

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

Form C-144
Revised October 11, 2022

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

BGT1

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

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

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

1. Operator: CrossTimbers Energy, LLC OGRID #: 298299
 Address: 400 West 7th Street, Fort Worth, Texas 76102
 Facility or well name: Breech C #323
 API Number: 30-039-08161 OCD Permit Number: _____
 U/L or Qtr/Qtr M Section 14 Township 26N Range 6W County: Rio Arriba
 Center of Proposed Design: Latitude 36.48323 Longitude -107.44221 NAD83
 Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
 Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
 Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3. ☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
 Volume: 10 BBL 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 _____
 Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

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

5. **Fencing:** Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)
☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify _____

6.

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

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

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

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

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

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC***Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.*****General siting****Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

☐ Yes ☐ No

☐ NA

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit .

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No

☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area. **(Does not apply to below grade tanks)**

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

☐ Yes ☐ No

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 100 feet of a wetland.

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

☐ Yes ☐ No

Temporary Pit Non-low chloride drilling fluid

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet of a wetland.

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

☐ Yes ☐ No

Permanent Pit or Multi-Well Fluid Management Pit

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 500 feet of a wetland.

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

☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ A List of wells with approved application for permit to drill associated with the pit.
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12.

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Climatological Factors Assessment
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Quality Control/Quality Assurance Construction and Installation Plan
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
☐ Emergency Response Plan
☐ Oil Field Waste Stream Characterization
☐ Monitoring and Inspection Plan
☐ Erosion Control Plan
☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

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

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

14.

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

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

15.

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

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

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

16.

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

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

17.

Operator Application Certification:

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

Name (Print): **James McDaniel, JAKD Solutions**

Title: **Environmental Contractor**

Signature: 

Date: **8/16/2024**

e-mail address: **james@jakdsolutions.com**

Telephone: **505-860-1666**

18.

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

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19.

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

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

☒ Closure Completion Date: **09/25/2024**

20.

Closure Method:

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

21.

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

- ☒ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure for private land only)
☐ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number Envirotech, Permit#NM01-0011
☒ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude **36.482322** Longitude **-107.442188** NAD: ☐ 1927 ☐ 1983

22.

Operator Closure Certification:

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

Name (Print): Samanntha Avarello Title: EHS Coordinator

Signature: Samanntha Avarello Date: 10/10/2024

e-mail address: savarello@txopartners.com Telephone: 817-334-7747



Drawn By: James McDaniel
Date: 8/16/2024



AERIAL MAP

Company: Cross Timbers Energy, LLC
Facility: Breech C #323
API: 30-039-08161
Section 14, Township 26N, Range 6W
Rio Arriba, New Mexico
GPS: 36.482322, -107.442188
Source: Google Earth (2022)

LEGEND



Drawn By: James McDaniel
Date: 9/5/2024



AERIAL MAP

Company: Cross Timbers Energy, LLC
Facility: Breech C #323
API: 30-039-08161
Section 14, Township 26N, Range 6W
Rio Arriba, New Mexico
GPS: 36.48323,-107.44221
Source: Google Earth (2022)

