

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.

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

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

**Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank, or alternative request**

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations, or ordinances.

Operator: XTO Energy, Inc OGRID #: 5380  
Address: 382 Road 3100, Aztec, New Mexico 87410  
Facility or well name: Bolack B #5  
API Number: 30-045-11823 OCD Permit Number:  
U/L or Qtr/Qtr J Section 31 Township 27N Range 8W County: San Juan  
Center of Proposed Design: Latitude N 36.52845 Longitude W -107.71881 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

RCVD OCT 26 '12  
OIL CONS. DIV.  
DIST. 3

2. ☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

RCVD MAY 23 '12  
OIL CONS. DIV.  
DIST. 3

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

4. ☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 21 bbl Type of fluid: Produced Water  
Tank Construction material: Steel  
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☐ Not labeled  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

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

6.	<p><b>Fencing:</b> 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 type="checkbox"/> Alternate. Please specify _____</p>																				
7.	<p><b>Netting:</b> 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 type="checkbox"/> Other _____</p> <p><input type="checkbox"/> Monthly inspections (If netting or screening is not physically feasible)</p>																				
8.	<p><b>Signs:</b> 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 type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC</p>																				
9.	<p><b>Administrative Approvals and Exceptions:</b></p> <p>Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</p> <p><b>Please check a box if one or more of the following is requested, if not leave blank:</b></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><b>Siting Criteria (regarding permitting):</b> 19.15.17.10 NMAC</p> <p><b>Instructions:</b> <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 border="0" style="width: 100%;"> <tr> <td style="width: 85%;"> <p>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</p> <ul style="list-style-type: none"> <li>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul> </td> <td style="width: 15%; text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</p> <ul style="list-style-type: none"> <li>- Topographic map, Visual inspection (certification) of the proposed site</li> </ul> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <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> <ul style="list-style-type: none"> <li>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> NA </td> </tr> <tr> <td> <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> <ul style="list-style-type: none"> <li>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> NA </td> </tr> <tr> <td> <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> <ul style="list-style-type: none"> <li>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <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> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within 500 feet of a wetland.</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within the area overlying a subsurface mine.</p> <ul style="list-style-type: none"> <li>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within an unstable area.</p> <ul style="list-style-type: none"> <li>- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td> <p>Within a 100-year floodplain.</p> <p>FEMA map</p> </td> <td style="text-align: right; vertical-align: top;"> <input type="checkbox"/> Yes <input 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> <ul style="list-style-type: none"> <li>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	<input type="checkbox"/> Yes <input 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> <ul style="list-style-type: none"> <li>- Topographic map, Visual inspection (certification) of the proposed site</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)</p> <ul style="list-style-type: none"> <li>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. 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<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> <ul style="list-style-type: none"> <li>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA																				
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<p>Within a 100-year floodplain.</p> <p>FEMA map</p>	<input type="checkbox"/> Yes <input 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 H<sub>2</sub>S, Prevention Plan  
☐ Emergency Response Plan  
☐ Oil Field Waste Stream Characterization  
☐ Monitoring and Inspection Plan  
☐ Erosion Control Plan  
☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.

**Proposed Closure:** 19.15.17.13 NMAC**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Closed-loop System  
☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal  
☐ Waste Removal (Closed-loop systems only)  
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)  
☐ In-place Burial ☐ On-site Trench Burial  
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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

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

16. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13 D NMAC)  
**Instructions:** Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?  
☐ Yes (If yes, please provide the information below) ☐ No

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

☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC  
**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site, Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database, Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

18. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

**Operator Application Certification:**

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

Name (Print): Logan HixonTitle: Environmental TechnicianSignature: Logan HixonDate: 5-21-2012E-mail address: Logan\_Hixon@xtoenergy.comTelephone: 505-333-3683

20.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 5/24/2012Title: Compliance Officer OCD Permit Number: \_\_\_\_\_

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: 9/18/12

22.

**Closure Method:**

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

23.

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

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

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

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

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

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

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

24.

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

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

On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: ☐ 1927 ☐ 1983

25.

**Operator Closure Certification:**

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

Name (Print): Logan Hixon Title: EHS TechnicianSignature: Log H Date: 10/17/12E-mail address: Logan\_Hixon@xtoenergy.com Telephone: 505 333-3683

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: Logan Hixon
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3683
Facility Name: Bolack B #5 (API 30-045-11823)	Facility Type: Gas Well (Dakota)

Surface Owner: Federal	Mineral Owner:	Lease No.: NMSF079232
------------------------	----------------	-----------------------

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	31	27 N	8 W	1850	FSL	1625	FEL	San Juan County

Latitude: N36.52845 Longitude: W-107.71881

#### NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: None
Source of Release: 21 bbl BGT	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: May 30, 2012
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 Bolack B #5 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 Chlorides, Benzene and Total BTEX, but above the 'pit rule' standards for TPH, confirming that a release had occurred at this location.

Describe Area Affected and Cleanup Action Taken.\*

Based on TPH results of 1330 ppm via USEPA Method 418.1, it has been confirmed that a release had occurred at this location.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

#### OIL CONSERVATION DIVISION

Signature: <i>Logan Hixon</i>	Approved by District Supervisor:		
Printed Name: Logan Hixon			
Title: Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: Logan_Hixon@xtoenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/17/12	Phone: 505-333-3683		

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

**Lease Name: Bolack B #5**

**API No.: 30-045-11823**

**Description: Unit J, Section 31, Township 27N, Range 8W, San Juan County**

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

## **General Plan**

1. XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.

**Closure Date is September 18, 2012**

2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.

**Closure Date is September 18, 2012**

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 Bolack B #5**

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	< 0. 0029mg/kg
BTEX	EPA SW-846 8021B or 8260B	50	< 0. 0696mg/kg
TPH	EPA SW-846 418.1	100	1330 mg/kg
Chlorides	EPA 300.1	250 or background	92 mg/kg
TPH (Spill Rule)	8015	100	100 mg/kg

8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.

**Due to TPH results of 1330 PPM, a release has been confirmed for this location. A C-141 Release Notification form will be sent outlining any remediation activities taken regarding this release.**

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 May 23, 2012; 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 May 23, 2012 via email. Email has been approved as a means of surface owner notification to the BLM by Brandon Powell, NMOCD Aztec Office.**

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.  
**The location 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.  
**Site 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**
15. This closure report is being submitted after the 60 day deadline required by the 'Pit Rule' due to a unforeseen delay on final reclamation of this well site. This delay was due to remediation activities for impacted soil on this site during the reclamation activities.



