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.

2009 NOV 24 AM 11 31

9929

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

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

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

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

1.
Operator: XTO Energy, Inc. OGRID #: 5380
Address: #382 County Road 3100, Aztec, NM 87410
Facility or well name: LAS COLINAS #100
API Number: 30-045-31301 OCD Permit Number:
U/L or Qtr/Qtr E Section 26 Township 30N Range 13W County: San Juan
Center of Proposed Design: Latitude 36.90111 Longitude 108.1825 NAD: ☐1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

RCVD APR 20 '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: 120 bbl Type of fluid: Produced Water
Tank Construction material: Steel
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other Visible sidewalls, vaulted, automatic high-level shut off, no liner
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

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



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6.

**Fencing:** Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify Four foot height, steel mesh field fence (hogwire) with pipe top railing

7.

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

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

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

8.

**Signs:** Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

9.

**Administrative Approvals and Exceptions:**

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

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

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

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

10.

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

***Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance.*** **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

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

11.
**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC
***Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
**Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC
***Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

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

13.
**Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC
***Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including $H_2S$, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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

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

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

15.
**Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

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

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

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

*Required for impacted areas which will not be used for future service and operations:*
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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

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

18.
**On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
**Operator Application Certification:**

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

Name (Print): Kim Champlin Title: Environmental Representative

Signature: Kim Champlin Date: 11/18/08

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

20.
**OCD Approval:** ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

**OCD Representative Signature:** Jonathan P. Kelly 4/23/2012 **Approval Date:** 10/17/11

**Title:** Environmental Engineer 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:** 11-3-2011

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 indentify 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): Kurt Hoekstra Title: Sr. Environmental Technician

Signature: Kurt Hoekstra Date: 4-19-2012

e-mail address: Kurt_Hoekstra@xtoenergy.com Telephone: 505-333-3202

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: Kurt Hoekstra |
| Address: 382 Road 3100, Aztec, New Mexico 87410 | Telephone No.: (505) 333-3202 |
| Facility Name: Las Colinas # 100 (30-045-31301) | Facility Type: Gas Well (Fulcher Kutz Pictured Cliffs ) |

| | | |
|---|---|---|
| Surface Owner: Federal | Mineral Owner: | Lease No.: NMSF-078213 |

## LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| E | 26 | 30N | 13W | 2005 | FNL | 414 | FWL | San Juan |

**Latitude:** 36.90111 **Longitude:** -108.1825

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release: N/A | Volume of Release: N/A | Volume Recovered: N/A |
| Source of Release: N/A | Date and Hour of Occurrence: N/A | Date and Hour of Discovery: NA |
| Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required | If YES, To Whom? | |
| By Whom? | Date and Hour | |
| Was a Watercourse Reached? ☐ Yes ☒ No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The below grade tank was removed at the Las Colinas # 100 well site due to the plugging and abandoning of this well site. The BGT cellar beneath the BGT was sampled for TPH via USEPA Method 8015 and 418.1, for BTEX via USEPA Method 8021, and for total chlorides. The sample returned results below the 'pit rule' standards of 100 ppm TPH, 0.2 ppm benzene, 10 ppm total BTEX and 250 ppm chlorides, confirming that a release has not occurred at this location.

Describe Area Affected and Cleanup Action Taken.*
No release has been confirmed for 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

| | | |
|---|---|---|
| Signature: Kurt Hoekstra | OIL CONSERVATION DIVISION | |
| Printed Name: Kurt Hoekstra | Approved by District Supervisor: | |
| Title: Sr. Environmental Technician | Approval Date: | Expiration Date: |
| E-mail Address: Kurt_Hoekstra@xtoenergy.com | Conditions of Approval: | Attached ☐ |
| Date: 4-19-2012 Phone: 505-333-3202 | | |

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

**Lease Name:** Las Colinas # 100
**API No.:** 30-045-31301
**Description:** Unit E, Section 26, Township 30N, Range 13W, 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 November 3, 2011**

2. XTO will close a below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
   **Closure Date is November 3, 2011**

3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
   **Required C-144 Form is attached to this document.**

4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
   Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B
   Soil contaminated by exempt petroleum hydrocarbons
   Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes
   Basin Disposal Permit No. NM01-005
   Produced water
   **All liquids and sludge were removed from the tank prior to closure activities.**