LEGEND



BGT Cellar

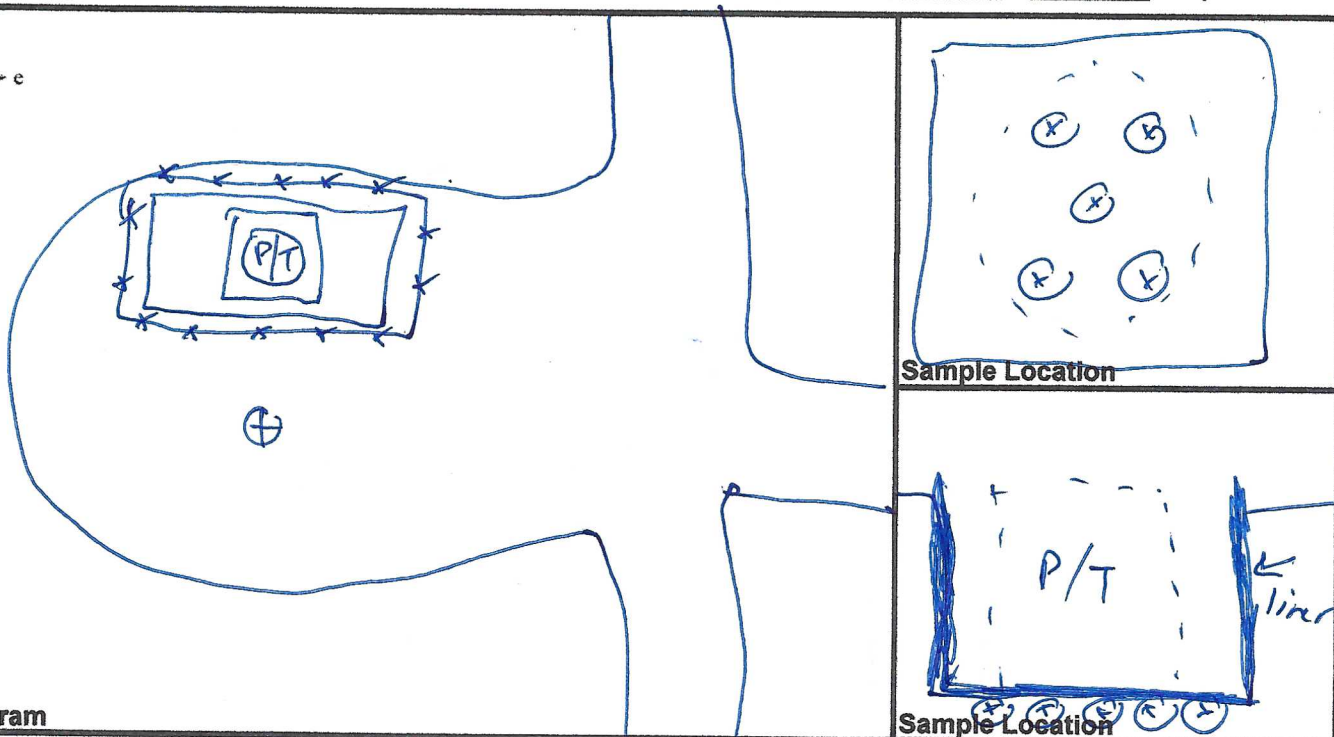


Closure Composite Sample Point



ON-SITE FORM

Land Use (Range / Residential / Tribe _____) Spill Area _____ x _____ x _____ deep



X Samples taken below liner

Comments

Samples

[illegible]

Date 8/23/24

Name (Signature) [Signature] Company CrossTimbers

Breech A 204**30-039-06550****9/5/2024****Sample Narrative**

On 8/16/2024 JAKD Solutions sent a closure notification via email to Nelson Velez with the NMOCD, copying Leigh Barr and Abiodun Adeloje with the BLM; see attached ***Proof of Notification***.

On 8/23/2024, JAKD Solutions was retained by CrossTimbers Energy to collect a below grade tank closure (BGT) sample from the pit cellar at the Breech C #323 wellsite. The BGT is being closed due to not being used on-site. At 9:00 AM on 8/23/2024, CrossTimbers removed the BGT from the cellar, and a composite sample was collected from the bottom of the cellar beneath the BGT. A 5-point composite sample was collected beneath the former location of the BGT and placed in a Ziploc bag. The sample was mixed thoroughly and placed into a 4-ounce glass jar and placed on ice for transport to Eurofins Laboratory for analysis. The samples were analyzed for total petroleum hydrocarbons (TPH) via USEPA Method 8015M, Benzene and total BTEX via USEPA Method 8021, and for total chlorides.

On 8/30/2024, sample results were returned from Eurofins laboratory. The sample returned results of non-detect for all constituents analyzed; see attached Laboratory Analysis and ***Sample Results Table***.

On 9/25/2024, the below grade tank cellar was backfilled by CrossTimbers; see attached ***Photo Page***.

James McDaniel

From: James McDaniel
Sent: Friday, August 16, 2024 12:37 PM
To: Adeloye, Abiodun A; Barr, Leigh, EMNRD; Velez, Nelson, EMNRD
Cc: Jeff Waggoner; Dan Guillotte; Samanntha Avarello
Subject: BGT Closure Notification - Breech C 323

Please accept this email as the required Below Grade Tank closure notification for the wellsite below:

30-039-08161 BREECH C #323 [312459]

General Well Information

Operator: [298299] CROSS TIMBERS ENERGY, LLC
Status: Active
Well Type: Gas
Work Type: New

Surface Location: M-14-26N-06W 890 FSL 1190 FWL
Lat/Long: 36.48232,-107.44221 NAD83
GL Elevation: 6736
KB Elevation:
DF Elevation:

Closure activities will be completed on 8/23/2024 at 9 AM. Please do not hesitate to contact me or Jeff Waggoner with any questions regarding this project.