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

Wednesday May 30, 2012

Report Number: L575605

Samples Received: 05/16/12

Client Project:

Description: Bolack B 5

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 - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979

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.



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# REPORT OF ANALYSIS

May 30, 2012

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

Date Received : May 16, 2012  
Description : Bolack B 5  
Sample ID : 21 BBL  
Collected By : Logan Hixon  
Collection Date : 05/14/12 10:24

ESC Sample # : L575605-01

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	92.	12.	mg/kg	9056	05/17/12	1
Total Solids	85.8	0.100	%	2540G	05/23/12	1
Benzene	BDL	0.0029	mg/kg	8021B	05/18/12	5
Toluene	BDL	0.029	mg/kg	8021B	05/18/12	5
Ethylbenzene	BDL	0.0029	mg/kg	8021B	05/18/12	5
Total Xylene	BDL	0.0087	mg/kg	8021B	05/18/12	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	98.6		% Rec.	8021B	05/18/12	5
TPH (GC/FID) Low Fraction	BDL	0.58	mg/kg	8015D/GRO	05/17/12	5
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	05/17/12	5
TPH (GC/FID) High Fraction	100	4.7	mg/kg	3546/DRO	05/23/12	1
Surrogate recovery(%)						
o-Terphenyl	66.5		% Rec.	3546/DRO	05/23/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 05/23/12 12:42 Revised: 05/30/12 09:20



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
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Est. 1970

REPORT OF ANALYSIS

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

May 30, 2012

Date Received : May 16, 2012  
Description : Bolack B 5  
Sample ID : 120 BBL  
Collected By : Logan Hixon  
Collection Date : 05/14/12 10:48

ESC Sample # : 1575605-02

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	85.	11.	mg/kg	9056	05/17/12	1
Total Solids	92.3	0.100	%	2540G	05/23/12	1
Benzene	BDL	0.0027	mg/kg	8021B	05/18/12	5
Toluene	BDL	0.027	mg/kg	8021B	05/18/12	5
Ethylbenzene	BDL	0.0027	mg/kg	8021B	05/18/12	5
Total Xylene	BDL	0.0081	mg/kg	8021B	05/18/12	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene (PID)	98.6		% Rec.	8021B	05/18/12	5
TPH (GC/FID) Low Fraction	BDL	0.54	mg/kg	8015D/GRO	05/17/12	5
Surrogate Recovery (70-130)						
a,a,a-Trifluorotoluene (FID)	101.		% Rec.	602/8015	05/17/12	5
TPH (GC/FID) High Fraction	BDL	4.3	mg/kg	3546/DRO	05/21/12	1
Surrogate recovery(%)						
o-Terphenyl	69.4		% Rec.	3546/DRO	05/21/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 05/23/12 12:42 Revised: 05/30/12 09:20



**YOUR LAB OF CHOICE**

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

Aztec, NM 87410

Quality Assurance Report  
Level II

1575605

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

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Est. 1970

May 30, 2012

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG593122	05/16/12 20:49
a,a,a-Trifluorotoluene(FID)		% Rec	101.0	59-128	WG593122	05/16/12 20:49
Chloride	< 1	mg/kg			WG593199	05/17/12 16:19
Benzene	< .0005	mg/kg			WG593521	05/18/12 14:35
Ethylbenzene	< .0005	mg/kg			WG593521	05/18/12 14:35
Toluene	< .005	mg/kg			WG593521	05/18/12 14:35
Total Xylene	< .0015	mg/kg			WG593521	05/18/12 14:35
a,a,a-Trifluorotoluene(PID)		% Rec.	99.15	54-144	WG593521	05/18/12 14:35
TPH (GC/FID) High Fraction	< 4	ppm			WG593357	05/21/12 10:21
o-Terphenyl		% Rec.	87.05	50-150	WG593357	05/21/12 10:21
TPH (GC/FID) High Fraction	< 4	ppm			WG594019	05/22/12 17:19
o-Terphenyl		% Rec.	83.08	50-150	WG594019	05/22/12 17:19
Total Solids	< .1	%			WG593897	05/23/12 07:51

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Chloride	mg/kg	620.	600.	2.63	20	1575026-04	WG593199
Total Solids	%	89.0	89.0	0.285	5	1575768-03	WG593897

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.85	125.	67-135	WG593122
a,a,a-Trifluorotoluene(FID)				105.4	59-128	WG593122
Chloride	mg/kg	200	213.	107.	80-120	WG593199
Benzene	mg/kg	.05	0.0416	83.2	76-113	WG593521
Ethylbenzene	mg/kg	.05	0.0413	82.7	78-115	WG593521
Toluene	mg/kg	.05	0.0429	85.7	76-114	WG593521
Total Xylene	mg/kg	.15	0.130	86.4	81-118	WG593521
a,a,a-Trifluorotoluene(PID)				98.86	54-144	WG593521
TPH (GC/FID) High Fraction	ppm	60	40.0	66.6	50-150	WG593357
o-Terphenyl				69.28	50-150	WG593357
TPH (GC/FID) High Fraction	ppm	60	48.0	79.9	50-150	WG594019
o-Terphenyl				75.95	50-150	WG594019
Total Solids	%	50	50.0	99.9	85-115	WG593897

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

Aztec, NM 87410

Quality Assurance Report  
Level II

L575605

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Est. 1970

May 30, 2012

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	6.80	6.85	124.	67-135	0.660	20	WG593122
a,a,a-Trifluorotoluene(FID)				105.2	59-128			WG593122
Chloride	mg/kg	220.	213.	110	80-120	3.23	20	WG593199
Benzene	mg/kg	0.0415	0.0416	83.0	76-113	0.150	20	WG593521
Ethylbenzene	mg/kg	0.0414	0.0413	83.0	78-115	0.180	20	WG593521
Toluene	mg/kg	0.0408	0.0429	82.0	76-114	4.84	20	WG593521
Total Xylene	mg/kg	0.129	0.130	86.0	81-118	0.660	20	WG593521
a,a,a-Trifluorotoluene(PID)				99.38	54-144			WG593521
TPH (GC/FID) High Fraction	ppm	44.2	40.0	74.0	50-150	9.95	25	WG593357
o-Terphenyl				75.29	50-150			WG593357
TPH (GC/FID) High Fraction	ppm	48.6	48.0	81.0	50-150	1.38	25	WG594019
o-Terphenyl				78.54	50-150			WG594019

