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

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

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Type of action: Below grade tank registration (Existing Tank) OIL CONS. DIV DIST. 3
↓5332 Closure of a pit, below-grade tank, or proposed alternative method JUN 3 0 2016
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.
I.         Operator:         XTO Energy, Inc.         OGRID #:         5380
Address: <u>#382 County Road 3100, Aztec, NM 87410</u>
Facility or well name:
API Number: Non Production Facility OCD Permit Number: Permit #_14197
U/L or Qtr/Qtr Section _27 Township26N Range _5W County: <u>Rio Arriba</u>
Center of Proposed Design: Latitude <u>36.461200</u> Longitude <u>-107.350861</u> NAD: □1927 ⊠ 1983
Surface Owner: 🗌 Federal 🗌 State 🗋 Private 🖾 Tribal Trust or Indian Allotment
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
3. Relow-grade tank: Subsection L of 19 15 17 11 NMAC
Volume: 90 bbl Type of fluid: Produced Water
Tank Construction material: Steel Double X Double
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
Visible sidewalls and liner Visible sidewalls only Other Doubled Walled BGT with leak Detection
□ Visible sidewalls and liner       □ Visible sidewalls only       ☑ Other Doubled Walled BGT with leak Detection         Liner type:       Thickness       mil       □ HDPE       □ PVC       □ Other
Visible sidewalls and liner Visible sidewalls only Other Doubled Walled BGT with leak Detection Liner type: Thicknessmil HDPE PVC Other 4. Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
<ul> <li>Visible sidewalls and liner</li> <li>Visible sidewalls only</li> <li>Other Doubled Walled BGT with leak Detection</li> <li>Liner type: Thicknessmil</li> <li>HDPE</li> <li>PVC</li> <li>Other</li> </ul> 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.
<ul> <li>Visible sidewalls and liner Visible sidewalls only Other Doubled Walled BGT with leak Detection</li> <li>Liner type: Thicknessmil HDPE PVC Other</li> <li>4.</li> <li>Alternative Method:</li> <li>Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> <li>5.</li> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> </ul>
<ul> <li>Visible sidewalls and liner Visible sidewalls only Other Doubled Walled BGT with leak Detection</li> <li>Liner type: Thicknessmil HDPE PVC Other</li> <li>Alternative Method:</li> <li>Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> <li>5.</li> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> <li>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)</li> </ul>
<ul> <li>Visible sidewalls and liner Visible sidewalls only Other Doubled Walled BGT with leak Detection</li> <li>Liner type: Thicknessmil HDPE PVC Other</li> <li>4.</li> <li>Alternative Method:</li> <li>Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> <li>5.</li> <li>Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</li> <li>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)</li> <li>Four foot height, four strands of barbed wire evenly spaced between one and four feet</li> </ul>

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

Screen Netting Other

Monthly inspections (If netting or screening is not physically feasible)

### 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

#### Variances and Exceptions:

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

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

Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

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

## Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ⊠ NM Office of the State Engineer - iWATERS database search; ⊠ USGS; □ Data obtained from nearby wells	☐ Yes ⊠ No □ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
<ul> <li>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)</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within the area overlying a subsurface mine. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	Yes No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	Yes No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
<ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🛛 Yes 🗌 No
<ul> <li>Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
<ul> <li>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.)</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No

<ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
Temporary Pit Non-low chloride drilling fluid	
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
Permanent Pit or Multi-Well Fluid Management Pit	
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
10. <b>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:</b> Subsection B of 19.15.17.9 N         Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot 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 19.15.17.10 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. and 19.15.17.13 NMAC         Previously Approved Design (attach copy of design)       API Number: or Permit Number:	NMAC cuments are ONMAC 15.17.9 NMAC
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 dot attached.	cuments are
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