James McDaniel, CSP, CHMM, CIT
Project Manager
505-860-1666
james@jakdsolutions.com





Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: James McDaniel
JAKD Solutions
3811 Crestridge Dr
Farmington, New Mexico 87401

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JOB DESCRIPTION

Breech C #323

JOB NUMBER

885-10616-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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8/30/2024 4:11:44 PM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: JAKD Solutions
Project/Site: Breech C #323

Laboratory Job ID: 885-10616-1

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Definitions/Glossary

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: JAKD Solutions
Project: Breech C #323

Job ID: 885-10616-1

Job ID: 885-10616-1Eurofins Albuquerque

Job Narrative
885-10616-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 8/27/2024 7:15 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.7°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

Client Sample ID: BGT Closure Composite

Lab Sample ID: 885-10616-1

Date Collected: 08/23/24 09:30

Matrix: Solid

Date Received: 08/27/24 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/27/24 14:08	08/29/24 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		35 - 166			08/27/24 14:08	08/29/24 03:27	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/27/24 14:08	08/29/24 03:27	1
Ethylbenzene	ND		0.047	mg/Kg		08/27/24 14:08	08/29/24 03:27	1
Toluene	ND		0.047	mg/Kg		08/27/24 14:08	08/29/24 03:27	1
Xylenes, Total	ND		0.094	mg/Kg		08/27/24 14:08	08/29/24 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)						08/27/24 14:08	08/29/24 03:27	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		08/28/24 09:30	08/29/24 13:07	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/28/24 09:30	08/29/24 13:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			08/28/24 09:30	08/29/24 13:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/28/24 13:55	08/28/24 21:41	20

Eurofins Albuquerque

QC Sample Results

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-11123/1-A					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11306					Prep Batch: 11123				
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/27/24 14:08	08/29/24 01:16	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		35 - 166			08/27/24 14:08	08/29/24 01:16	1	

Lab Sample ID: LCS 885-11123/2-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11306					Prep Batch: 11123				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	25.0	27.6		mg/Kg		110	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	216		35 - 166						

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-11123/1-A					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11307					Prep Batch: 11123				
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		08/27/24 14:08	08/29/24 01:16	1	
Ethylbenzene	ND		0.050	mg/Kg		08/27/24 14:08	08/29/24 01:16	1	
Toluene	ND		0.050	mg/Kg		08/27/24 14:08	08/29/24 01:16	1	
Xylenes, Total	ND		0.10	mg/Kg		08/27/24 14:08	08/29/24 01:16	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)						08/27/24 14:08	08/29/24 01:16	1	

Lab Sample ID: LCS 885-11123/3-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11307					Prep Batch: 11123				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	1.00	1.03		mg/Kg		103	70 - 130		
Ethylbenzene	1.00	1.02		mg/Kg		102	70 - 130		
Toluene	1.00	1.02		mg/Kg		102	70 - 130		

Lab Sample ID: 885-10616-1 MS					Client Sample ID: BGT Closure Composite				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 11307					Prep Batch: 11123				
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.937	1.05		mg/Kg		112	70 - 130
Ethylbenzene	ND		0.937	1.07		mg/Kg		115	70 - 130
Toluene	ND		0.937	1.07		mg/Kg		114	70 - 130

Eurofins Albuquerque

QC Sample Results

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 885-10616-1 MSD						Client Sample ID: BGT Closure Composite						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 11307						Prep Batch: 11123						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Benzene	ND		0.941	1.09		mg/Kg		116	70 - 130	4	20	
Ethylbenzene	ND		0.941	1.11		mg/Kg		118	70 - 130	3	20	
Toluene	ND		0.941	1.11		mg/Kg		118	70 - 130	4	20	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-11222/1-A						Client Sample ID: Method Blank						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 11289						Prep Batch: 11222						
Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed		Dil Fac		
Chloride	ND		3.0		mg/Kg		08/28/24 13:55	08/28/24 20:02		1		

