 382 County Road 3100 Aztec, NM 87410				Alternate Billing XTORN031810S Report to James McDaniel E-mail to James_McDaniel@xtoenergy.com				Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> 8015 801 CALOADES </div> <div style="width: 50%; border-left: 1px solid black; border-right: 1px solid black;"></div> </div>				Chain of Custody Page ___ of ___ C078 Prepared by ENVIRONMENTAL Science corp 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859									
Project Description:				City/State Collected:				CoCode (lab use only) XTORNM Template/Prelogin Shipped Via: Fed Ex													
PHONE 505-333-3701 FAX		Client Project No.		Lab Project #																	
Collected by James McDaniel		Site/Facility ID# CANYON 17		P O #																	
Collected by (signature) 		Rush? (Lab MUST be Notified) ___ Next Day 100% ___ Two Day 50% ___ Three Day 25%		Date Results Needed Email? ___ No ___ X ___ Yes FAX? ___ No ___ Yes																	
Packed on Ice N ___ Y X		No of Cntrs		Sample ID BGT CLOSURE		Comp/Grab COMP		Matrix SDIL		Depth 1'		Date 2-17-11		Time 1636		1 X X X		Remarks/contaminant 		Sample # (lab only) LS02723-01	

Matrix SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other _____ pH _____ Temp _____

Remarks _____ Flow _____ Other _____

Relinquisher by (Signature) 		Date 2/18/11		Time 1248		Received by (Signature) 		Samples returned via FedEx ___ X ___ UPS ___ Other ___ 87196030 1720		Condition (lab use only)	
Relinquisher by (Signature)		Date		Time		Received by (Signature)		Temp 20.8°C		Bottles Received 1402	
Relinquisher by (Signature)		Date		Time		Received for lab by (Signature) 		Date 2/19/11		Time 0930	
								pH Checked		NCF:	



Well Below Tank Inspection Report

RouteName		StopName		Pumper	Foreman	WellName			APIWellNumber		Section	Range	Township
Below Grade Pit Forms (Temp		Canyon 17		Unassigned	Unassigned	CANYON 17			3004521508		25	11W	25N
InspectorName	Inspection Date	Inspection Time	Visible LinerTears	VisibleTankLeak Overflow	Collection OfSurfaceRun	Visible LayerOil	Visible Leak	Freeboard EstFT	PitLocation	PitType	Notes		
Nick Rybacki	08/27/2008	15:00	No	No	No	Yes	No	4			Oil in pit is compressor oil		
Nick Rybacki	09/22/2008	08:45	No	No	No	No	No	6					
Nick Rybacki	10/13/2008	12:58	No	No	No	No	No	2	Well Water Pit	Below Ground			
Nick Rybacki	11/13/2008	10:30	No	No	No	No	No	1	Well Water Pit	Below Ground			
Nick Rybacki	12/23/2008	12:57	No	No	No	No	No	4	Well Water Pit	Below Ground			
Nick Rybacki	01/29/2009	12:00	No	No	No	No	No	3	Well Water Pit	Below Ground			
Nick Rybacki	02/16/2009	11:06	No	No	No	No	No	3	Well Water Pit	Below Ground			
Nick Rybacki	03/12/2009	14:06	No	No	No	No	No	3	Well Water Pit	Below Ground			
Nick Rybacki	04/21/2009	11:21	No	No	No	No	No	3	Well Water Pit	Below Ground			
Nick Rybacki	06/21/2009	11:32	No	No	No	No	No	1	Well Water Pit	Below Ground			
Nick Rybacki	07/30/2009	13:42	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	08/27/2009	13:00	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	09/14/2009	08:30	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	10/07/2009	09:00	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	11/27/2009	11:45	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	12/21/2009	13:01	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	01/31/2010	12:00	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	02/28/2010	14:48	No	No	No	No	No	6	Well Water Pit	Below Ground			
Nick Rybacki	03/10/2010	09:45	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	04/14/2010	09:58	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	05/12/2010	12:05	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	06/23/2010	09:59	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	07/28/2010	10:23	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	08/17/2010	12:00	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	09/06/2010	12:15	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	10/07/2010	10:45	No	No	No	No	No	6	Well Water Pit	Below Ground			
nick rybacki	11/07/2010	11:25	No	No	No	No	No	6	Well Water Pit	Below Ground			
Gary Derrera	01/14/2011	12:30	No	No	No	No	No	6	Well Water Pit	Below Ground			
Gary Derrera	02/13/2011	12:30	No	No	No	No	No	6	Well Water Pit	Below Ground			

XTO Energy, Inc.
Canyon #17
Section 25, Township 25N, Range 11W
Closure Date: 3/18/2011

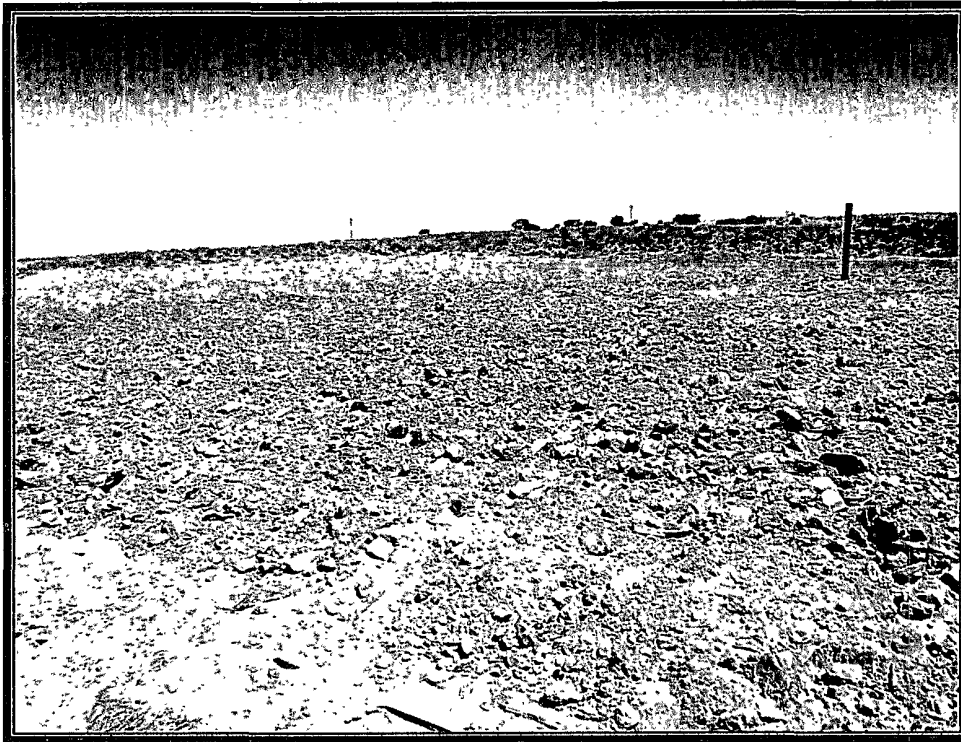


Photo 1: Canyon #17 after Reclamation (View 1)



Photo 2: Canyon #17 after Reclamation (View 2)