5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
   **XTO has removed the below grade tank, and will dispose of it at a division approved facility, or recycle, reclaim or reuse it in a manner that is approved by the division.**

6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
**All equipment has been removed due to the plugging and abandoning of the Las Colinas # 100**

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 | **< 0.0028 mg/kg** |
| BTEX | EPA SW-846 8021B or 8260B | 50 | **< 0.0422 Mg/kg** |
| TPH | EPA SW-846 418.1 | 100 | **< 20 Mg/kg** |
| Chlorides | EPA 300.1 | 250 or background | **57 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.
**No release has been confirmed at this location**

9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
**The pit cellar was 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 October 27, 2011; see attached email printout.**

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

**The surface owner was notified on October 27, 2011 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 the gathering company not removing their equipment in a timely fashion.

James McDaniel /FAR/CTOC
10/27/2011 12:36 PM

To brandon.powell@state.nm.us
cc
bcc
Subject Las Colinas #100 BGT Closure

Brandon,

Please accept this email as the required notification for BGT closure activities at the Las Colinas #100 well site (api #30-045-31301) located in Unit E, Section 26, Township 30N, Range 13W, San Juan County, New Mexico. This BGT is being closed due to the plugging and abandoning of this well location. Thank you for your time in regards to this matter.

*James McDaniel, CHMM #15676*
**EH&S Supervisor**
**XTO Energy, Inc.**
Office # 505-333-3701
Cell # 505-787-0519
James_Mcdaniel@xtoenergy.com

James McDaniel /FAR/CTOC
10/27/2011 12:37 PM

To Mark_Kelly@blm.gov
cc
bcc
Subject BGT Closure Las Colinas #100

Mark
Please accept this email as the required notification for BGT closure activities at the Las Colinas #100 well site (api #30-045-31301) located in Unit E, Section 26, Township 30N, Range 13W, San Juan County, New Mexico. This BGT is being closed due to the plugging and abandoning of this well location. This BGT will be closed by excavation and removal. Thank you for your time in regards to this matter.

*James McDaniel, CHMM #15676*
**EH&S Supervisor**
**XTO Energy, Inc.**
Office # 505-333-3701
Cell # 505-787-0519
James_Mcdaniel@xtoenergy.com

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

# COVER LETTER

Monday, October 24, 2011

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

TEL: (505) 333-3100
FAX (505) 333-3280

RE: Las Colinas 100

Order No.: 1110905

Dear James McDaniel:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 10/18/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Andy Freeman
Laboratory Manager

# Hall Environmental Analysis Laboratory, Inc.

**Date:** *24-Oct-11*

***Analytical Report***

| | | | |
|---|---|---|---|
| **CLIENT:** | XTO Energy | **Client Sample ID:** | BGT Closure |
| **Lab Order:** | 1110905 | **Collection Date:** | 10/17/2011 9:07:00 AM |
| **Project:** | Las Colinas 100 | **Date Received:** | 10/18/2011 |
| **Lab ID:** | 1110905-01 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **EPA METHOD 418.1: TPH** | | | | | | Analyst: **JB** |
| Petroleum Hydrocarbons, TR | ND | 20 | | mg/Kg | 1 | 10/21/2011 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| * | Value exceeds Maximum Contaminant Level | B | Analyte detected in the associated Method Blank |
| E | Estimated value | H | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | MCL | Maximum Contaminant Level |
| NC | Non-Chlorinated | ND | Not Detected at the Reporting Limit |
| PQL | Practical Quantitation Limit | S | Spike recovery outside accepted recovery limits |

# QA/QC SUMMARY REPORT

**Client:** XTO Energy
**Project:** Las Colinas 100 **Work Order:** 1110905

| Analyte | Result | Units | PQL | SPK Va | SPK ref | %Rec | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Method: EPA Method 418.1: TPH** | | | | | | | | | | | |
| **Sample ID: MB-28991** | | *MBLK* | | | | Batch ID: **28991** | | Analysis Date: | | | 10/20/2011 |
| Petroleum Hydrocarbons, TR | ND | mg/Kg | 20 | | | | | | | | |
| **Sample ID: LCS-28991** | | *LCS* | | | | Batch ID: **28991** | | Analysis Date: | | | 10/20/2011 |
| Petroleum Hydrocarbons, TR | 100.0 | mg/Kg | 20 | 100 | 0 | 100 | 87.8 | 115 | | | |
| **Sample ID: LCSD-28991** | | *LCSD* | | | | Batch ID: **28991** | | Analysis Date: | | | 10/20/2011 |
| Petroleum Hydrocarbons, TR | 103 9 | mg/Kg | 20 | 100 | 0 | 104 | 87.8 | 115 | 3.84 | 8.04 | |

