

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144
Revised April 3, 2017

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

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

Type of action: ☐ Below grade tank registration
☐ 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: Enduring Resources, LLC OGRID #: 372286
Address: 332 Road 3100, Aztec, New Mexico 87410
Facility or well name: Cardon COM SWD #1
API Number: 30-045-24392 OCD Permit Number: _____
U/L or Qtr/Qtr A Section 27 Township 32N Range 13W County: San Juan
Center of Proposed Design: Latitude 36.962209 Longitude -108.185279 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: 95 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 _____

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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 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <u>Temporary Pit Non-low chloride drilling fluid</u> | |
| 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 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 500 horizontal feet of a 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 | <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 |
| <u>Permanent Pit or Multi-Well Fluid Management Pit</u> | |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 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 | <input type="checkbox"/> Yes <input type="checkbox"/> 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 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |

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 | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within a 100-year floodplain. - FEMA map | <input type="checkbox"/> Yes <input type="checkbox"/> No |

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ Approval Date: 8/7/2018

Title: Environmental Specialist 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: 6/7/2018

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.
Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check 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
- ☒ 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

Operator Closure Certification:

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

Name (Print): James McDaniel Title: HSE Supervisor

Signature:  Date: 7/31/2018

e-mail address: jmcDaniel@enduringresources.com Telephone: 505-636-9731

Enduring Resources, LLC

Below Grade Tank

Closure Report

Lease Name: Cardon COM SWD #1

API No.: 30-045-24392

Description: Unit A, Section 27, Township 32N, 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 Enduring Resources, LLC. (Enduring) locations. This is Enduring'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. Enduring 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 June 7, 2018
2. Enduring 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 June 7, 2018
3. Enduring 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. Enduring 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. Enduring 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.
Enduring 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. Enduring will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
This location is still in production. All other on-site equipment will be utilized in the continued production of oil and gas.
7. Enduring 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 8015M or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 9056A or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. Enduring 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 | <0.1 mg/kg |
| BTEX | EPA SW-846 8021B or 8260B | 50 | < 0.1 mg/kg |
| TPH | EPA SW-846 8015M | 100 | < 95 mg/kg |
| Chlorides | EPA 9056A | 250 or background | 45.3 mg/kg |

8. If Enduring or the division determines that a release has occurred, Enduring will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
No leak has been confirmed for 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, Enduring will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
The site has been backfilled, and will be recontoured and revegetated upon P&A of the wellsite.
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 Vanessa Fields on June 7, 2018 via email and phone call. Arrangements were made over the phone for Ms. Fields to witness the sampling on June 7, 2018.

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

Enduring Resources is the surface owner of this property, as such, notification was not required.

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.
This site will be recontoured and revegetated once plugging and abandoning activities have been completed. The site will be recontoured to match the above mentioned 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 area has been backfilled to match these specifications.
13. Enduring will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.
The site will be re-seeded per surface owner specifications once plugging and abandoning activities have been completed.
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:
 - Proof of closure notice to division and surface owner; **division notice attached**
 - Details on capping and covering, where applicable; **per OCD Specifications**
 - Confirmation sampling analytical results; **attached**
 - Disposal facility name(s) and permit number(s); **attached**
 - Soil backfilling and cover installation; **per OCD Specifications**
 - Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable); **pursuant to surface owner specifications upon P&A**
 - Photo documentation of the site reclamation. **attached**



From: Mitch Morris

Sent: Thursday, June 07, 2018 9:10 AM

To: 'cory.smith@state.nm.us' <cory.smith@state.nm.us>; 'Vanessa.Fields@state.nm.us' <Vanessa.Fields@state.nm.us>

Cc: James McDaniel <JMcDaniel@enduringresources.com>

Subject: Closure Plan - Cardon COM SWD #1, BGT #2

Cory/Vanessa,

Attached is the Closure Plan for BGT #2 at the Cardon COM SWD #1 location. Enduring Resources, LLC is the surface owner of this location.

