District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Pit, Closed-Loop System, Below-Grade Tank, or

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

| Proposed Alternative Method Permit or Closure Plan Application  |  |  |  |  |  |
|---|--|--|--|--|--|
| Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method  |  |  |  |  |  |
| Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request  |  |  |  |  |  |
| Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.   |  |  |  |  |  |
| I.         Operator:  |  |  |  |  |  |
| Address: Post Office Box 36366 Houston, TX 77236  |  |  |  |  |  |
| Facility or well name: Redfern #1   |  |  |  |  |  |
| API Number: <u>30-045-29035</u> OCD Permit Number: <u>1126</u>  |  |  |  |  |  |
| U/L or Qtr/Qtr K Section 14 Township 29N Range 13W County: San Juan   |  |  |  |  |  |
| Center of Proposed Design: Latitude 36 723047° Longitude -108 179558° NAD: 1927 1983  |  |  |  |  |  |
| Surface Owner:  Federal State Private Tribal Trust or Indian Allotment  |  |  |  |  |  |
| DIL CONS. DIV DIST. 3   |  |  |  |  |  |
| Pit: Subsection F or G of 19.15.17.11 NMAC  |  |  |  |  |  |
| Temporary: Drilling Workover AUG 272013   |  |  |  |  |  |
| Permanent Emergency Cavitation P&A  |  |  |  |  |  |
| ☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other   |  |  |  |  |  |
| Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other  |  |  |  |  |  |
| 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.  |  |  |  |  |  |
| String-Reinforced  Liner Seams: ☐ Welded ☐ Factory ☐ Other  |  |  |  |  |  |
| String-Reinforced  Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D  3.  Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  |  |  |  |  |  |
| String-Reinforced  Liner Seams:  Welded Factory Other Volume: bbl Dimensions: L x W x D  3. Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  Drying Pad Above Ground Steel Tanks Haul-off Bins Other   |  |  |  |  |  |
| String-Reinforced  Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D  3.  Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  |  |  |  |  |  |
| String-Reinforced  Liner Seams:  Welded  Factory Other  Volume: bbl Dimensions: L x W x D  3.  Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation:  P&A  Drilling a new well  Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  Drying Pad  Above Ground Steel Tanks  Haul-off Bins Other  Lined Unlined Liner type: Thickness mil LLDPE  PVC Other  Liner Seams:  Welded Factory Other |  |  |  |  |  |
| String-Reinforced  Liner Seams:   |  |  |  |  |  |
| String-Reinforced Liner Seams:  |  |  |  |  |  |
| String-Reinforced Liner Seams:  Welded  Factory Other   |  |  |  |  |  |
| String-Reinforced Liner Seams:  |  |  |  |  |  |
| String-Reinforced Liner Seams:  Welded  Factory Other   |  |  |  |  |  |
| String-Reinforced Liner Seams:  |  |  |  |  |  |
| String-Reinforced Liner Seams:  |  |  |  |  |  |

| 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, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify  | hospital,          |  |  |
|---|--------------------|--|--|
| Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)  |                    |  |  |
| Signs: Subsection C of 19.15.17.11 NMAC  ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  ☐ Signed in compliance with 19.15.3.103 NMAC  |                    |  |  |
| Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.   | office for         |  |  |
| Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate districtive or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.  Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system. |                    |  |  |
| Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | ☐ Yes ☐ No         |  |  |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  |                    |  |  |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image   | ☐ Yes ☐ No<br>☐ NA |  |  |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | ☐ Yes ☐ No<br>☐ NA |  |  |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  | ☐ Yes ☐ No         |  |  |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality   | ☐ 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         |  |  |
| Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   |                    |  |  |
| 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.<br>- FEMA map   | ☐ Yes ☐ No         |  |  |