**Qualifiers:**

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

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name XTO ENERGY | Date Received: 10/18/2011

Work Order Number 1110905 | Received by: LNM

Checklist completed by: _____ 10/18/11 | Sample ID labels checked by: _____

Signature | Date | Initials

Matrix: | Carrier name: Courier

| | | | | |
|---|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ | |
| Custody seals intact on shipping container/cooler? | Yes ☑ | No ☐ | Not Present ☐ | Not Shipped ☐ |
| Custody seals intact on sample bottles? | Yes ☐ | No ☐ | N/A ☑ | |
| Chain of custody present? | Yes ☑ | No ☐ | | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | | |
| Sample containers intact? | Yes ☑ | No ☐ | | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | | |
| All samples received within holding time? | Yes ☑ | No ☐ | | Number of preserved bottles checked for pH: |
| Water - VOA vials have zero headspace? | No VOA vials submitted ☑ | Yes ☐ | No ☐ | |
| Water - Preservation labels on bottle and cap match? | Yes ☐ | No ☐ | N/A ☑ | |
| Water - pH acceptable upon receipt? | Yes ☐ | No ☐ | N/A ☑ | _____ <2 >12 unless noted below. |
| Container/Temp Blank temperature? | 1.9° | <6° C Acceptable If given sufficient time to cool. | | |

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

# Chain-of-Custody Record

Client: XTO

Mailing Address: 382 RD 3100
AZTEC, NM 87410

Phone #: 505-947-0519

email or Fax#: james.mcdaniel@xtoenergy.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name:
LAS COLINAS 100

Project #:
BGT CLOSURE

Project Manager:
JAMES McDANIEL

Sampler: BRAD GRIFFITH

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.9


HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107


| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. 1110905 | BTEX + MTBE + TMB's (8021) | BTEX + MTBE + TPH (Gas only) | TPH Method 8015B (Gas/Diesel) | TPH (Method 418.1) | EDB (Method 504.1) | 8310 (PNA or PAH) | RCRA 8 Metals | Anions (F,Cl,$NO_3$,$NO_2$,$PO_4$,$SO_4$) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | Air Bubbles (Y or N) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/17 | 0907 | Soil | BGT CLOSURE | 1 4oz | Cool | -1 | | | | X | | | | | | | | |

Analysis Request

| Date. | Time: | Relinquished by: | Received by: | Date | Time |
|---|---|---|---|---|---|
| 10/17 | 1540 | | Christine Walker | 10/17/11 | 1540 |
| 10/17/11 | 1635 | Christine Walker | | 10/18/11 | 0840 |

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

ESC
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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

Tuesday October 25, 2011

Report Number: L542053
Samples Received: 10/18/11
Client Project:

Description: BGT Closure

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 R Richards
Daphne Richards , ESC Representative

## *Laboratory Certification Numbers*

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


Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Est. 1970

REPORT OF ANALYSIS

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

October 25,2011

ESC Sample # : L542053-01

Site ID : LAS COLINAS 100

Project # :

Date Received : October 18, 2011
Description : BGT Closure

Sample ID : BGT CLOSURE

Collected By : Brad Griffith
Collection Date : 10/17/11 09:07

| Parameter | Dry Result | Det. Limit | Units | Method | Date | Dil. |
|---|---|---|---|---|---|---|
| Chloride | 57. | 11. | mg/kg | 9056 | 10/21/11 | 1 |
| Total Solids | 89. | | % | 2540G | 10/25/11 | 1 |
| Benzene | BDL | 0.0028 | mg/kg | 8021/8015 | 10/22/11 | 5 |
| Toluene | BDL | 0.028 | mg/kg | 8021/8015 | 10/22/11 | 5 |
| Ethylbenzene | BDL | 0.0028 | mg/kg | 8021/8015 | 10/22/11 | 5 |
| Total Xylene | BDL | 0.0084 | mg/kg | 8021/8015 | 10/22/11 | 5 |
| TPH (GC/FID) Low Fraction | BDL | 0.56 | mg/kg | GRO | 10/22/11 | 5 |
| Surrogate Recovery-% | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 101. | | % Rec. | 8021/8015 | 10/22/11 | 5 |
| a,a,a-Trifluorotoluene(PID) | 107. | | % Rec. | 8021/8015 | 10/22/11 | 5 |
| TPH (GC/FID) High Fraction | BDL | 4.5 | mg/kg | 3546/DRO | 10/19/11 | 1 |
| Surrogate recovery(%) | | | | | | |
| o-Terphenyl | 60.4 | | % Rec. | 3546/DRO | 10/19/11 | 1 |