Lab Sample ID: LCS 885-11222/2-A						Client Sample ID: Lab Control Sample						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 11289						Prep Batch: 11222						
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits			
Chloride			30.0	28.2		mg/Kg		94	90 - 110			

Lab Sample ID: MB 885-11289/6						Client Sample ID: Method Blank						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 11289												
Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed		Dil Fac		
Chloride	ND		0.50		mg/Kg			08/28/24 08:48		1		

Lab Sample ID: MRL 885-11289/5						Client Sample ID: Lab Control Sample						
Matrix: Solid						Prep Type: Total/NA						
Analysis Batch: 11289												
Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits			
Chloride			0.500	0.519		mg/L		104	50 - 150			

QC Association Summary

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

GC VOA

Prep Batch: 11123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	5030C	
MB 885-11123/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-11123/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-11123/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-10616-1 MS	BGT Closure Composite	Total/NA	Solid	5030C	
885-10616-1 MSD	BGT Closure Composite	Total/NA	Solid	5030C	

Analysis Batch: 11306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	8015M/D	11123
MB 885-11123/1-A	Method Blank	Total/NA	Solid	8015M/D	11123
LCS 885-11123/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	11123

Analysis Batch: 11307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	8021B	11123
MB 885-11123/1-A	Method Blank	Total/NA	Solid	8021B	11123
LCS 885-11123/3-A	Lab Control Sample	Total/NA	Solid	8021B	11123
885-10616-1 MS	BGT Closure Composite	Total/NA	Solid	8021B	11123
885-10616-1 MSD	BGT Closure Composite	Total/NA	Solid	8021B	11123

GC Semi VOA

Prep Batch: 11173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	SHAKE	

Analysis Batch: 11296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	8015M/D	11173

HPLC/IC

Prep Batch: 11222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	300_Prep	
MB 885-11222/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-11222/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 11289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-10616-1	BGT Closure Composite	Total/NA	Solid	300.0	11222
MB 885-11222/1-A	Method Blank	Total/NA	Solid	300.0	11222
MB 885-11289/6	Method Blank	Total/NA	Solid	300.0	
LCS 885-11222/2-A	Lab Control Sample	Total/NA	Solid	300.0	11222
MRL 885-11289/5	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

Client Sample ID: BGT Closure Composite
Date Collected: 08/23/24 09:30
Date Received: 08/27/24 07:15

Lab Sample ID: 885-10616-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			11123	JR	EET ALB	08/27/24 14:08
Total/NA	Analysis	8015M/D		1	11306	AT	EET ALB	08/29/24 03:27
Total/NA	Prep	5030C			11123	JR	EET ALB	08/27/24 14:08
Total/NA	Analysis	8021B		1	11307	AT	EET ALB	08/29/24 03:27
Total/NA	Prep	SHAKE			11173	EM	EET ALB	08/28/24 09:30
Total/NA	Analysis	8015M/D		1	11296	KR	EET ALB	08/29/24 13:07
Total/NA	Prep	300_Prep			11222	EH	EET ALB	08/28/24 13:55
Total/NA	Analysis	300.0		20	11289	RC	EET ALB	08/28/24 21:41

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: JAKD Solutions
Project/Site: Breech C #323

Job ID: 885-10616-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics (GRO)-C6-C10
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25

[illegible]

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.

Login Sample Receipt Checklist

Client: JAKD Solutions

Job Number: 885-10616-1

Login Number: 10616
List Number: 1
Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	

Breach C 323 Sample Results Table											
Sample Name	Date	Time	Diesel Range Organics (DRO) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Oil Range Organics (MRO) (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Chlorides (mg/kg)
BGT Closure Composite	8/23/2024	9:30 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Non-Detect



CrossTimbers Energy
Breach C 323 BGT Closure
Photo Page



Photo 1: Well Sign



Photo 2: BGT in Cellar



CrossTimbers Energy
Breech C 323 BGT Closure
Photo Page



Photo 3: BGT Cellar after Tank Removal



Photo 4: Backfilled BGT Cellar Area

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 392339

CONDITIONS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 392339
	Action Type: [C-144] Below Grade Tank Plan (C-144B)

CONDITIONS

Created By	Condition	Condition Date
joseph.kennedy	None	10/17/2024