Analyte	Units	MS Res	Matrix Spike			Limit	Ref Samp	Batch
			Ref Res	TV	% Rec			
TPH (GC/FID) Low Fraction	mg/kg	24.7	0	5.5	89.7	55-109	L575455-01	WG593122
a,a,a-Trifluorotoluene(FID)					104.2	59-128		WG593122
Chloride	mg/kg	585.	79.0	500	101.	80-120	L575605-01	WG593199
Benzene	mg/kg	0.203	0	.05	81.1	32-137	L575605-02	WG593521
Ethylbenzene	mg/kg	0.200	0	.05	80.1	10-150	L575605-02	WG593521
Toluene	mg/kg	0.206	0	.05	82.4	20-142	L575605-02	WG593521
Total Xylene	mg/kg	0.628	0	.15	83.8	16-141	L575605-02	WG593521
a,a,a-Trifluorotoluene(PID)					98.75	54-144		WG593521
TPH (GC/FID) High Fraction	ppm	43.7	0	60	72.9	50-150	L575690-03	WG593357
o-Terphenyl					66.62	50-150		WG593357
TPH (GC/FID) High Fraction	ppm	98.8	86.0	60	21.2*	50-150	L576282-01	WG594019
o-Terphenyl					87.66	50-150		WG594019

Analyte	Units	MSD	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec						
TPH (GC/FID) Low Fraction	mg/kg	21.2	24.7	77.2		55-109	15.0	20	L575455-01	WG593122
a,a,a-Trifluorotoluene(FID)				102.9		59-128				WG593122
Chloride	mg/kg	607	585.	106.		80-120	3.69	20	L575605-01	WG593199
Benzene	mg/kg	0.202	0.203	80.7		32-137	0.490	39	L575605-02	WG593521
Ethylbenzene	mg/kg	0.196	0.200	78.5		10-150	1.97	44	L575605-02	WG593521
Toluene	mg/kg	0.195	0.206	77.9		20-142	5.57	42	L575605-02	WG593521
Total Xylene	mg/kg	0.610	0.628	81.3		16-141	3.00	46	L575605-02	WG593521
a,a,a-Trifluorotoluene(PID)				98.13		54-144				WG593521

\* Performance of this Analyte is outside of established criteria.

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



YOUR LAB OF CHOICE

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

Aztec, NM 87410

Quality Assurance Report  
Level II

L575605

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1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

May 30, 2012

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
TPH (GC/FID) High Fraction o-Terphenyl	ppm	51.0	43.7	84.9 69.03	50-150 50-150	15.3	25	L575690-03	WG593357 WG593357
TPH (GC/FID) High Fraction o-Terphenyl	ppm	84.1	98.8	0* 89.44	50-150 50-150	16.0	40	L576282-01	WG594019 WG594019

Batch number /Run number / Sample number cross reference

WG593122: R2173113: L575605-01 02  
WG593199: R2175013: L575605-01 02  
WG593521: R2177253: L575605-01 02  
WG593357: R2178293: L575605-02  
WG594019: R2180853: L575605-01  
WG593897: R2181596: L575605-01 02

\* \* 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.'



**YOUR LAB OF CHOICE**

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

Aztec, NM 87410

Quality Assurance Report  
Level II

L575605

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

May 30, 2012

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.



<b>Company Name/Address:</b> <b>XTO Energy - San Juan Division</b>  382 County Road 3100 Aztec, NM 87410			<b>Billing Information:</b>  XTO Energy Inc Accounts Payable 382 CR 3100  Aztec, NM 87410			<b>Analysis/Container/Preservative</b> <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8015 GR/DIO</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8021</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8001 Chlorides</div> </div>			<b>Chain of Custody</b> Page ___ of ___   <b>ESC</b> L.A.B S.C.I.E.N.C.E.S 12065 Lebanon Road Mt. Juliet, TN 37122  Phone: (800) 767-5859 Phone: (615) 758-5858 Fax: (615) 758-5859		
<b>Report to:</b> Logan Hixon James McDaniel			<b>Email to:</b> James.McDaniel@XTO Logan.Hixon@XTO								
<b>Project Description:</b> Bolack B #5			<b>City/State Collected:</b> NM								
<b>Phone:</b> (505) 333-3100 <b>FAX:</b>		<b>Client Project #:</b>		<b>ESC Key:</b>							
<b>Collected by: (print)</b> Logan Hixon		<b>Site/Facility ID#:</b>		<b>P.O.#:</b>							
<b>Collected by (signature):</b> 		<b>Rush?</b> (Lab MUST Be Notified) <input type="checkbox"/> Same Day..... 200% <input type="checkbox"/> Next Day..... 100% <input type="checkbox"/> Two Day..... 50% <input type="checkbox"/> Three Day..... 25%		<b>Date Results Needed:</b> Email? <input type="checkbox"/> No <input type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		<b>No of Cntrs</b>					
<b>Immediately Packed on Ice</b> N <input checked="" type="checkbox"/> (Y)											
<b>Sample ID</b>	<b>Comp/Grab</b>	<b>Matrix*</b>	<b>Depth</b>	<b>Date</b>	<b>Time</b>						
21 bbl pit tank	comp	SS		5/14/12	10:24	1402	X	X	X		
120 bbl pit tank	comp	SS		5/14/12	10:48	1402	X	X	X		

\*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature) 	Date 5/15/12	Time: 5:00	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition:  (lab use only)	
	Relinquished by: (Signature) 	Date:	Time:	Received by: (Signature) 	Temp: 3.2	Bottles Received: 2 402
	Relinquished by: (Signature) 	Date:	Time:	Received for lab by: (Signature) 	Date: 5/16/12	Time: 0916
				CoC Seals Intact: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA	pH Checked: NCF	



## Report Summary

Client: XTO

Chain of Custody Number: 13955

Samples Received: 05-15-12

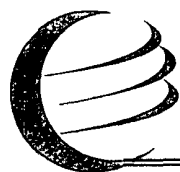
Job Number: 98031-0528

Sample Number(s): 62068-62069

Project Name/Location: Bolack B #5

Entire Report Reviewed By: *[Signature]* Date: 05-17-12

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.