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

The reported analytical results relate only to the sample submitted
Reported: 10/25/11 12:18 Printed: 10/25/11 12:19

Summary of Remarks For Samples Printed
10/25/11 at 12:19:14

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L542053-01 Account: XTORNM Received: 10/18/11 09:00 Due Date: 10/25/11 00:00 RPT Date: 10/25/11 12:18

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

Aztec, NM 87410

Quality Assurance Report
Level II

L542053

October 25, 2011

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| TPH (GC/FID) High Fraction | < 4 | ppm | | | WG561172 | 10/19/11 00:56 |
| o-Terphenyl | | % Rec. | 68.51 | 50-150 | WG561172 | 10/19/11 00:56 |
| Chloride | < 10 | mg/kg | | | WG561538 | 10/21/11 17:48 |
| Benzene | < .0005 | mg/kg | | | WG561623 | 10/22/11 01:54 |
| Ethylbenzene | < .0005 | mg/kg | | | WG561623 | 10/22/11 01:54 |
| Toluene | < .005 | mg/kg | | | WG561623 | 10/22/11 01:54 |
| TPH (GC/FID) Low Fraction | < .1 | mg/kg | | | WG561623 | 10/22/11 01:54 |
| Total Xylene | < .0015 | mg/kg | | | WG561623 | 10/22/11 01:54 |
| a,a,a-Trifluorotoluene(FID) | | % Rec. | 101.0 | 59-128 | WG561623 | 10/22/11 01:54 |
| a,a,a-Trifluorotoluene(PID) | | % Rec. | 107.7 | 54-144 | WG561623 | 10/22/11 01:54 |
| Total Solids | < .1 | % | | | WG561746 | 10/25/11 10:20 |

Duplicate

| Analyte | Units | Result | Duplicate | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|
| Total Solids | % | 82.0 | 81.6 | 0.662 | 5 | L542156-03 | WG561746 |

Laboratory Control Sample

| Analyte | Units | Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| TPH (GC/FID) High Fraction | ppm | 60 | 40.8 | 67.9 | 50-150 | WG561172 |
| o-Terphenyl | | | | 76.50 | 50-150 | WG561172 |
| Chloride | mg/kg | 200 | 201. | 101. | 85-115 | WG561538 |
| Benzene | mg/kg | .05 | 0.0463 | 92.7 | 76-113 | WG561623 |
| Ethylbenzene | mg/kg | .05 | 0.0539 | 108. | 78-115 | WG561623 |
| Toluene | mg/kg | .05 | 0.0505 | 101. | 76-114 | WG561623 |
| Total Xylene | mg/kg | .15 | 0.163 | 109. | 81-118 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | 101.6 | 59-128 | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | 104.6 | 54-144 | WG561623 |
| TPH (GC/FID) Low Fraction | mg/kg | 5.5 | 5.92 | 108. | 67-135 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | 101.8 | 59-128 | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | 109.1 | 54-144 | WG561623 |
| Total Solids | % | 50 | 50.0 | 100. | 85-155 | WG561746 |

Laboratory Control Sample Duplicate

| Analyte | Units | Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| TPH (GC/FID) High Fraction | ppm | 37.4 | 40.8 | 62.0 | 50-150 | 8.49 | 25 | WG561172 |
| o-Terphenyl | | | | 72.51 | 50-150 | | | WG561172 |
| Chloride | mg/kg | 211. | 201. | 106. | 85-115 | 4.85 | 20 | WG561538 |
| Benzene | mg/kg | 0.0500 | 0.0463 | 100. | 76-113 | 7.60 | 20 | WG561623 |
| Ethylbenzene | mg/kg | 0.0564 | 0.0539 | 113. | 78-115 | 4.51 | 20 | WG561623 |
| Toluene | mg/kg | 0.0525 | 0.0505 | 105. | 76-114 | 3.88 | 20 | WG561623 |