| · ·   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.   |  |  |  |  |  |  |
| Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC                          |  |  |  |  |  |  |
| Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  |  |  |  |  |  |  |
| Previously Approved Design (attach copy of design) API Number: or Permit Number:  |  |  |  |  |  |  |
| 12.   |  |  |  |  |  |  |
| Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.   |  |  |  |  |  |  |
| Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  |  |  |  |  |  |  |
| Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC   |  |  |  |  |  |  |
| Previously Approved Design (attach copy of design)  API Number:   |  |  |  |  |  |  |
| Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use  |  |  |  |  |  |  |
| above ground steel tanks or haul-off bins and propose to implement waste removal for closure)   |  |  |  |  |  |  |
| 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.  |  |  |  |  |  |  |
| <ul> <li>☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC</li> <li>☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>☐ Climatological Factors Assessment</li> </ul>  |  |  |  |  |  |  |
| <ul> <li>☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC</li> </ul> |  |  |  |  |  |  |
| Quality Control/Quality Assurance Construction and Installation Plan  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  |  |  |  |  |  |  |
| Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan   |  |  |  |  |  |  |
| ☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization   |  |  |  |  |  |  |
| Monitoring and Inspection Plan  |  |  |  |  |  |  |
| ☐ Erosion Control Plan ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC   |  |  |  |  |  |  |
| 14. Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  |  |  |  |  |  |  |
| Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative  |  |  |  |  |  |  |
| Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only)  |  |  |  |  |  |  |
| On-site Closure Method (Only for temporary pits and closed-loop systems)  |  |  |  |  |  |  |
| ☐ In-place Burial ☐ On-site Trench Burial ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)  |  |  |  |  |  |  |
| 15.   |  |  |  |  |  |  |
| Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.   |  |  |  |  |  |  |
| Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  |  |  |  |  |  |  |
| ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)   |  |  |  |  |  |  |
| Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   |  |  |  |  |  |  |
| <ul> <li>□ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC</li> <li>□ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC</li> </ul>   |  |  |  |  |  |  |

| Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, facilities are required.   |   |                       |
|---|---|-----------------------|
| Disposal Facility Name:   | Disposal Facility Permit Number:  |                       |
| Disposal Facility Name: Disposal Facility Permit Number:  |   |                       |
| Will any of the proposed closed-loop system operations and associated activities of Yes (If yes, please provide the information below) ☐ No   |   |                       |
| Required for impacted areas which will not be used for future service and operation  Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection  | e requirements of Subsection H of 19.15.17.13 NMA(<br>n Lof 19.15.17.13 NMAC  | C                     |
| Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may require considered an exception which must be submitted to the Santa Fe Environment demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC  | re administrative approval from the appropriate dist<br>al Bureau office for consideration of approval. Justi   | rict office or may be |
| Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Da  | ta obtained from nearby wells   | ☐ Yes ☐ No<br>☐ NA    |
| Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Da  | ta obtained from nearby wells   | ☐ Yes ☐ No<br>☐ 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; Da   | ta obtained from nearby wells   | ☐ Yes ☐ No<br>☐ NA    |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  | gnificant watercourse or lakebed, sinkhole, or playa  | ☐ Yes ☐ No            |
| Within 300 feet from a permanent residence, school, hospital, institution, or churc - Visual inspection (certification) of the proposed site; Aerial photo; Satellie  |   | ☐ Yes ☐ No            |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that lew attering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database; Visual inspection  | spring, in existence at the time of initial application.  | ☐ Yes ☐ No            |
| Within incorporated municipal boundaries or within a defined municipal fresh war adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written appro  |   | ☐ Yes ☐ No            |
| Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   |   |                       |
| Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Minim   | g and Mineral Division  | ☐ Yes ☐ No            |
| Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map   | gy & Mineral Resources; USGS; NM Geological   | ☐ Yes ☐ No            |
| Within a 100-year floodplain FEMA map   |   | Yes No                |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying Protocols and Procedures - based upon the appropriate requirements of 19.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate re Waste Material Sampling Plan - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection | quirements of 19.15.17.10 NMAC of Subsection F of 19.15.17.13 NMAC ppropriate requirements of 19.15.17.11 NMAC pad) - based upon the appropriate requirements of 19. 5.17.13 NMAC quirements of Subsection F of 19.15.17.13 NMAC of Subsection F of 19.15.17.13 NMAC drill cuttings or in case on-site closure standards cann H of 19.15.17.13 NMAC | 15.17.11 NMAC         |

| 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:   |  |  |  |
| OCD Approval: Permit Application (including closure plan) Closure Plan.(only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: W/2013  Title: OCD Permit Number:  |  |  |  |
| 21.  Chasure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report.  The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date: June 12, 2013  |  |  |  |
| 22.  Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)  If different from approved plan, please explain.  |  |  |  |
| Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haut-off Bins Only:  Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.  Disposal Facility Name:  Disposal Facility Permit Number:  Disposal Facility Permit Number:  Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  Yes (If yes, please demonstrate compliance to the items below)   |  |  |  |
| Required for impacted areas which will not be used for future service and operations:  Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  |  |  |  |
| 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) See Attached Closure Notices  Proof of Deed Notice (required for on-site closure) Not Required  Plot Plan (for on-site closures and temporary pits) Not Required  Confirmation Sampling Analytical Results (if applicable) See Attached Analytical Results  Waste Material Sampling Analytical Results (required for on-site closure) Not Required  Disposal Facility Name and Permit Number Envirotech, Inc. Soil Remediation Facility, Permit #: NM-01-0011  Soil Backfilling and Cover installation See Attached Site Photography  Re-vegetation Application Rates and Seeding Technique Former Below Grade area still in use (active well site)  Site Reclamation (Photo Documentation) See Attached Site Photography  On-site Closure Location: Latitude |  |  |  |
| 25.  Onerator 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): Mr. Adam Oliver Title: Lead Facilities Engineer  |  |  |  |
| Signature: FUAN Olver Date: 8/22/2015  |  |  |  |
| a mail address: Adom Oliver Ochevron non Talanhama. (EDE) 223 1042   |  |  |  |