Coordinates:

36.96210

-108.1853

I would like to obtain verification samples for this closure, would one of you be able to meet me on-site? Please let me know your availability to witness this sampling.

Thanks,

Mitch Morris

Air Compliance Specialist

Enduring Resources

(505) 636-9748

MMorris@enduringresources.com



District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

| | |
|--|--|
| Name of Company: Enduring Resources, LLC | Contact: James McDaniel |
| Address: 332 Road 3100, Aztec, New Mexico 87410 | Telephone No.: 505-636-9731 |
| Facility Name: Cardon COM SWD #1 | Facility Type: Injection Well (SWD) |

| | | |
|---------------------------|---------------------------|-----------------------------|
| Surface Owner: FEE | Mineral Owner: FEE | API No. 30-045-24392 |
|---------------------------|---------------------------|-----------------------------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------------------|----------------------|------------------------|---------------------|------------------------------|----------------------------------|------------------------------|-------------------------------|---------------------------|
| Unit Letter A | Section 27 | Township 32N | Range 13W | Feet from the 1120 | North/South Line NORTH | Feet from the 1050 | East/West Line EAST | County San Juan |
|-------------------------|----------------------|------------------------|---------------------|------------------------------|----------------------------------|------------------------------|-------------------------------|---------------------------|

Latitude **36.962209** Longitude **-108.185279** NAD83

NATURE OF RELEASE

| | | |
|--|---|---------------------------------------|
| Type of Release: NONE | Volume of Release: NONE | Volume Recovered: NA |
| Source of Release: NA | Date and Hour of Occurrence: NA | Date and Hour of Discovery: NA |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? | Date and Hour | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*

NMOCD

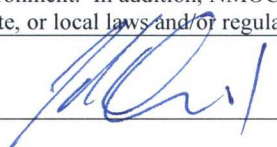
Describe Cause of Problem and Remedial Action Taken.*
No release was confirmed for this location.

JUL 31 2018

DISTRICT III

Describe Area Affected and Cleanup Action Taken.*
No release has been confirmed for this location. No further action is required.

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

| | | | |
|--|--|---|------------------|
| Signature:  | | <u>OIL CONSERVATION DIVISION</u> | |
| Printed Name: James McDaniel | | Approved by Environmental Specialist: | |
| Title: HSE Supervisor | | Approval Date: | Expiration Date: |
| E-mail Address: jmcdaniel@enduringresources.com | | Conditions of Approval: | |
| Date: 7/31/2018 Phone: 505-636-9731 | | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary



Analytical Report

Report Summary

Client: Enduring Resources, LLC

Chain Of Custody Number:

Samples Received: 6/7/2018 3:55:00PM

Job Number: 17065-0017

Work Order: P806019

Project Name/Location: Cardon Com #1 BGT #2

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman', written over a horizontal line.

Date: 6/15/18

Walter Hinchman, Laboratory Director

A handwritten signature in black ink, appearing to read 'Tim Cain', written over a horizontal line.

Date: 6/15/18

Tim Cain, Project Manager



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.

Statement of Data Authenticity: Envirotech, Inc. attests the data reported has not been altered in any way.

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Envirotech, Inc. currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.



Enduring Resources, LLC
511 16th Street, Suite 700
Denver CO, 80202

Project Name: Cardon Com #1 BGT #2
Project Number: 17065-0017
Project Manager: James McDaniel

Reported:
15-Jun-18 16:45

Analytical Report for Samples

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|--------------------------|---------------|--------|----------|----------|------------------|
| Cardon Com SWD #1 BGT #2 | P806019-01A | Soil | 06/07/18 | 06/07/18 | Glass Jar, 4 oz. |

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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fx (800) 362-1879

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laboratory@envirotech-inc.com



| | | | |
|----------------------------|------------------|----------------------|------------------------------|
| Enduring Resources, LLC | Project Name: | Cardon Com #1 BGT #2 | Reported: 15-Jun-18 16:45 |
| 511 16th Street, Suite 700 | Project Number: | 17065-0017 | |
| Denver CO, 80202 | Project Manager: | James McDaniel | |