* 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

L542053

October 25, 2011

Laboratory Control Sample Duplicate

| Analyte | Units | Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| Total Xylene | mg/kg | 0.169 | 0.163 | 112. | 81-118 | 3.27 | 20 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | 101.7 | 59-128 | | | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | 104.2 | 54-144 | | | WG561623 |
| TPH (GC/FID) Low Fraction | mg/kg | 5.63 | 5.92 | 102. | 67-135 | 5.06 | 20 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | 101.4 | 59-128 | | | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | 109.2 | 54-144 | | | WG561623 |

Matrix Spike

| Analyte | Units | MS Res | Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| TPH (GC/FID) High Fraction | ppm | 44.2 | 6.00 | 60 | 63.6 | 50-150 | L542102-04 | WG561172 |
| o-Terphenyl | | | | | 79.72 | 50-150 | | WG561172 |
| Chloride | mg/kg | 548. | 36.0 | 500 | 102. | 80-120 | L542399-10 | WG561538 |
| Benzene | mg/kg | 0.235 | 0.00340 | .05 | 92.5 | 32-137 | L542674-01 | WG561623 |
| Ethylbenzene | mg/kg | 0.259 | 0 | .05 | 104. | 10-150 | L542674-01 | WG561623 |
| Toluene | mg/kg | 0.256 | 0 | .05 | 102. | 20-142 | L542674-01 | WG561623 |
| Total Xylene | mg/kg | 0.794 | 0.0110 | .15 | 104. | 16-141 | L542674-01 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | | 100.0 | 59-128 | | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | | 104.4 | 54-144 | | WG561623 |
| TPH (GC/FID) Low Fraction | mg/kg | 22.4 | 0.620 | 5.5 | 79.0 | 55-109 | L542674-01 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | | 107.1 | 59-128 | | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | | 108.0 | 54-144 | | WG561623 |

Matrix Spike Duplicate

| Analyte | Units | MSD | Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| TPH (GC/FID) High Fraction | ppm | 41.5 | 44.2 | 59.1 | 50-150 | 6.31 | 25 | L542102-04 | WG561172 |
| o-Terphenyl | | | | 77.11 | 50-150 | | | | WG561172 |
| Chloride | mg/kg | 548. | 548. | 102. | 80-120 | 0 | 20 | L542399-10 | WG561538 |
| Benzene | mg/kg | 0.192 | 0.235 | 75.5 | 32-137 | 19.9 | 39 | L542674-01 | WG561623 |
| Ethylbenzene | mg/kg | 0.181 | 0.259 | 72.5 | 10-150 | 35.4 | 44 | L542674-01 | WG561623 |
| Toluene | mg/kg | 0.191 | 0.256 | 76.6 | 20-142 | 28.7 | 42 | L542674-01 | WG561623 |
| Total Xylene | mg/kg | 0.549 | 0.794 | 71.8 | 16-141 | 36.5 | 46 | L542674-01 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | 100.4 | 59-128 | | | | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | 104.7 | 54-144 | | | | WG561623 |
| TPH (GC/FID) Low Fraction | mg/kg | 22.1 | 22.4 | 78.1 | 55-109 | 1.14 | 20 | L542674-01 | WG561623 |
| a,a,a-Trifluorotoluene(FID) | | | | 106.4 | 59-128 | | | | WG561623 |
| a,a,a-Trifluorotoluene(PID) | | | | 107.9 | 54-144 | | | | WG561623 |

Batch number /Run number / Sample number cross reference

WG561172: R1900753: L542053-01
WG561538: R1904892: L542053-01
WG561623: R1905152: L542053-01
WG561746: R1907598: L542053-01

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

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

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

Aztec, NM 87410

Quality Assurance Report
Level II

L542053

October 25, 2011

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

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

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

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

Company Name/Address

**XTO ENERGY, INC.**

**382 County Road 3100**
**AZTEC, NM 87410**

Alternate Billing

Report to James McDaniel

E-mail to:james_mcdaniel@xtoenergy com

Project Description: **BGT Closure**

City/State Collected

PHONE 505-333-3701

FAX:

Client Project No.