### BELOW GRADE TANK (BGT) CLOSURE PLAN

#### SITE NAME:

REDFERN #1 WELL SITE
UNIT LETTER K, SECTION 14, TOWNSHIP 29N, RANGE 13W
SAN JUAN COUNTY, NEW MEXICO
LATITUDE: N36.723047° LONGITUDE: W108.179558°

#### SUBMITTED TO:

MR. BRANDON POWELL
NEW MEXICO OIL CONSERVATION DIVISION
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 EXT 15

#### SUBMITTED BY:

MR. RICHARD CARROLL
CHEVRON NORTH AMERICA
760 HORIZON DRIVE
GRAND JUNCTION, COLORADO 81506
(970) 257-6026

**JULY 2013** 

## BELOW GRADE TANK (BGT) CLOSURE PLAN CHEVRON NORTH AMERICA REDFERN #1 WELL SITE SAN JUAN COUNTY, NEW MEXICO

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#### **Introduction**

Chevron North America would like to submit a closure plan for the below grade tank (BGT) at the Redfern #1 Well Site located in the NE ¼ SW ¼ of Section 14, Township 29N, Range 13W, San Juan County, New Mexico. This closure plan has been prepared in conformance with New Mexico Oil Conservation Division (NMOCD) procedures.

#### **SCOPE OF CLOSURE ACTIVITIES**

The purpose of this closure plan is to provide the details of activities involved in the closure of the BGT at the Redfern #1 Well Site. The following scope of closure activities has been designed to meet this objective:

- 1) Chevron North America shall submit a closure plan to the division's environmental bureau. Upon receipt of this plan the division shall review the current closure plan for adequacy and accordance with 19.15.17.9 Subsection C NMAC and 19.15.17.13 NMAC.
  - a. Closure Plan was submitted on March 1, 2010, to the division's environmental bureau, in accordance with 19.15.17.9 Subsection C NMAC and 19.15.17.13 NMAC. The Closure Plan was approved by the NMOCD on June 5, 2013.
- 2) No less than 72 hours and no greater than one (1) week prior to BGT removal Chevron North America will provide written notification to the appropriate division district office, as in accordance with 19.15.17.13 Subsection J Paragraph (2) NMAC.
  - a. Please find attached the written notification to the district office sent on June 5, 2013.
- 3) Chevron North America shall provide written notification to the surface owner no later than 24 hours prior to BGT removal. BLM will receive notification per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC.
  - a. <u>Chevron North America is the landowner for this well site; therefore, no notification was required.</u>
- 4) Chevron North America or a contractor acting on behalf of Chevron will remove all liquids, and/or sludge, if applicable, prior to closure. Material will be disposed of at Envirotech's Landfarm, Permit # NM-01-0011, as in accordance with 19.15.17.13 Subsection E Paragraph (1) NMAC.
  - a. All waste material was removed from the BGT by Riley Services and transported to Envirotech's NMOCD approved Landfarm #2 as listed above; see attached Bill of Lading.
- 5) Chevron North America or a contractor acting on behalf of Chevron will remove the BGT and all on-site equipment associated with this BGT that cannot or will not be reused on-site, as in accordance with 19.15.17.13 Subsection E Paragraphs (2) and (3) NMAC.
  - a. Chevron has removed the BGT and associated equipment that will not be reused on-site; see attached Site Photography.

6) Once the BGT is removed a five (5) – point composite sample will be collected from directly below the tank or below the leak detection system if present. An additional discrete sample will be collected from any area that is wet, discolored, or showing other evidence of a release. All samples being collected will be analyzed for benzene and total BTEX via USEPA Method 8021, TPH via USEPA Method 418.1, and chlorides via USEPA 300.1, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.