**Cardon Com SWD #1 BGT #2
P806019-01 (Solid)**

| Reporting | | | | | | | | | |
|---|--------|--------|-------|----------|---------|----------|----------|--------------------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| <u>Volatile Organics by EPA 8021</u> | | | | | | | | | |
| Benzene | ND | 100 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| Toluene | ND | 100 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| Ethylbenzene | ND | 100 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| p,m-Xylene | ND | 200 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| o-Xylene | ND | 100 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| Total Xylenes | ND | 100 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| Total BTEX | ND | 100 | ug/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| Surrogate: 4-Bromochlorobenzene-PID | | 92.1 % | | 50-150 | 1824016 | 06/13/18 | 06/14/18 | EPA 8021B | |
| <u>Nonhalogenated Organics by 8015</u> | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | mg/kg | 1 | 1824016 | 06/13/18 | 06/14/18 | EPA 8015D | |
| Diesel Range Organics (C10-C28) | ND | 25.0 | mg/kg | 1 | 1823022 | 06/08/18 | 06/08/18 | EPA 8015D | |
| Oil Range Organics (C28-C40+) | ND | 50.0 | mg/kg | 1 | 1823022 | 06/08/18 | 06/08/18 | EPA 8015D | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | | 102 % | | 50-150 | 1824016 | 06/13/18 | 06/14/18 | EPA 8015D | |
| Surrogate: n-Nonane | | 115 % | | 50-200 | 1823022 | 06/08/18 | 06/08/18 | EPA 8015D | |
| <u>Anions by 300.0/9056A</u> | | | | | | | | | |
| Chloride | 45.3 | 20.0 | mg/kg | 1 | 1823019 | 06/08/18 | 06/08/18 | EPA 300.0/9056A | |

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Enduring Resources, LLC
511 16th Street, Suite 700
Denver CO, 80202

Project Name: Cardon Corn #1 BGT #2
Project Number: 17065-0017
Project Manager: James McDaniel

Reported:
15-Jun-18 16:45

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch 1824016 - Purge and Trap EPA 5030A

Blank (1824016-BLK1)

Prepared & Analyzed: 12-Jun-18

| | | | | | | | | | | |
|-------------------------------------|------|-----|-------|------|--|-----|--------|--|--|--|
| Benzene | ND | 100 | ug/kg | | | | | | | |
| Toluene | ND | 100 | " | | | | | | | |
| Ethylbenzene | ND | 100 | " | | | | | | | |
| p,m-Xylene | ND | 200 | " | | | | | | | |
| o-Xylene | ND | 100 | " | | | | | | | |
| Total Xylenes | ND | 100 | " | | | | | | | |
| Total BTEX | ND | 100 | " | | | | | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 8400 | | " | 8000 | | 105 | 50-150 | | | |

LCS (1824016-BS1)

Prepared & Analyzed: 12-Jun-18

| | | | | | | | | | | |
|-------------------------------------|-------|-----|-------|-------|--|------|--------|--|--|--|
| Benzene | 4500 | 100 | ug/kg | 5000 | | 90.0 | 70-130 | | | |
| Toluene | 4460 | 100 | " | 5000 | | 89.2 | 70-130 | | | |
| Ethylbenzene | 4490 | 100 | " | 5000 | | 89.8 | 70-130 | | | |
| p,m-Xylene | 9000 | 200 | " | 10000 | | 90.1 | 70-130 | | | |
| o-Xylene | 4460 | 100 | " | 5000 | | 89.1 | 70-130 | | | |
| Total Xylenes | 13500 | 100 | " | 15000 | | 89.8 | 70-130 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 8480 | | " | 8000 | | 106 | 50-150 | | | |

Matrix Spike (1824016-MS1)