Lab Project #

Collected by Brad Griffith

Site/Facility ID# CAS COLINAS 100

P O #

Collected by(signature) BL Griffith

Packed on Ice N__ Y X

Rush? (Lab MUST be Notified)

_____Next Day . . 100%

_____Two Day. 50%

_____Three Day. .. . 25%

Date Results Needed 17-Jun

Email?__No_X__Yes

FAX?___No__Yes

| Sample ID | Comp/Grab | Matrix* | Depth | Date | Time | No of Cntrs | 8015 | 8021 | Chlorides | | | | Remarks/contaminant | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BGT CLOSURE | COMP | SOIL | | 10/17 | 907 | 1 | X | X | X | | | | | L592053-01 |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

Analysis/Container/Preservative

Chain of Custody Page___of___

Prepared by: G035


ENVIRONMENTAL SCIENCE CORP

12065 Lebanon Road

Mt. Juliet TN 37122

Phone (615)758-5858

Phone (800) 767-5859

FAX (615)758-5859


CoCode (lab use only)

XTORNM

Template/Prelogin

Shipped Via: Fed Ex

*Matrix. SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH_____ Temp_____

Remarks. "ONLY 1 COC Per Site!!" 4341 9819 3961

Flow_____ Other_____

| Relinquisher by (Signature) | Date | Time | Received by (Signature) | Samples returned via FedEx_X_ UPS__Other__ | Condition (lab use only) |
|---|---|---|---|---|---|
| BL Griffith | 10/17 | | | | OK |
| Relinquisher by (Signature) | Date | Time | Received by (Signature) | Temp: 3.4 | Bottles Received: 1402 |
| Relinquisher by (Signature) | Date | Time | Received for lab by: (Signature) | Date 10/18/11 | Time 0900 |
| | | | | | pH Checked: NCF: |