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 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         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 19.15.17.11 NMAC         Hydroge of Hazardous Odors, including H <sub>2</sub> S, Prevention Plan         Emergency Response Plan         Oil Field Waste Stream Characterization         Monitoring and Inspection Plan         Errosion Control Plan         Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC	documents are
<u><b>rroposed Closure:</b></u> 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 F	luid Management Pit
Proposed Closure Method: 🛛 Waste Excavation and Removal	
<ul> <li>Waste Removal (Closed-loop systems only)</li> <li>On-site Closure Method (Only for temporary pits and closed-loop systems)</li> </ul>	
In-place Burial On-site Trench Burial Alternative Closure Method	
14.	
<ul> <li>closure plan. Please indicate, by a check mark in the box, that the documents are attached.</li> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)</li> <li>Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>	
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 19.15.17.10 NMAC for guidance.	rce material are Please refer to
Ground water is less than 25 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
<ul> <li>Ground water is more than 100 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	□ Yes □ No □ NA
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗋 Yes 🗌 No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	🗌 Yes 🗌 No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	Yes No
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	Yes No
Within an unstable area.	
<ul> <li>Engineering measures incorporated into the design, NM Bureau of Geology &amp; Mineral Resources, USOS, NM Geological Society; Topographic map</li> </ul>	Yes No
Within a 100-year floodplain.	
- FEMA map	
16.         On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure planets are actached.         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 19.15.17.13 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 cannet 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	an. Please indicate, 11 NMAC 15.17.11 NMAC ot be achieved)
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 beli	ef.
Name (Print): Title :	
Sizestary Data	
Signature Date	
e-mail address: Telephone:	
18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:	3 /2016
19. Cleaner Barrent (commind within 60 down of alcourse commutation): 10.15.17.12.210.04.0	
<u>Closure Report (required within 60 days of closure completion)</u> : 19.15.17.15 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	the closure report. complete this
Closure Completion Date:April 6, 2016	i
<ul> <li>20.</li> <li><u>Closure Method:</u></li> <li>Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-lo</li> <li>If different from approved plan, please explain.</li> </ul>	op systems only)
<ul> <li>21.</li> <li><u>Closure Report Attachment Checklist</u>: <i>Instructions: Each of the following items must be attached to the closure report. Please interaction in the box, that the documents are attached.</i></li> <li>Proof of Closure Notice (surface owner and division)</li> <li>Proof of Deed Notice (required for on-site closure for private land only)</li> <li>Plot Plan (for on-site closures and temporary pits)</li> <li>Confirmation Sampling Analytical Results (if applicable)</li> <li>Waste Material Sampling Analytical Results (required for on-site closure)</li> <li>Disposal Facility Name and Permit Number</li> <li>Soil Backfilling and Cover Installation</li> <li>Re-vegetation Application Rates and Seeding Technique</li> <li>Site Reclamation (Photo Documentation)</li> <li>On-site Closure Location: Latitude</li> <li>Longitude</li> </ul>	dicate, by a check

#### 22. Operator Closure Certification:

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

Name (Print):Rex Farnsworth	Title:EH&S Technician	
Signature:	Date:6-21-2016	
e-mail address:rex_farnsyorth@xtoenergy.com	Telephone:505-787-0643	

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

OIL CONS. DIV DIST. 3

MAR 1 7 2016

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

14197 Proposed Alternative Method Permit or Closure Plan Application

Type of action:

Г

Below grade tank registration (Existing Tank) Permit of a pit or proposed alternative method

Closure of a pit, below-grade tank, or proposed alternative method

۲ Modification to an existing permit/or registration

Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, pie zoos pit, not submitted to santa Fe

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.

Operator: XTO Energy, Inc. OGRID #: 5380	
Address: #382 County Road 3100, Aztec, NM 87410	
Facility or well name: Jicarilla Tapacitas	
API Number: Non Production Facility OCD Permit Number	ser:
U/L or Qtr/Qtr Section _27 Township26N Range	5W County: <u>Rio Arriba</u>
Center of Proposed Design: Latitude 36.461200 Longitude -107.350861	NAD: 1927 🛛 1983
Surface Owner: 🗌 Federal 🗋 State 🗋 Private 🖾 Tribal Trust or Indian Allotment	
2. 2. 3. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	Low Chloride Drilling Fluid 🗌 yes 🗌 no
String-Reinforced	
Liner Seams: Welded Factory Other Volume: h	bl Dimensions: L x W x D
3.         Image: Subsection I of 19.15.17.11 NMAC         Volume: 90       bbl Type of fluid:        Produced Water         Tank Construction material: Steel Double X Double         Image: Secondary containment with leak detection       Visible sidewalls, liner, 6-inch lift and automatic         Image: Visible sidewalls and liner       Visible sidewalls only       Other         Liner type: Thickness       mil       HDPE       PVC       Other	overflow shut-off
۹.	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environm	nental Bureau office for consideration of approval.
s. 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 institution or church)	t of a permanent residence, school, hospital.
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify 4-Foot Hog-Wire Fencing	