Source: P806028-01

Prepared & Analyzed: 12-Jun-18

| | | | | | | | | | | |
|-------------------------------------|-------|-----|-------|-------|----|------|----------|--|--|--|
| Benzene | 4680 | 100 | ug/kg | 5000 | ND | 93.6 | 54.3-133 | | | |
| Toluene | 4630 | 100 | " | 5000 | ND | 92.7 | 61.4-130 | | | |
| Ethylbenzene | 4650 | 100 | " | 5000 | ND | 93.0 | 61.4-133 | | | |
| p,m-Xylene | 9300 | 200 | " | 10000 | ND | 93.0 | 63.3-131 | | | |
| o-Xylene | 4580 | 100 | " | 5000 | ND | 91.6 | 63.3-131 | | | |
| Total Xylenes | 13900 | 100 | " | 15000 | ND | 92.5 | 63.3-131 | | | |
| Surrogate: 4-Bromochlorobenzene-PID | 8580 | | " | 8000 | | 107 | 50-150 | | | |

Matrix Spike Dup (1824016-MSD1)

Source: P806028-01

Prepared: 12-Jun-18 Analyzed: 13-Jun-18

| | | | | | | | | | | |
|-------------------------------------|-------|-----|-------|-------|----|------|----------|------|----|--|
| Benzene | 4810 | 100 | ug/kg | 5000 | ND | 96.3 | 54.3-133 | 2.78 | 20 | |
| Toluene | 4760 | 100 | " | 5000 | ND | 95.3 | 61.4-130 | 2.78 | 20 | |
| Ethylbenzene | 4800 | 100 | " | 5000 | ND | 96.0 | 61.4-133 | 3.19 | 20 | |
| p,m-Xylene | 9590 | 200 | " | 10000 | ND | 95.9 | 63.3-131 | 3.12 | 20 | |
| o-Xylene | 4730 | 100 | " | 5000 | ND | 94.7 | 63.3-131 | 3.28 | 20 | |
| Total Xylenes | 14300 | 100 | " | 15000 | ND | 95.5 | 63.3-131 | 3.17 | 20 | |
| Surrogate: 4-Bromochlorobenzene-PID | 8570 | | " | 8000 | | 107 | 50-150 | | | |

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Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com
laboratory@envirotech-inc.com



Enduring Resources, LLC
511 16th Street, Suite 700
Denver CO, 80202

Project Name: Cardon Com #1 BGT #2
Project Number: 17065-0017
Project Manager: James McDaniel

Reported:
15-Jun-18 16:45

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch 1823022 - DRO Extraction EPA 3570

Blank (1823022-BLK1)

Prepared & Analyzed: 08-Jun-18

| | | | | | | | | | | |
|---------------------------------|------|------|-------|------|--|-----|--------|--|--|--|
| Diesel Range Organics (C10-C28) | ND | 25.0 | mg/kg | | | | | | | |
| Oil Range Organics (C28-C40+) | ND | 50.0 | " | | | | | | | |
| Surrogate: n-Nonane | 57.7 | | " | 50.0 | | 115 | 50-200 | | | |

LCS (1823022-BS1)

Prepared & Analyzed: 08-Jun-18

| | | | | | | | | | | |
|---------------------------------|------|------|-------|------|--|------|--------|--|--|--|
| Diesel Range Organics (C10-C28) | 464 | 25.0 | mg/kg | 500 | | 92.7 | 38-132 | | | |
| Surrogate: n-Nonane | 58.7 | | " | 50.0 | | 117 | 50-200 | | | |

Matrix Spike (1823022-MS1)

Source: P806021-01

Prepared & Analyzed: 08-Jun-18

| | | | | | | | | | | |
|---------------------------------|------|------|-------|------|-----|------|--------|--|--|--|
| Diesel Range Organics (C10-C28) | 732 | 25.0 | mg/kg | 500 | 281 | 90.3 | 38-132 | | | |
| Surrogate: n-Nonane | 62.6 | | " | 50.0 | | 125 | 50-200 | | | |

Matrix Spike Dup (1823022-MSD1)