# envirotech

Analytical Laboratory

EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS

Client:	XTO	Project #:	98031-0528
Sample ID:	21 BBL PIT tank	Date Reported:	05-16-12
Laboratory Number:	62068	Date Sampled:	05-14-12
Chain of Custody No:	13955	Date Received:	05-15-12
Sample Matrix:	Soil	Date Extracted:	05-16-12
Preservative:		Date Analyzed:	05-16-12
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

Total Petroleum Hydrocarbons	1,330	7.4
------------------------------	-------	-----

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Bolack B #5**



EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS

Client:	XTO	Project #:	98031-0528
Sample ID:	120 BBL Pit tank	Date Reported:	05-16-12
Laboratory Number:	62069	Date Sampled:	05-14-12
Chain of Custody No:	13955	Date Received:	05-15-12
Sample Matrix:	Soil	Date Extracted:	05-16-12
Preservative:		Date Analyzed:	05-16-12
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
-----------	--------------------------	--------------------------

<b>Total Petroleum Hydrocarbons</b>	<b>44.3</b>	<b>7.4</b>
-------------------------------------	-------------	------------

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Bolack B #5**



EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS  
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	05-16-12
Laboratory Number:	05-16-12-TPH.QA/QC 62068	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	05-16-12
Preservative:	N/A	Date Extracted:	05-16-12
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	04-25-12	05-16-12	1,850	1,720	7.0%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	7.4

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	1,330	1,180	11.3%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	1,330	2,000	3,100	93.1%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 62068-62069.

# CHAIN OF CUSTODY RECORD

13955

Client: <b>XTO</b>				Project Name / Location: <b>Black B #5</b>				ANALYSIS / PARAMETERS														
Email results to: <b>Logan Hixen @ xtoenergy.com</b>				Sampler Name: <b>Logan Hixen</b>				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
Client Phone No.: <b>(505) 386 8018</b>				Client No.: <b>98031-0528</b>																		
Sample No. / Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative																	
					HgCl <sub>2</sub>	HCl																
21 BBL PIT tank	5/14/12	10:24	62068	1-40Z																		
120 BBL pit tank	5/14/12	10:48	62069	1-40Z																		
Relinquished by: (Signature) <i>[Signature]</i>				Date: <b>5/15/12</b>	Time: <b>16:10</b>	Received by: (Signature) <i>[Signature]</i>				Date: <b>5/15/12</b>	Time: <b>16:10</b>											
Relinquished by: (Signature)						Received by: (Signature)																
Sample Matrix																						
Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																						
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																						



5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com

Sample warm



Logan Hixon/FAR/CTOC  
05/23/2012 03:31 PM

To MARK KELLY

cc James McDaniel/FAR/CTOC@CTOC, Kurt  
Hoekstra/FAR/CTOC@CTOC

bcc

Subject Below ground tank closure notification-Bolack B #5

Mark,

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

Bolack B #5 (API #30-045-11823) Located in Section 31J, Township 27N, Range 8W, San Juan County New Mexico

This below grade tank is being closed due to plugging and abandoning of these well locations .

Thank you for your time in regards to this matter .

Thank You!

Logan Hixon

Environmental Technician

XTO Energy Inc. An ExxonMobil Subsidiary

Western Division

382 CR 3100

Aztec NM 87410

Office (505)333- 3683

Cell (505) 386-8018

Logan\_Hixon@xtoenergy.com



Logan Hixon/FAR/CTOC

05/23/2012 03:32 PM

To BRANDON POWELL

cc James McDaniel/FAR/CTOC@CTOC, Kurt  
Hoekstra/FAR/CTOC@CTOC

bcc

Subject BGT Closure Notification-Bolack B #5

Brandon,

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

Bolack B #5 (API #30-045-11823) Located in Section 31J, Township 27N, Range 8W, San Juan County New Mexico

This below grade tank is being closed due to plugging and abandoning of these well locations .

Thank you for your time in regards to this matter .

Thank You!

Logan Hixon

Environmental Technician

XTO Energy Inc. An ExxonMobil Subsidiary

Western Division

382 CR 3100

Aztec NM 87410

Office (505)333- 3683

Cell (505) 386-8018

Logan\_Hixon@xtoenergy.com



XTO Energy, Inc.  
Bolack B #5  
Section 31 (J), Township 27N, Range 8W  
Closure Date: 6/27/2012



Photo 1: Bolack B #5 after reclamation (View 1)

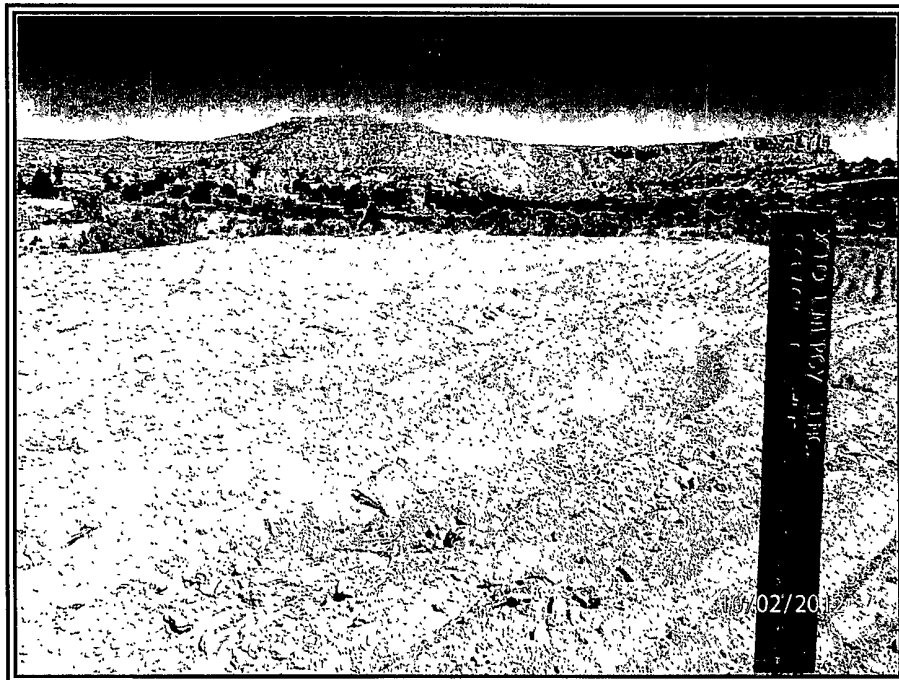


Photo 2: Bolack B #5 after reclamation (View 2)

XTO Energy, Inc.  
Bolack B #5  
Section 31 (J), Township 27N, Range 8W  
Closure Date: 6/27/2012



Photo 3: Bolack B #5 after reclamation (View 3)