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

Screen Netting Other

Monthly inspections (If netting or screening is not physically feasible)

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

#### Variances and Exceptions:

8

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. <u>Siting Criteria (regarding permitting)</u> : 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	
General siting	
<ul> <li>Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.</li> <li>NM Office of the State Engineer - iWATERS database search; ⊠ USGS; □ Data obtained from nearby wells</li> </ul>	□ Yes ⊠ No □ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	🗌 Yes 🗌 No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	Yes No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). <ul> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🛛 Yes 🗌 No
<ul> <li>Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes 🛛 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search: Visual inspection (certification) of the proposed site	Yes No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map: Topographic map: Visual inspection (certification) of the proposed site	Yes No	
Temporary Pit Non-low chloride drilling fluid		
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes No	
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No	
<ul> <li>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;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes No	
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No	
Permanent Pit or Multi-Well Fluid Management Pit		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa		
<ul> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No	
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes No	
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes No	
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
10.         Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:       Subsection B of 19.15.17.9 NMAC         Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.         Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC         Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Design Plan - based upon the appropriate requirements of 19.15.17.10 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:		
II.       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 doc 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 and 19.15.17.13 NMAC         Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.10 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	cuments are	
Previously Approved Design (attach copy of design) API Number: or Permit Number:		

12. <u>Permanent Pits Permit Application Checklist</u> : Subsection B of 19.15.17.9 NMAC <i>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the</i>	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	
<ul> <li>Climatological Factors Assessment</li> <li>Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan</li> <li>Emergency Response Plan</li> <li>Oil Field Waste Stream Characterization</li> <li>Monitoring and Inspection Plan</li> </ul>	
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         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	luid Management Pit
Waste Excavation and Removal Closure Plan Checklist:       (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.	attached to the
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. In 19.15.17.10 NMAC for guidance.	rce material are Please refer to
Ground water is less than 25 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No NA
Ground water is more than 100 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	Yes No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	
Form C-144 Oil Conservation Division Page 4 o	f 6

<ul> <li>Written confirmation or verification from the municipality: Written approval obtained from the municipality</li> </ul>	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.	
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society: Topparametric man</li> </ul>	
Within a 100 wars floodalain	Yes No
- 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 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. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19. 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 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann 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	an. Please indicate, 11 NMAC 15.17.11 NMAC ot be achieved)
<ul> <li>17.</li> <li>Operator Application Certification:</li> <li>I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli</li> </ul>	ef.
Name (Print): Logan Hixon Title : EHS Coordinator	
Signature: Jogan Hilson Date: 3-14-16	
e-mail address: Logan_Hixon@xtoenergy.com Telephone: (505) 333-3683	
e-mail address: Logan_Hixon@xtoenergy.com Telephone: (505) 333-3683	
e-mail address: Logan_Hixon@xtoenergy.com Telephone: Telephone: Telephone: OCD Approval: Permit Application (including closure plan) X Closure Plan (orly OCD Conditions (see attachment) OCD Representative Signature: Approval Date:	
e-mail address: Logan Hixon@xtoenergy.com Telephone: (505) 333-3683	
e-mail address: Logan_Hixon@xtoenergy.com Telephone: (505) 333-3683	the closure report. complete this
e-mail address: Logan_Hixon@xtoenergy.com Telephone:	the closure report. complete this
e-mail address: Logan_Hixon@xtoenergy.com Telephone:	the closure report. complete this
e-mail address: Logan Hixon@xtoenergy.com       Telephone:	the closure report. complete this

<ul> <li>Decrator Closure Certification:</li> <li>I hereby certify that the information and attachments submitted with this closure report belief. I also certify that the closure complies with all applicable closure requirements</li> </ul>	t is true, accurate and complete to the best of my knowledge and and conditions specified in the approved closure plan.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

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.