# Well Below Tank Inspection Report

XTO ENERGY

Denver

Dates -
06/01/2008 - 04/01/2012

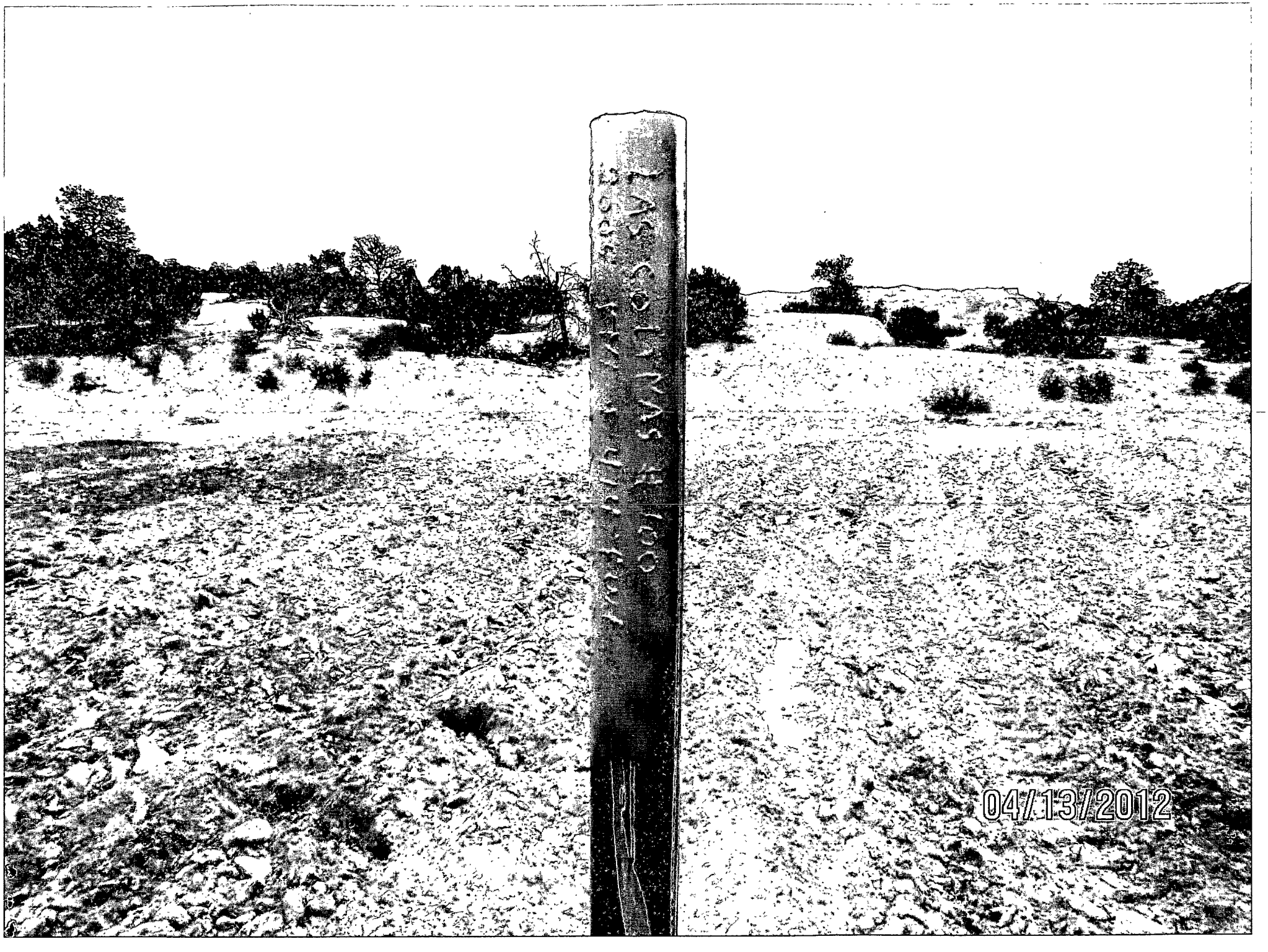
Type Route Stop

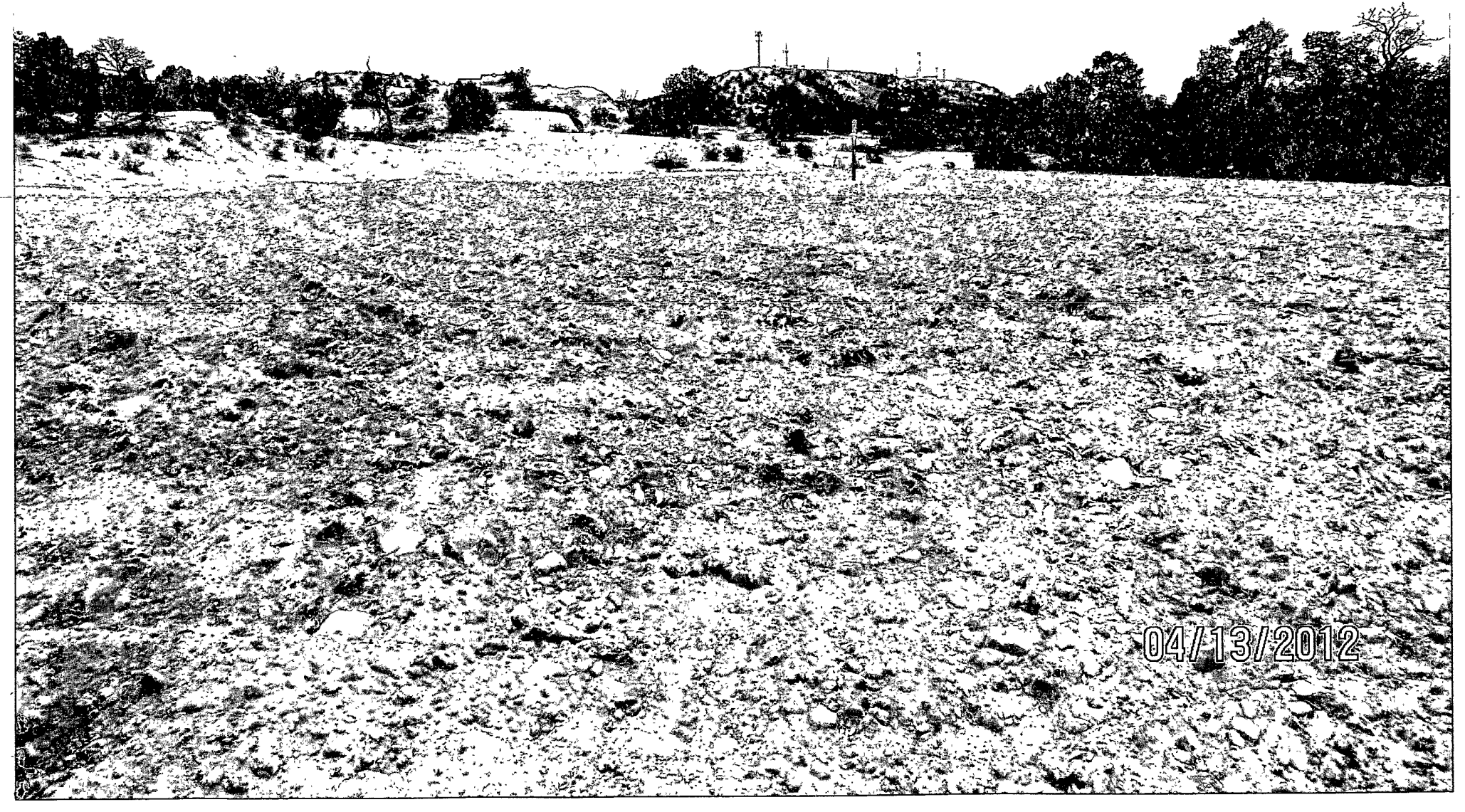
Type Value L

| RouteName | StopName | Pumper | Foreman | WellName | APIWellNumber | Section | Range | Township |
|---|---|---|---|---|---|---|---|---|
| Below Grade Pit Forms (Temp ) | Las Colinas 100 | Thompson, Ronnie | Unassigned | LAS COLINAS 100 (PA) | 3004531301 | 26 | 13W | 30N |

| InspectorName | Inspection Date | Inspection Time | Visible LinerTears | VisibleTankLeak Overflow | Collection OfSurfaceRun | Visible LayerOil | Visible Leak | Freeboard EstFT | PitLocation | PitType | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Shane Durham | 08/12/2008 | 14 00 | No | No | No | Yes | No | 4 | | | |
| Joseph Maestas | 10/05/2008 | 11 11 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 11/02/2008 | 13 40 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 12/08/2008 | 09 31 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 02/16/2009 | 14 43 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 03/18/2009 | 09 22 | No | No | No | Yes | No | 2 | Well Water P | Below Ground | |
| Joseph Maestas | 04/29/2009 | 11 21 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 05/24/2009 | 11 10 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 06/30/2009 | 15 24 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 07/30/2009 | 08 00 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 08/20/2009 | 08 09 | No | No | No | Yes | No | 4 | Well Water P | Below Ground | |
| Joseph Maestas | 10/28/2009 | 14 39 | No | No | No | Yes | No | 3 | Well Water P | Below Ground | |