Source: P806021-01

Prepared & Analyzed: 08-Jun-18

| | | | | | | | | | | |
|---------------------------------|------|------|-------|------|-----|------|--------|------|----|--|
| Diesel Range Organics (C10-C28) | 769 | 25.0 | mg/kg | 500 | 281 | 97.6 | 38-132 | 4.91 | 20 | |
| Surrogate: n-Nonane | 62.0 | | " | 50.0 | | 124 | 50-200 | | | |

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envirotech-inc.com
laboratory@envirotech-inc.com

Enduring Resources, LLC
 511 16th Street, Suite 700
 Denver CO, 80202

 Project Name: Cardon Corn #1 BGT #2
 Project Number: 17065-0017
 Project Manager: James McDaniel

Reported:
 15-Jun-18 16:45

Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch 1824016 - Purge and Trap EPA 5030A
Blank (1824016-BLK1)

Prepared & Analyzed: 12-Jun-18

| | | | | | | | | | | |
|---|------|------|-------|------|--|-----|--------|--|--|--|
| Gasoline Range Organics (C6-C10) | ND | 20.0 | mg/kg | | | | | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.27 | | " | 8.00 | | 103 | 50-150 | | | |

LCS (1824016-BS2)

Prepared & Analyzed: 12-Jun-18

| | | | | | | | | | | |
|---|------|------|-------|------|--|------|--------|--|--|--|
| Gasoline Range Organics (C6-C10) | 45.9 | 20.0 | mg/kg | 50.0 | | 91.9 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.06 | | " | 8.00 | | 101 | 50-150 | | | |

Matrix Spike (1824016-MS2)

Source: P806028-01

Prepared: 12-Jun-18 Analyzed: 13-Jun-18

| | | | | | | | | | | |
|---|------|------|-------|------|----|------|--------|--|--|--|
| Gasoline Range Organics (C6-C10) | 46.8 | 20.0 | mg/kg | 50.0 | ND | 93.7 | 70-130 | | | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.38 | | " | 8.00 | | 105 | 50-150 | | | |

Matrix Spike Dup (1824016-MSD2)

Source: P806028-01

Prepared: 12-Jun-18 Analyzed: 13-Jun-18

| | | | | | | | | | | |
|---|------|------|-------|------|----|------|--------|------|----|--|
| Gasoline Range Organics (C6-C10) | 49.4 | 20.0 | mg/kg | 50.0 | ND | 98.9 | 70-130 | 5.42 | 20 | |
| Surrogate: 1-Chloro-4-fluorobenzene-FID | 8.23 | | " | 8.00 | | 103 | 50-150 | | | |

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Enduring Resources, LLC
511 16th Street, Suite 700
Denver CO, 80202

Project Name: Cardon Corn #1 BGT #2
Project Number: 17065-0017
Project Manager: James McDaniel

Reported:
15-Jun-18 16:45

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|--------|-----------------|-------|--|---------------|------|-------------|-------|-----------|-------|
| Batch 1823019 - Anion Extraction EPA 300.0/9056A | | | | | | | | | | |
| Blank (1823019-BLK1) | | | | Prepared & Analyzed: 07-Jun-18 | | | | | | |
| Chloride | ND | 20.0 | mg/kg | | | | | | | |
| LCS (1823019-BS1) | | | | Prepared: 07-Jun-18 Analyzed: 08-Jun-18 | | | | | | |
| Chloride | 255 | 20.0 | mg/kg | 250 | | 102 | 90-110 | | | |
| Matrix Spike (1823019-MS1) | | | | Source: P806014-01 Prepared: 07-Jun-18 Analyzed: 08-Jun-18 | | | | | | |
| Chloride | 269 | 20.0 | mg/kg | 250 | ND | 108 | 80-120 | | | |
| Matrix Spike Dup (1823019-MSD1) | | | | Source: P806014-01 Prepared: 07-Jun-18 Analyzed: 08-Jun-18 | | | | | | |
| Chloride | 268 | 20.0 | mg/kg | 250 | ND | 107 | 80-120 | 0.238 | 20 | |

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Enduring Resources, LLC
511 16th Street, Suite 700
Denver CO, 80202

Project Name: Cardon Com #1 BGT #2
Project Number: 17065-0017
Project Manager: James McDaniel

Reported:
15-Jun-18 16:45

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
RPD Relative Percent Difference
** Methods marked with ** are non-accredited methods.