			Rele	ease Notificat	tion	and Co	rrective A	ction				
						OPERAT	TOR		Initial	Report	$\boxtimes$	Final Report
Name of Co	ompany: X	TO Energy,	Inc.		(	Contact: Re	x Farnsworth					
Address: 38	32 Road 31	00, Aztec, N	lew Mex	ico 87410	1	Telephone N	No.: (505) 333-3	3100				
Facility Nat	me: Jicarill	a Tapacitas			F	Facility Typ	e: NPI					
Surface Ow	ner: Triba	1		Mineral Own	ner			AP	PI No. 1	NPI		
				LOCAT								
Unit Latter	Section	Township	Danga	LUCAI	IOP	South Line	East from the	Eact/Wact I	ine (	County		
Unit Letter	Section	Township	Kange	reet nom me	iorui/s	South Line	reet nom the	East west L		county		
	27	26N	5W			FSL		FEL		1	Rio An	riba
			1	Latitude: 36.46120	00	Longitude	: <u>-107.350861</u>					
-				NATU	RE	OF REL	EASE					
Type of Rele	ease: N/A				_	Volume of	Release: N/A	Volu	ime Ree	covered: N	N/A	NI/A
Source of Re	ource of Release: N/A					Date and H N/A	our of Occurrent	ce Date	e and Ho	our of Dis	covery	: N/A
Was Immedi	Was Immediate Notice Given?						Whom?					
By Whom?						Date and H	lour					
Was a Water	Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.					
			Yes 🖄	No								
Describe Car location. The chlorides. The confirming t	use of Proble BGT cellan he sample re hat a release	em and Reme r beneath the l turned results has not occu	dial Actio BGT was below the rred at this	n Taken.*The below sampled for TPH via 'pit rule' standards s location.	grade USEI of 100	e tank was rei PA Method 8 ) ppm TPH,	moved at the Jica 015M C6-C36, f 10 ppm benzene,	rilla Tapacitas or BTEX via I 50 ppm total I	s well si USEPA BTEX,	te due to t Method 8 and 250 p	upgrade 3021, a pm chl	es of the nd for total orides,
Describe Are	ea Affected	and Cleanup	Action Tal	ken.*No release has b	been c	confirmed at	this location and	no further acti	ion is re	equired.		
I hereby cert regulations a public health should their	ify that the i all operators or the envi operations h onment. In g	information gi are required t ronment. The nave failed to addition, NMC	iven above o report and acceptant adequately OCD accept	e is true and complete nd/or file certain relea ce of a C-141 report l v investigate and rem otance of a C-141 rep	e to th ase no by the ediate ort do	te best of my otifications au NMOCD m contaminationes not reliev	knowledge and u nd perform correc arked as "Final R on that pose a thr e the operator of	inderstand that ctive actions for eport" does no reat to ground responsibility	t pursua or releas ot reliev water, s for con	ant to NM ses which we the open surface wa npliance w	OCD re may en rator of ater, hu vith any	ules and adanger f liability man health y other
federal, state	, or logal la	ws/ma/or regi	llations.									
federal, state Signature:	e, or logal te	ws/phd/or regu	liations.				OIL CON	SERVATI	ON E	DIVISIO	DN	
or the enviro federal, state Signature: Printed Nam	e, or logal to	sworth	liations.		_	Approved by	OIL CON	SERVATI	ON E	DIVISIO	<u>DN</u>	
or the enviro federal, state Signature: Printed Nam Title: EHS T	e, or local for e: Rex Farm fechnician	sworth	liations.			Approved by Approval Dat	OIL CON Environmental S e:	SERVATI	ON E	DIVISIO	<u>DN</u>	
or the enviro federal, state Signature: Printed Nam Title: EHS T E-mail Addr	e, or local far e: Rex Farm echnician ess: rex_farm	sworth@xtoo	energy.con	n		Approved by Approval Dat Conditions of	OIL CON Environmental S e: Approval:	SERVATI pecialist: Expira	ON D	DIVISIC ate: Attached		

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

Lease Name:Jicarilla TapacitasAPI No.:NPIDescription:Section 27, Township 26N, Range 5W, Rio Arriba

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**

- 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 April 6, 2016.
- 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 April 6, 2016.
- 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 and an above ground tank was installed for the upgrade of this 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 that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.

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

Components	Test Method	Limit (mg/Kg)	Results (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	10	<0.021 mg/kg
BTEX	EPA SW-846 8021B or 8260B	50	<0.189 mg/kg
TPH	EPA 8015	100	<64.1 mg/kg
Chloride		250	<30 mg/kg

- 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.
   No release has been confirmed for this location and no further action is required for this site.
- 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.
- 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 with the Aztec office of the OCD via email on March 28, 2016; 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 28, 2016; Email has been approved as a means of surface owner notification to the State by Cory Smith, NMOCD Aztec Office.