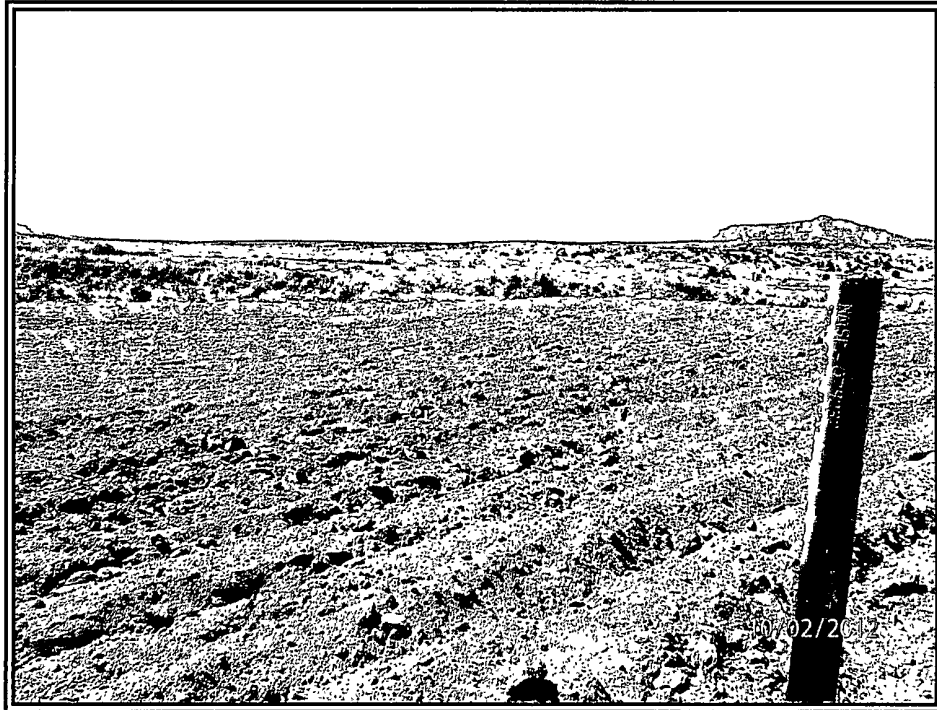


Photo 4: Bolack B #5 after reclamation (View 4)

XTO Energy, Inc.  
Bolack B #5  
Section 31 (J), Township 27N, Range 8W  
Closure Date: 6/27/2012

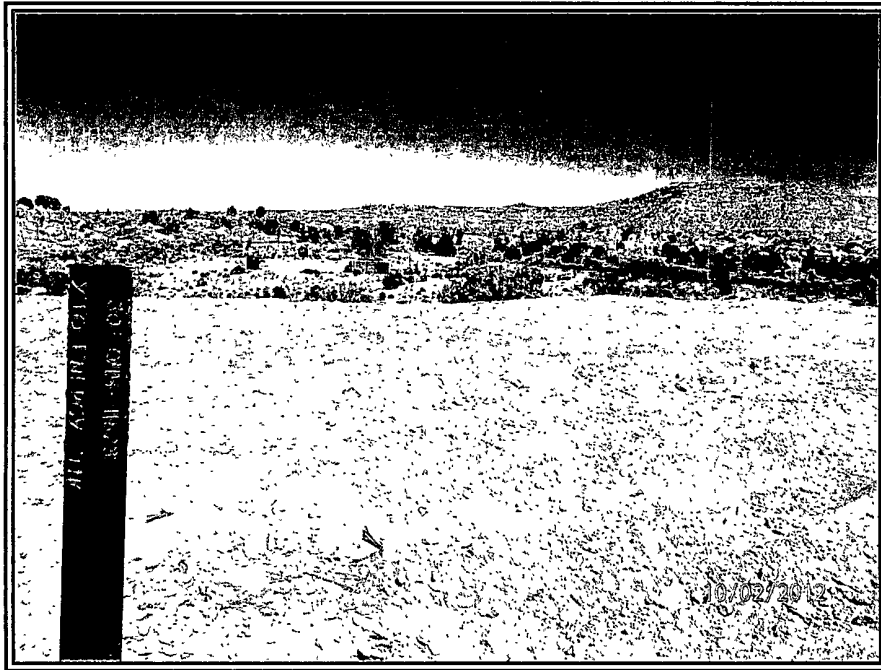


Photo 5: Bolack B #5 after reclamation (View 5)

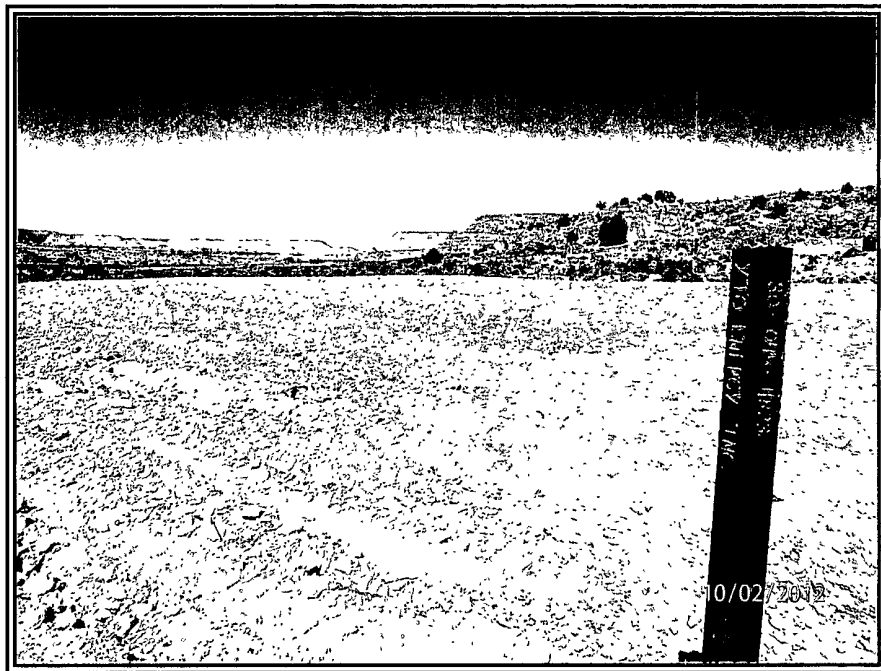


Photo 6: Bolack B #5 after reclamation (View 6)

XTO Energy, Inc.  
Bolack B #5  
Section 31 (J), Township 27N, Range 8W  
Closure Date: 6/27/2012