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laboratory@envirotech-inc.com

Project Information

Chain of Custody

Page 1 of 1

| | | | | | | | | | | | | |
|---|--|---|--|------------------------|--|------------------------------|--|-------------|----|------|-----|------|
| Client: <u>Enduro Resources</u> | | Report Attention | | Lab Use Only | | TAT | | EPA Program | | | | |
| Project: <u>Carbon Com #1 BGT #2</u> | | Report due by: | | Lab WO# <u>P806014</u> | | Job Number <u>17045-0017</u> | | 1D | 3D | RCRA | CWA | SDWA |
| Project Manager: <u>James McDaniel</u> | | Attention: <u>James McDaniel</u> | | | | | | | | | | |
| Address: <u>332 Rd 3100</u> | | Address: <u>332 Rd 3100</u> | | | | | | | | | | |
| City, State, Zip <u>Aztec, NM 87410</u> | | City, State, Zip <u>Aztec, NM 87410</u> | | | | | | | | | | |
| Phone: <u>(505) 444-3004</u> | | Phone: <u>(505) 444-3004</u> | | | | | | | | | | |
| Email: <u>jmcDaniel@enduroresources.com</u> | | Email: <u>jmcDaniel@enduroresources.com</u> | | | | | | | | | | |

| Time Sampled | Date Sampled | Matrix | No Containers | Sample ID | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0 | TPH 418.1 | State | Remarks |
|--------------|--------------|--------|---------------|--------------------------|------------|-----------------|-----------------|--------------|-------------|-------------|----------------|-----------|-------|-------------|
| 15:30 | 6.7.18 | S | 1 | Carbon Com SWD #1 BGT #2 | 1 | X | X | X | | | X | | NM | 1-402 G jar |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

Additional Instructions: 8015, 8021 & Chlorides.I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally misstating the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Mike Marcos

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

| | | | | | | |
|------------------------------|-----------------|----------------|--------------------------|---------------|--------------|-------------------------------|
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time | Lab Use Only |
| <u>[Signature]</u> | <u>6.7.2018</u> | <u>3:15:55</u> | <u>[Signature]</u> | <u>6/7/18</u> | <u>15:55</u> | Received on ice: Y / <u>N</u> |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time | T1 T2 T3 |
| | | | | | | AVG Temp °C <u>31.6</u> |

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5796 US Highway 64, Farmington, NM 87401

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Ph (970) 259-0635 Fax (800) 362-1079

 envirotech-inc.com
 Laboratory@envirotech-inc.com

Mr. Cory Smith
Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, New Mexico 87410
Email: cory.smith@state.nm.us
Phone (505) 334-6178 Ext 115

Re: Variance Request for 19.15.17 NMAC Table I and Table II

Mr. Smith,

Please accept this letter as a variance request as outlined in 19.15.17.15(A) NMAC. Enduring Resources, LLC (Enduring) would like to request the replacement of USEPA Method 418.1 for the analysis of Total Petroleum Hydrocarbons (TPH) for USEPA Method 8015M, measuring carbon ranges C6-C36, for all sampling associated with closures and confirmations samples in relation to 19.15.17 NMAC, both in Table I and Table II (2103) and the 'pit rule' passed in 2008. Enduring is requesting this variance on the grounds that USEPA Method 418.1 is an outdated analytical method that reports a full range of hydrocarbons from C5 through C40 (*Reference: American Petroleum Institute*).