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The location is in operation with an above ground pit for containment.

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 is in operation and will be vegetated when this location is no longer being used.

- 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 divisionapproved 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. This site is being utilized in our daily operations.
- 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; None Available
  - 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 OCD Specifications
  - viii. Photo documentation of the site reclamation. attached
- 15. This closure report is being submitted after the 60 day deadline required by the 'Pit Rule' due to unforeseen delays in the resetting of the above grade tank..

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

April 06, 2016

James McDaniel XTO Energy 382 County Road 3100 Aztec, NM 87410 TEL: (505) 787-0519 FAX (505) 333-3280

RE: Jicarilla Tapacitas

OrderNo.: 1604107

Dear James McDaniel:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/5/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report	
Lab Order 1604107	

Date Reported: 4/6/2016

## Hall Environmental Analysis Laboratory, Inc.

Analyses		Result	POL O	Inal	Units	DF Date Analyzed
Lab ID:	1604107-001	Matrix:	MEOH (SOI	L)	Received	Date: 4/5/2016 7:20:00 AM
Project:	Jicarilla Tapacitas				Collection	Date: 4/4/2016 1:25:00 PM
CLIENT:	XTO Energy			0	lient Samp	le ID: BGT Pit

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	ND	30	mg/Kg	20	4/5/2016 11:15:55 AM	24624
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	s			Analys	t: KJH
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/5/2016 11:11:37 AM	24618
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/5/2016 11:11:37 AM	24618
Surr: DNOP	98.1	70-130	%Rec	1	4/5/2016 11:11:37 AM	24618
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: RAA
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	4/5/2016 12:12:21 PM	24607
Surr: BFB	99.2	66.2-112	%Rec	1	4/5/2016 12:12:21 PM	24607
EPA METHOD 8021B: VOLATILES					Analys	t: RAA
Benzene	ND	0.021	mg/Kg	1	4/5/2016 12:12:21 PM	24607
Toluene	ND	0.042	mg/Kg	1	4/5/2016 12:12:21 PM	24607
Ethylbenzene	ND	0.042	mg/Kg	1	4/5/2016 12:12:21 PM	24607
Xylenes, Total	ND	0.084	mg/Kg	1	4/5/2016 12:12:21 PM	24607
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	4/5/2016 12:12:21 PM	24607

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	
	D	Sample Diluted Due to Matrix	E	
	Н	Holding times for preparation or analysis exceeded	J	
	ND	Not Detected at the Reporting Limit	P	
	R	RPD outside accepted recovery limits	RL	
	S	% Recovery outside of range due to dilution or matrix	w	

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Client: XTO Energy Project: Jicarilla Tapacitas

Sample ID MB-24624	SampType: MBLK	TestCode: EPA Method	300.0: Anions				
Client ID: PBS	Batch ID: 24624	RunNo: 33339					
Prep Date: 4/5/2016	Analysis Date: 4/5/2016	SeqNo: 1024485	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Chloride	ND 1.5						
Sample ID LCS-24624	SampType: LCS	TestCode: EPA Method					
Client ID: LCSS	Batch ID: 24624	RunNo: 33339	RunNo: 33339				
Prep Date: 4/5/2016	Analysis Date: 4/5/2016	SeqNo: 1024486	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
	44 45 4500	0 00 5 00	440				

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#: 1604107

06-Apr-16

Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: XTO Energy Project: Jicarilla Tapaci

Project: Jicaril	a Tapacitas						
Sample ID MB-24618	SampType:	MBLK	TestCode: El	PA Method	8015M/D: Die	sel Rang	e Organics
Client ID: PBS	Batch ID:	24618	RunNo: 3	3293			
Prep Date: 4/5/2016	Analysis Date:	4/5/2016	SeqNo: 1	022945	Units: mg/K	g	
Analyte	Result PC	QL SPK value	SPK Ref Val %REC	LowLimit	HighLimit	%RPD	RPDLimit
Diesel Range Organics (DRO)	ND	10					
Motor Oil Range Organics (MRO)	ND	50					
Surr: DNOP	9.4	10.00	94.0	70	130		
Sample ID LCS-24618	SampType:	LCS	TestCode: El	PA Method	8015M/D: Die	sel Rang	e Organics
Client ID: LCSS	Batch ID:	24618	RunNo: 3	3293			
Prep Date: 4/5/2016	Analysis Date:	4/6/2016	SeaNo: 1	024364	Units: ma/K	a	