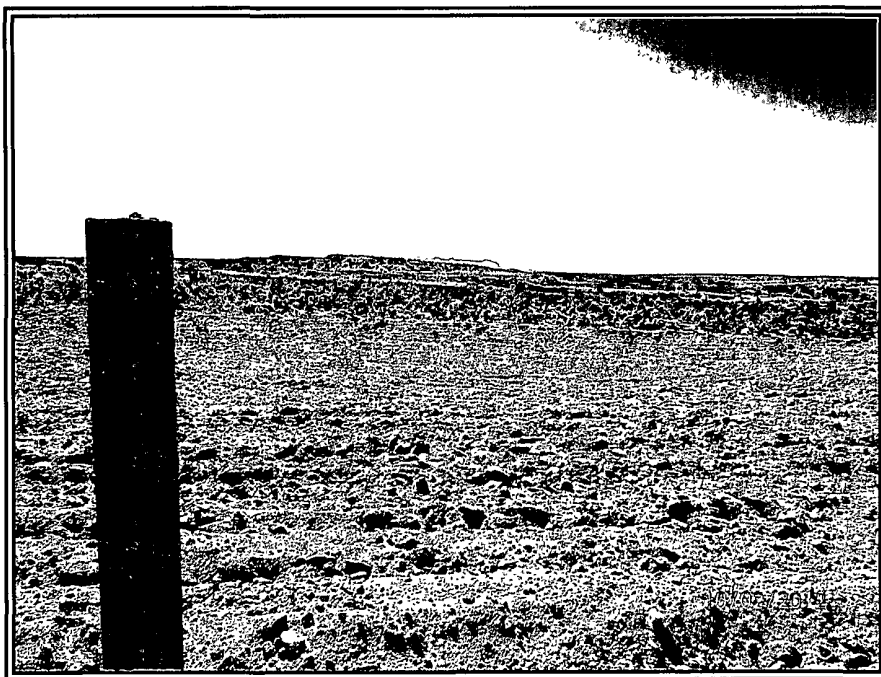


Photo 7: Bolack B #5 after reclamation (View 7)

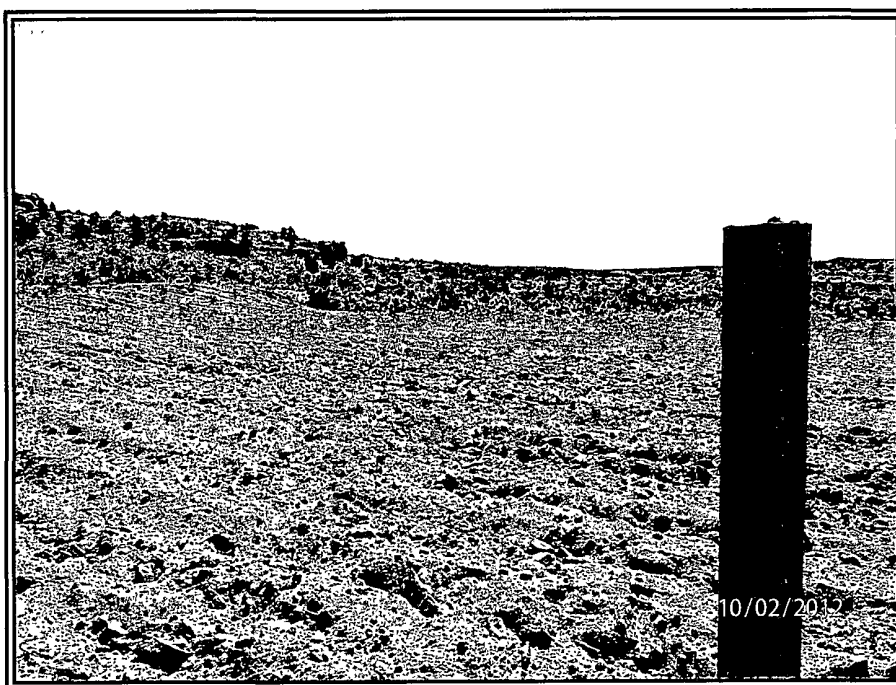


Photo 8: Bolack B #5 after reclamation (View 8)

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: Logan Hixon
Address: 382 Road 3100, Aztec, New Mexico 87410	Telephone No.: (505) 333-3683
Facility Name: Bolack B #5 (API 30-045-11823)	Facility Type: Gas Well (Dakota)

Surface Owner: Federal	Mineral Owner:	Lease No.: NMSF079232
------------------------	----------------	-----------------------

### LOCATION OF RELEASE

Unit Letter J	Section 31	Township 27 N	Range 8 W	Feet from the 1850	North/South Line FSL	Feet from the 1625	East/West Line FEL	County San Juan County
------------------	---------------	------------------	--------------	-----------------------	-------------------------	-----------------------	-----------------------	---------------------------

Latitude: N36.52845 Longitude: W-107.71881

### NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: None
Source of Release: 21 bbl BGT	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: May 14, 2012
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 Bolack B #5 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 Chlorides, Benzene and Total BTEX, but above the 'pit rule' standards for TPH, confirming that a release had occurred at this location

Describe Area Affected and Cleanup Action Taken.\*

Based on TPH results of 1330 ppm via USEPA Method 418.1, it has been confirmed that a release had occurred on this location. The site was then ranked pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. The site was ranked a 20 due to an estimated distance of ground water less than 50 feet to. This set the closure standard to 100 ppm TPH, 10 ppm benzene and 50 ppm total BTEX. The BGT closure composite sample returned results below the standard set for benzene and total BTEX and equal to TPH standard determined for this site pursuant to the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. No further action is required for this site. All applicable analytical results are attached for your reference.

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.

### OIL CONSERVATION DIVISION

Signature: <i>Logan Hixon</i>	Approved by District Supervisor:		
Printed Name: Logan Hixon			
Title: Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: Logan_Hixon@xtoenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/17/12	Phone: 505-333-3683		



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

Wednesday May 30, 2012

Report Number: L575605

Samples Received: 05/16/12

Client Project:

Description: Bolack B 5

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 - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979

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.



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

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Est. 1970

REPORT OF ANALYSIS

May 30, 2012

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

Date Received : May 16, 2012  
Description : Bolack B 5  
Sample ID : 21 BBL  
Collected By : Logan Hixon  
Collection Date : 05/14/12 10:24

ESC Sample # : L575605-01

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	92.	12.	mg/kg	9056	05/17/12	1
Total Solids	85.8	0.100	%	2540G	05/23/12	1
Benzene	BDL	0.0029	mg/kg	8021B	05/18/12	5
Toluene	BDL	0.029	mg/kg	8021B	05/18/12	5
Ethylbenzene	BDL	0.0029	mg/kg	8021B	05/18/12	5
Total Xylene	BDL	0.0087	mg/kg	8021B	05/18/12	5
Surrogate Recovery(%) a,a,a-Trifluorotoluene (PID)	98.6		% Rec.	8021B	05/18/12	5
TPH (GC/FID) Low Fraction	BDL	0.58	mg/kg	8015D/GRO	05/17/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	102.		% Rec.	602/8015	05/17/12	5
TPH (GC/FID) High Fraction	100	4.7	mg/kg	3546/DRO	05/23/12	1
Surrogate recovery(%) o-Terphenyl	66.5		% Rec.	3546/DRO	05/23/12	1