| alonso m | 04/30/2010 | 10 35 | No | No | No | No | No | 8 | Well Water P | Below G | seiler is falling down |
| alonso m | 05/15/2010 | 10 00 | No | No | No | No | No | 8 | Well Water P | Below G | seiler is falling down |
| alonso m | 06/08/2010 | 08 45 | No | No | No | No | No | 8 | Well Water P | Below G | seiler is falling down |
| alonso m | 07/11/2010 | 08 00 | No | No | No | No | No | 8 | Well Water P | Below G | seiler is falling down |
| alonso m | 08/30/2010 | 09 30 | No | No | No | No | No | 8 | Well Water P | Below G | seiler is falling down |
| alonso m | 09/18/2010 | 01 00 | No | No | No | No | No | 8 | Well Water P | Below G | seiler is falling down |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| alonso m | 10/31/2010 | 02 00 | No | No | No | No | No | 8 | Well Water P Below G seiler is falling down |
| alonso m | 11/14/2010 | 11 00 | No | No | No | No | No | 8 | Well Water P Below G seiler is falling down |
| alonso m | 12/14/2010 | 10 30 | No | No | No | No | No | 8 | Well Water P Below G seiler is falling down |
| alonso m | 01/17/2011 | 12 30 | No | No | No | No | No | 8 | Well Water P Below G seiler is falling down |
| tc | 02/18/2011 | 13 26 | No | No | No | No | No | 8 | Well Water P Below G celler falling in |
| AM | 05/03/2011 | 04 20 | No | No | No | No | No | 8 | Well Water P Below G celler falling in |
| AM | 06/03/2011 | 03 25 | No | No | No | No | No | 8 | Well Water P Below G celler falling in |
| AM | 07/29/2011 | 01 25 | No | No | No | No | No | 8 | Well Water P Below G celler falling in |
| AM | 08/03/2011 | 10 35 | No | No | No | No | No | 8 | Well Water P Below Ground |


04/13/2012


04/13/2012