The attached table demonstrates the carbon ranges, and the typical hydrocarbon products that can be found in those ranges. As you can see, lube oil ranges from C28-C35. Analytical Method USEPA 418.1 extends past lube oils from C35 through C40. This range of hydrocarbons is above the range that can reasonably be expected to be found in our field in both drilling pits and beneath below grade tanks. USEPA Method 8015M (GRO/DRO + extended analysis) will report hydrocarbons ranging from C6-C10 for GRO, C10- C28 for DRO, and C28-C36 for extended analysis. This information was provided by Environmental Science Corporation Laboratories. As the information demonstrates, the 8015M analytical method reports as low as C6, reporting lower than USEPA Method 418.1. Utilizing analytical method 8015M, lighter range hydrocarbons will be reported instead of higher range, heavy hydrocarbons that may not be reasonably expected to be found in our field. Utilization of USEPA Method 8015M will better protect groundwater resources by identifying lighter, more mobile hydrocarbons that USEPA Method 418.1 cannot identify. The heavier range hydrocarbons, C36-C40, that are not identified by USEPA Method 8015M are not a mobile form of hydrocarbon, and are not a threat to human health and the environment. With your acceptance of this variance request, XTO Energy will begin utilizing USEPA Method 8015M in place of USEPA Method 418.1 for all sampling activities associated with 19.15.17 NMAC, both from the rules passed in 2008 and 2013.

Respectfully Submitted,



James McDaniel, CHMM #15676
HSE Supervisor
Enduring Resources, LLC

Carbon Ranges of Typical Hydrocarbons

Hydrocarbon Carbon Range

Condensate C2-C12

Aromatics C5-C7

Gasoline C7-C11

Kerosene C6-C16

Diesel Fuel C8-C21

Fuel Oil #1 C9-C16

Fuel Oil #2 C11-C20

Heating Oil C14-C20

Lube Oil C28-C35



Enduring Resources, LLC
BGT Closure Report
Cardon COM SWD #1
30-045-24392



PHOTO 1: BGT Area after set of new Above Grade Tank

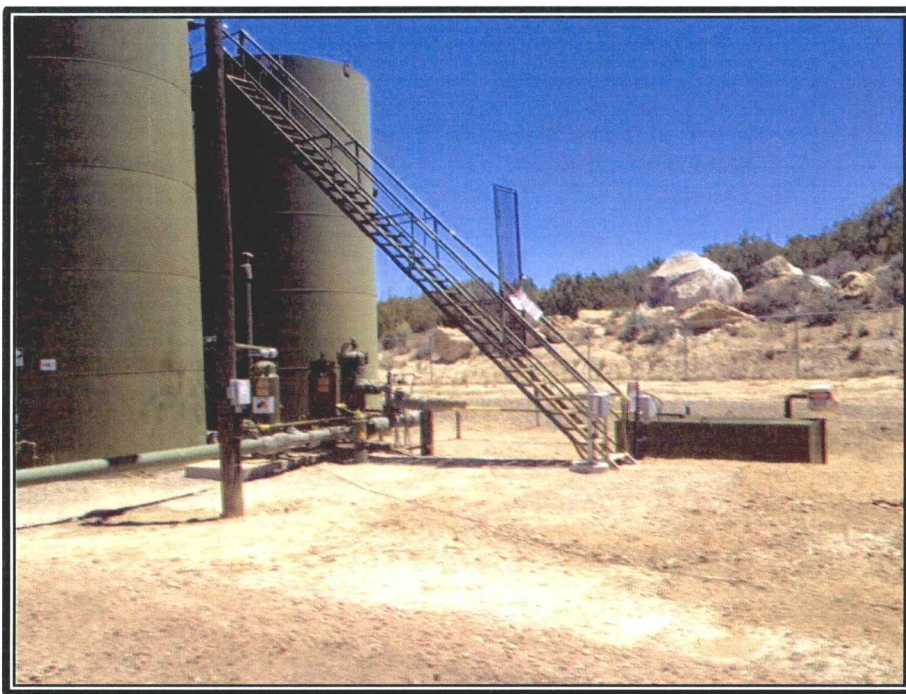


PHOTO 2: BGT Area after set of new Above Grade Tank