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: 05/23/12 12:42 Revised: 05/30/12 09:20



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

May 30, 2012

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

Date Received : May 16, 2012  
Description : Bolack B 5  
Sample ID : 120 BBL  
Collected By : Logan Hixon  
Collection Date : 05/14/12 10:48

ESC Sample # : L575605-02

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride	85.	11.	mg/kg	9056	05/17/12	1
Total Solids	92.3	0.100	%	2540G	05/23/12	1
Benzene	BDL	0.0027	mg/kg	8021B	05/18/12	5
Toluene	BDL	0.027	mg/kg	8021B	05/18/12	5
Ethylbenzene	BDL	0.0027	mg/kg	8021B	05/18/12	5
Total Xylene	BDL	0.0081	mg/kg	8021B	05/18/12	5
Surrogate Recovery(%) a,a,a-Trifluorotoluene (PID)	98.6		% Rec.	8021B	05/18/12	5
TPH (GC/FID) Low Fraction	BDL	0.54	mg/kg	8015D/GRO	05/17/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene (FID)	101.		% Rec.	602/8015	05/17/12	5
TPH (GC/FID) High Fraction	BDL	4.3	mg/kg	3546/DRO	05/21/12	1
Surrogate recovery(%) o-Terphenyl	69.4		% Rec.	3546/DRO	05/21/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 05/23/12 12:42 Revised: 05/30/12 09:20





**YOUR LAB OF CHOICE**

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

Aztec, NM 87410

Quality Assurance Report  
Level II

L575605

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

May 30, 2012

Analyte	Result	Laboratory Blank Units % Rec	Limit	Batch	Date Analyzed
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	< .1	mg/kg % Rec. 101.0	59-128	WG593122	05/16/12 20:49
Chloride	< 1	mg/kg		WG593199	05/17/12 16:19
Benzene	< .0005	mg/kg		WG593521	05/18/12 14:35
Ethylbenzene	< .0005	mg/kg		WG593521	05/18/12 14:35
Toluene	< .005	mg/kg		WG593521	05/18/12 14:35
Total Xylene a,a,a-Trifluorotoluene(PID)	< .0015	mg/kg % Rec. 99.15	54-144	WG593521	05/18/12 14:35
TPH (GC/FID) High Fraction o-Terphenyl	< 4	ppm % Rec. 87.05	50-150	WG593357	05/21/12 10:21
TPH (GC/FID) High Fraction o-Terphenyl	< 4	ppm % Rec. 83.08	50-150	WG594019	05/22/12 17:19
Total Solids	< .1	%		WG593897	05/23/12 07:51

Analyte	Units	Result	Duplicate Duplicate RPD	Limit	Ref Samp	Batch
Chloride	mg/kg	620.	600. 2.63	20	L575026-04	WG593199
Total Solids	%	89.0	89.0 0.285	5	L575768-03	WG593897

Analyte	Units	Laboratory Control Sample Known Val Result	% Rec	Limit	Batch
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.5 6.85	125. 105.4	67-135 59-128	WG593122 WG593122
Chloride	mg/kg	200 213.	107.	80-120	WG593199
Benzene	mg/kg	.05 0.0416	83.2	76-113	WG593521
Ethylbenzene	mg/kg	.05 0.0413	82.7	78-115	WG593521
Toluene	mg/kg	.05 0.0429	85.7	76-114	WG593521
Total Xylene a,a,a-Trifluorotoluene(PID)	mg/kg	.15 0.130	86.4 98.86	81-118 54-144	WG593521 WG593521
TPH (GC/FID) High Fraction o-Terphenyl	ppm	60 40.0	66.6 69.28	50-150 50-150	WG593357 WG593357
TPH (GC/FID) High Fraction o-Terphenyl	ppm	60 48.0	79.9 75.95	50-150 50-150	WG594019 WG594019
Total Solids	%	50 50.0	99.9	85-115	WG593897

\* Performance of this Analyte is outside of established criteria.

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



YOUR LAB OF CHOICE

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James McDaniel  
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report  
Level II

L575605

12065 Lebanon Rd.  
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(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

May 30, 2012

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	6.80	6.85	124. 105.2	67-135 59-128	0.660	20	WG593122 WG593122
Chloride	mg/kg	220.	213.	110.	80-120	3.23	20	WG593199
Benzene	mg/kg	0.0415	0.0416	83.0	76-113	0.150	20	WG593521
Ethylbenzene	mg/kg	0.0414	0.0413	83.0	78-115	0.180	20	WG593521
Toluene	mg/kg	0.0408	0.0429	82.0	76-114	4.84	20	WG593521
Total Xylene a,a,a-Trifluorotoluene(PID)	mg/kg	0.129	0.130	86.0 99.38	81-118 54-144	0.660	20	WG593521 WG593521
TPH (GC/FID) High Fraction o-Terphenyl	ppm	44.2	40.0	74.0 75.29	50-150 50-150	9.95	25	WG593357 WG593357
TPH (GC/FID) High Fraction o-Terphenyl	ppm	48.6	48.0	81.0 78.54	50-150 50-150	1.38	25	WG594019 WG594019

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	24.7	0	5.5	89.7 104.2	55-109 59-128	L575455-01	WG593122 WG593122
Chloride	mg/kg	585.	79.0	500	101.	80-120	L575605-01	WG593199
Benzene	mg/kg	0.203	0	.05	81.1	32-137	L575605-02	WG593521
Ethylbenzene	mg/kg	0.200	0	.05	80.1	10-150	L575605-02	WG593521
Toluene	mg/kg	0.206	0	.05	82.4	20-142	L575605-02	WG593521
Total Xylene a,a,a-Trifluorotoluene(PID)	mg/kg	0.628	0	.15	83.8 98.75	16-141 54-144	L575605-02	WG593521 WG593521
TPH (GC/FID) High Fraction o-Terphenyl	ppm	43.7	0	60	72.9 66.62	50-150 50-150	L575690-03	WG593357 WG593357
TPH (GC/FID) High Fraction o-Terphenyl	ppm	98.8	86.0	60	21.2* 87.66	50-150 50-150	L576282-01	WG594019 WG594019

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	21.2	24.7	77.2 102.9	55-109 59-128	15.0	20	L575455-01	WG593122 WG593122
Chloride	mg/kg	607.	585.	106.	80-120	3.69	20	L575605-01	WG593199
Benzene	mg/kg	0.202	0.203	80.7	32-137	0.490	39	L575605-02	WG593521
Ethylbenzene	mg/kg	0.196	0.200	78.5	10-150	1.97	44	L575605-02	WG593521
Toluene	mg/kg	0.195	0.206	77.9	20-142	5.57	42	L575605-02	WG593521
Total Xylene a,a,a-Trifluorotoluene(PID)	mg/kg	0.610	0.628	81.3 98.13	16-141 54-144	3.00	46	L575605-02	WG593521 WG593521