							21772	100		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.2	65.8	136			
Surr: DNOP	4.7		5.000		93.8	70	130			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#: 1604107

Qual

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: XTO Energy Project: Jicarilla Tapacitas

Sample ID LCS-24607	SampT	Type: LC	S	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	le		
Client ID: LCSS	Batc	h ID: 24	607	F	RunNo: 3	3301					
Prep Date: 4/4/2016	Analysis D	Date: 4/	5/2016	S	SeqNo: 1	024387	Units: mg/k	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.7	80	120				
Surr: BFB	1100		1000		107	66.2	112				
Sample ID MB-24607	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	le		
Client ID: PBS	Batc	h ID: 24	607	F	RunNo: 3	3301					
Prep Date: 4/4/2016	Analysis D	Date: 4/	5/2016	S	SeqNo: 1	024388	Units: mg/k	۲g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0			and the second s						
Surr: BFB	1000		1000		99.6	66.2	112				

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#: 1604107

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# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

**Client: XTO Energy** 

**Project:** 

Jicarilla Tapacitas

Sample ID LCS-24607	Samp	Type: LC	s	Tes	tCode: E	ode: EPA Method 8021B: Volatiles				
Client ID: LCSS	Batc	h ID: 24	607	F	RunNo: 3	3301				
Prep Date: 4/4/2016	Analysis [	Date: 4/	5/2016	S	SeqNo: 1	024408	Units: mg/h	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	75.3	123			
Toluene	0.91	0.050	1.000	0	91.1	80	124			
Ethylbenzene	0.88	0.050	1.000	0	88.1	82.8	121			
Xylenes, Total	2.6	0.10	3.000	0	87.5	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			
Sample ID MB-24607	Samp	Гуре: МІ	BLK	Tes	FestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batc	h ID: 24	607	F	RunNo: 33301					
Prep Date: 4/4/2016	Analysis [	Date: 4/	5/2016	5	SeqNo: 1	024409	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1 000		103	80	120			

Qualifiers:

- Value exceeds Maximum Contaminant Level. .
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Н
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank в
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

WO#: 1604107

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albi TEL: 505-345-3975 Website: www.ha	Analysi 4901 uquerqu FAX: 5 Illenviro	s Laborate Hawkins e, NM 871 05-345-41 nmental.c	NE 05 07 07	ole Log-In C	heck List
Client Name: XTO Energy Wo	ork Order Number:	16041	07		RcptNo:	1
Received by/date:	516			trinker Alabar		
Logged by: Lindsay Mangin 4/9/20	016 7:20:00 AM			dulla.		i
Povioued By:	0107.45.57 AM			Orgingo		
the of Custode				5 B		
nain of Custody				No 🗖	Nat Descart	
1. Custody seals intact on sample bottles?		Yes			Not Present	
2. Is Chain of Custody complete?		Yes				
3. How was the sample delivered?		Cour	er			
og In						
4. Was an attempt made to cool the samples?		Yes		No 🗌	NA 🗔	
5. Were all samples received at a temperature of >0	° C to 6.0°C	Yes		No 🗌		
6. Sample(s) In proper container(s)?		Yes		No 🗌		
7. Sufficient sample volume for indicated test(s)?		Yes		No 🗌		
8. Are samples (except VOA and ONG) properly pres	served?	Yes		No 🗌		
9. Was preservative added to bottles?		Yes		No 💌	NA 🗌	
0.VOA vials have zero headspace?		Yes		No 🗌	No VOA Vials 🗑	
11. Were any sample containers received broken?		Yes	No 🛃			
12.Does paperwork match bottle labels?		Yes		No 🗆	# of preserved bottles checked for pH:	
(Note discrepancies on chain of custody)				(<2	or >12 unless noted)	
13. Are matrices correctly identified on Chain of Custody?		Yes		No 🗌	Adjusted?	
14. Is it clear what analyses were requested?				No 🗌	Checked bu	
<ol> <li>Were all holding times able to be met? (If no, notify customer for authorization.)</li> </ol>		Yes		No 🗋	Checked by.	
necial Handling (if annlicable)						
6 Was client notified of all discrepancies with this orr	ter?	Ves		No 🗍	NA M	
		100				1
Person Notined:	Date: ]				Dia Daman	
Regarding:	Via:			ione [] Fax		
Client Instructions:						
7 Additional remarks:						1
A A A A A A A A A A A A A A A A A A A						
8. Cooler No. J. Temp 90.   Condition   Sociliate	ot   Seal Ma	Seel De	to I	Signed But		
1 30 Good Ves	Sear NO	Jeal Da	te	Signed by		