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Analyte		Units	MSD	Matrix Ref	Spike %Rec	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
TPH (GC/FID)	High Fraction	ppm	51.0	43.7	84.9	69.03	50-150 50-150	15.3	25	L575690-03	WG593357 WG593357
TPH (GC/FID)	High Fraction	ppm	84.1	98.8	0*	89.44	50-150 50-150	16.0	40	L576282-01	WG594019 WG594019

Batch number /Run number / Sample number cross reference

WG593122: R2173113: L575605-01 02  
WG593199: R2175013: L575605-01 02  
WG593521: R2177253: L575605-01 02  
WG593357: R2178293: L575605-02  
WG594019: R2180853: L575605-01  
WG593897: R2181596: L575605-01 02

\* \* Calculations are performed prior to rounding of reported values.

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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: <b>XTO Energy - San Juan Division</b>  382 County Road 3100 Aztec, NM 87410			Billing Information:  XTO Energy Inc Accounts Payable 382 CR 3100  Aztec, NM 87410			Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">8015 GLO/DFO</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">802</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">800.1 Chlorides</div> </div>			Chain of Custody Page ___ of ___   <b>ESC</b> L.A.B S.C.I.E.N.C.E.S 12065 Lebanon Road Mt. Juliet, TN 37122  Phone: (800) 767-5859 Phone: (615) 758-5858 Fax: (615) 758-5859				
Report to: <u>Logan Hixon</u> <u>James McDaniel</u>			Email to: <u>James.McDaniel@XTO</u> <u>Logan.Hixon@XTO</u>										
Project Description: <u>Bolack B #5</u>			City/State Collected: <u>NM</u>										
Phone: (505) 333-3100 FAX:		Client Project #:		ESC Key:									
Collected by (print): <u>Logan Hixon</u>		Site/Facility ID#:		P.O.#:									
Collected by (signature): <u>[Signature]</u> Immediately Packed on Ice N <u>(Y)</u>		<input checked="" type="checkbox"/> <b>Rush?</b> (Lab MUST Be Notified) ___ Same Day . . . . . 200% ___ Next Day . . . . . 100% ___ Two Day . . . . . 50% ___ Three Day . . . . . 25%		Date Results Needed: Email? ___ No ___ Yes FAX? ___ No ___ Yes		No. of Cntrs					CoCode: <u>XTORNM</u> (lab use only) Template/Prelogin Shipped Via:		
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time							Remarks/Contaminant	Sample # (lab only)
21 66l pit tank	comp	SS		5/14/12	10:24	1402	X	X	X				<u>65756052</u>
120 66l pit tank	comp	SS		5/14/12	10:48	1402	X	X	X				<u>62</u>

\*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature) <u>[Signature]</u> Relinquished by: (Signature) <u>[Signature]</u> Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>5/15/12</u>	Time: <u>8:00</u>	Received by: (Signature) <u>[Signature]</u>	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition: <u>OK</u> (lab use only) CoC Seals Intact: <u>Y</u> <u>OK</u> pH Checked: <u>OK</u> NCF:
	Date:	Time:	Received by: (Signature) <u>[Signature]</u>	Temp: <u>32</u> Bottles Received: <u>2 402</u>	
	Date:	Time:	Received for lab by (Signature) <u>[Signature]</u>	Date: <u>5/16/12</u> Time: <u>0916</u>	



# Well Below Tank Inspection Report

RouteName		StopName	Pumper	Foreman	WellName	APIWellNumber	Section	Range	Township		
Below Grade Pit Forms (Temp			Bolack B 05	McDowell, Jesse	Unassigned	BOLACK B 05 (PA)	3004511823	31	8W	27N	
InspectorName	Inspection Date	Inspection Time	Visible LinerTears	VisibleTankLeak Overflow	Collection OfSurfaceRun	Visible LayerOil	Visible Leak	Freeboard EstFT	PitLocation	PitType	Notes
I parke	07/23/2008	01:42	No	No	No	Yes	No	2			
I parke	08/25/2008	11:15	No	No	No	Yes	No	1			
I parke	09/22/2008	11:07	No	No	No	Yes	No	3			
I parke	10/30/2008	12:55	No	No	No	Yes	No	5	Well Water Pi	Below Ground	
I parke	12/31/2008	12:00	No	No	No	Yes	No	5	Well Water Pi	Below Ground	
I parke	01/18/2009	12:00	No	No	No	Yes	No	3	Well Water Pi	Below Ground	
I parke	02/20/2009	12:00	No	No	No	Yes	No	3	Well Water Pi	Below Ground	
M,GARCIA	04/29/2009	11:45	No	No	No	Yes	No	3	Well Water Pi	Below Ground	
LP	06/05/2009	11:45	No	No	No	Yes	No	2	Well Water Pi	Below Ground	
LP	09/30/2009	11:45	No	No	No	Yes	No	4	Well Water Pi	Below Ground	
LP	01/15/2010	11:00	No	No	No	Yes	No	2	Well Water Pi	Below Ground	
LP	02/15/2010	11:00	No	No	No	Yes	No	34	Well Water Pi	Below Ground	
MG	03/22/2010	11:30	No	No	No	Yes	No	3	Well Water Pi	Below Ground	
MG	04/22/2010	11:00	No	No	No	Yes	No	5	Well Water Pi	Below Ground	
MG	05/11/2010	12:00	No	No	No	Yes	No	3	Well Water Pi	Below Ground	
MG	07/14/2010	02:00	No	No	No	Yes	No	3	Well Water Pi	Below Ground	
LR	08/31/2010	02:00	No	No	No	Yes	No	2	Well Water Pi	Below Ground	
mg	09/03/2010	12:00	No	No	No	Yes	No	2	Well Water Pi	Below Ground	
mg	10/19/2010	02:30	No	No	No	Yes	No	3	Well Water Pi	Below G	MG
LR	11/19/2010	02:30	No	No	No	Yes	No	4	Well Water Pi	Below G	LR
LR	01/17/2011	02:30	No	No	No	Yes	No	5	Well Water Pi	Below G	LR
LR	02/28/2011	02:30	No	No	No	Yes	No	5	Well Water Pi	Below G	LR
SE	09/08/2011	02:30	No	No	No	Yes	No	5	Well Water Pi	Below Ground	