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From:	Hixon, Logan		
To:	Smith, Cory, EMNRD; Bryce Hammond (BryceHammond@iicarillaoga.com); Fields, Vanessa, EMNRD		
Cc:	<u>McDaniel, James (James McDaniel@xtoenergy.com); Hoekstra, Kurt; Farnsworth, Rex</u> <u>(Rex Farnsworth@xtoenergy.com); Clement, Jeff (Jeff Clement@xtoenergy.com); Dawes, Thomas</u> <u>(Thomas Dawes@xtoenergy.com)</u>		
Subject:	2016-3-28, 72 Hour BGT Closure Notification 2016/3/31-2016/4/7, Jicarilla Tapacitas (API: NPF, Permit # 14197)		
Date:	Monday, March 28, 2016 6:16:00 AM		

Mr. Smith & Mr. Hammond,

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

-Jicarilla Tapacitas (API NPF, Permit #14197) located in Section 27 Township 26N, Range 5W, Rio Arriba County, New Mexico.

This BGT is being closed due to upgrades at this well site.

The closure plan was approved on March 23, 2016.

Work is tentatively scheduled for Thursday April 4, 2016 at approximately 1200 MST.

If there is any unforeseen delays in closure of this BGT and it will not be closed within a week's time (April 7, 2016), a follow up email notification will be made for the change.

Thank you and have a good day

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

Thank You! EHS/OIMS Coordinator Logan Hixon | 382 CR 3100 | Aztec, NM 87410 | ph: 505-333-3100 |Cell: 505-386 8018 Logan\_Hixon@xtoenergy.com XTO ENERGY INC., an ExxonMobil subsidiary

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

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

## Fencing

XTO requests a variance on rule 19.15.17.11.D(3) NMAC which requires fencing around below grade tanks to have at least four (4) strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level. XTO instead requests to utilize hogwire fencing at least four (4) feet high with a top rail for fencing around below grade tanks. This will provide equal protection for livestock from the below grade tank.

## **Closure Requirements**

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

XTO Energy is requesting this variance on the grounds that USEPA Method 418.1 is an outdated analytical method that reports a full range of hydrocarbons from  $C_8$  through  $C_{40}$  (*Reference: American Petroleum Institute*). This range of hydrocarbons is above the range that can reasonably be expected to be found in our field in both drilling pits and beneath below grade tanks. USEPA Method 8015M (GRO/DRO + extended analysis) will report hydrocarbons ranging from  $C_6$ - $C_{10}$  for GRO,  $C_{10}$ - $C_{28}$  for DRO, and  $C_{28}$ - $C_{36}$  for extended analysis. This information was provided by Environmental Science Corporation Laboratories. As the information demonstrates, the 8015M analytical method reports as low as  $C_6$ , reporting lower than USEPA Method 418.1. Utilizing analytical method 8015M, lighter range hydrocarbons will be reported instead of higher range, heavy hydrocarbons that may not be reasonably expected to be found in our field. Utilization of USEPA Method 8015M will better protect groundwater resources by identifying lighter, more mobile hydrocarbons that USEPA Method 418.1 cannot identify. The heavier range hydrocarbons,  $C_{36}$ - $C_{40}$ , that are not identified by USEPA Method 8015M are not a mobile form of hydrocarbon, and are not a threat to human health and the environment.

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

XTO Energy Inc. Jicarilla Tapacitas CDP (API NPF, Permit #14197) Section 27, Township 26N, Range 5W Closure Date: April 6, 2016

Photo 1: Jicarilla Tapacitas CDP



Photo 2: Jicarilla Tapacitas CDP



XTO Energy Inc. Jicarilla Tapacitas CDP (API NPF, Permit #14197) Section 27, Township 26N, Range 5W Closure Date: April 6, 2016

# Photo #3: Jicarilla Tapacitas CDP



Photo #4: Jicarilla Tapacitas CDP