7)

| Sample ID | TPH<br>(418.1) | Benzene | BTEX   | Total Chlorides |
|-----------|----------------|---------|--------|-----------------|
| BGT NE    | 92             | < 0.05  | < 0.05 | 57.3            |
| BGT SW    | 76             | < 0.05  | < 0.05 | 189             |

- 8) Depending on soil sample results the area will be either backfilled or the area will be excavated.
  - a. If soil samples pass the regulatory standards of 0.2 ppm benzene, 50 ppm BTEX, 100 ppm TPH, and 250 ppm or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
    - i. Chevron North America or a contractor acting on behalf of Chevron will backfill the excavation or impacted area with non-waste containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC.
      - 1. BGT pit was backfilled with clean earthen material in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC.
    - ii. Upon decommissioning of the well site Chevron North America or a contractor acting on behalf of Chevron will construct a divison-prescribed soil cover, substantially restore, recontour and re-vegetate the site, in accordance with 19.15.17.13 Subsections G, H, and I NMAC.
      - 1. Well site is still in use re-vegetation will occur upon the decommissioning of the well site.
  - b. If soil samples exceed the regulatory standards stated above.
    - i. Chevron North America will submit a Release Notification by Form C-141 to the appropriate division district office, in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
    - ii. Activities beyond this point will be in accordance with 19.15.3.116 NMAC and 19.15.11.19 NMAC.
      - 1. Samples collected returned results at or below the regulatory standards stated above, indicating that a release has not occurred at this site.

#### REPORTING

Reporting will occur within 60 days following the BGT closure and will consist of a form C-144 with all supporting data, and a form C-141 with all supporting data, if necessary. The supporting

Below Grade Tank (BGT) Closure Plan Chevron North America Redfern #1 Well Site Page 3

data will include analytical results, a site diagram, and other information related to the onsite activities.

We appreciate the opportunity to be of service. If you have any questions or require further information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully Submitted:

**Chevron North America** 

Richard Carroll

Waste & Water Specialist Chevron North America Mid-Continent Business Unit

#### Toni McKnight

From:

Bailey, Rodney G [bailerg@chevron.com]

Sent:

Thursday, June 06, 2013 2:21 PM

To:

Oliver, Adam W.

Subject:

Redfern #1

I talked to Jonathan Kelly with local NMOCD office and you are good to complete the work on Redfern #1. Removal of the two BGT's.

Question when you sample will you send the results to me or do you talk to the state?

Rodney Bailey
Waste & Water Team Lead
Midland Texas
Chevron USA
Office - 432-687-7123
Cell - 432-894-3519
Fax - 866-569-5650
bailerg@chevron.com

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#### Toni McKnight

From:

Bailey, Rodney G [bailerg@chevron.com]

Sent:

Thurşday, June 06, 2013 9:08 AM

To:

Oliver, Adam W.

Subject:

FW: Redfern 1 BGT closure

Attachments:

2013 6-5 Redfern 1 95 bbl BGT closure.pdf

Rodney Bailey
Waste & Water Team Lead
Midland Texas
Chevron USA
Office - 432-687-7123
Cell - 432-894-3519
Fax - 866-569-5650
bailerg@chevron.com

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From: Griswold, Jim, EMNRD [mailto:Jim.Griswold@state.nm.us]

Sent: Wednesday, June 05, 2013 4:02 PM

To: Bailey, Rodney G

Subject: Redfern 1 BGT closure

See attached. Thanks for coming by today.

#### Jim Griswold

Senior Hydrologist
EMNRD/Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3465

email: jim.griswold@state.nm.us



#### EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Chevron North America

-

Project #:
Date Reported:

92270-1119

Sample No.: Sample ID:

BGT NE

- neported.

7/24/2013 6/12/2013

Sample Matrix:

Soil

Date Sampled: Date Analyzed:

6/12/2013

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

92

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Redfern #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Toni McKnight, EIT

Printed

Felipe Aragon, CES

Printed



envioled)-incom



## CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

| Cal |    | $\Box$ | 2 | t۵ |  |
|-----|----|--------|---|----|--|
| Ua: | 1. | IJ     | а | 12 |  |

12-Jun-13

| Parameter | Standard<br>Concentration<br>mg/L | Concentration<br>Reading<br>mg/L |  |
|-----------|-----------------------------------|----------------------------------|--|
| ТРН       | 100                               |                                  |  |
|           | 200                               | 207                              |  |
|           | 500<br>1000                       |                                  |  |

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

1 ani Molony a S Analyst

7/24/2013

Date

Toni McKnight, EIT

Print Name

7/24/2013

Review

Date

Felipe Aragon, CES

Print Name



#### Field Chloride

Client:

Chevron North America

Sample No.:

**BGT NE** 

Sample ID:

Five-point Composite

Sample Matrix: Preservative:

Soil

Condition:

Cool

Cool and Intact

Project #:

92270-1119

Date Reported:

7/24/2013

Date Sampled:

Analysis Needed:

6/12/2013

Date Analyzed:

6/12/2013 Chloride

|           | A STATE OF THE STA | Det.    |
|-----------|--|---------|
|           | Concentration  | Limit   |
| Parameter | (mg/kg)  | (mg/kg) |

Field Chloride

39

32.0

ND = Parameter not detected at the stated detection limit.

References:

"Standard Methods for the Examination of Water and Wastewater", 18th ed., 1992

Hach Company Quantab Titrators for Chloride

Comments:

Redfern #1

,

Toni McKnight, EIT

Printed

Review

Felipe Aragon, CES

Printed



#### **Analytical Report**

#### **Report Summary**

Client: Chevron

Chain Of Custody Number: 15696

Samples Received: 6/12/2013 3:40:00PM

Job Number: 92270-1119 Work Order: P306057

Project Name/Location: Red Fern #1

Entire Report Reviewed By:

Date: 6/23/13

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



322 Road 3100 Aztec NM, 87410 Project Name:

Red Fern #1

Project Number:

92270-1119

Project Manager:

Toni Mckinght

Reported: 23-Jun-13 12:55

#### **Analyical Report for Samples**

| Client Sample ID | Lab Sample ID | Matrix | Sampled  | Received | Container        |
|------------------|---------------|--------|----------|----------|------------------|
| BGT NE           | P306057-01A   | Soil   | 06/12/13 | 06/12/13 | Glass Jar, 4 oz. |
| BGT SW           | P306057-02A   | Soil   | 06/12/13 | 06/12/13 | Glass Jar, 4 oz. |

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adhadallana 🖫



Chevron 322 Road 3100 Aztec NM, 87410 Project Name:

Red Fern #1

Project Number:

92270-1119

Project Manager:

Toni Mckinght

Reported: 23-Jun-13 12:55

#### BGT NE P306057-01 (Solid)

|                                |        | Reporting |       |          |         |           |           |           |      |
|--------------------------------|--------|-----------|-------|----------|---------|-----------|-----------|-----------|------|
| Analyte                        | Result | Limit     | Units | Dilution | Batch   | Prepared  | Analyzed  | Method    | Note |
| Volatile Organics by EPA 8021  |        |           |       |          |         |           |           |           |      |
| Benzene                        | ND     | 0.05      | mg/kg | 1        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Toluene                        | ND     | 0.05      | mg/kg | 1        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Ethylbenzene                   | ND     | 0.05      | mg/kg | l        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| p,m-Xylene                     | ND     | 0.05      | mg/kg | 1        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| o-Xylene                       | ND     | 0.05      | mg/kg | 1        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Total Xylenes                  | ND     | 0.05      | mg/kg | l        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Total BTEX                     | ND     | 0.05      | mg/kg | i        | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Surrogate: Bromochlorobenzene  |        | 82.5 %    | 80-   | 120      | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Surrogate: 1,4-Difluorobenzene |        | 96.0 %    | 80-   | 120      | 1325001 | 17-Jun-13 | 19~Jun-13 | EPA 8021B |      |
| Surrogate: Fluorobenzene       |        | 91.6%     | 80-   | 120      | 1325001 | 17-Jun-13 | 19-Jun-13 | EPA 8021B |      |
| Cation/Anion Analysis          |        |           |       |          |         |           |           |           |      |
| Chloride                       | 57.3   | 9.99      | mg/kg | 1        | 1325006 | 17-Jun-13 | 17-Jun-13 | EPA 300.0 |      |

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enviousibilisaem dus sal-abstratures (naturals)



Chevron 322 Road 3100 Aztec NM, 87410 Project Name:

Red Fern #1

Project Number:

92270-1119

Project Manager:

Toni Mckinght

Reported: 23-Jun-13 12:55

#### BGT SW P306057-02 (Solid)

|                                |        | Reporting |       |          |         |             |           |           |       |
|--------------------------------|--------|-----------|-------|----------|---------|-------------|-----------|-----------|-------|
| Analyte                        | Result | Limit     | Units | Dilution | Batch   | Prepared    | Analyzed  | Method    | Notes |
| Volatile Organics by EPA 8021  |        |           |       |          |         |             |           |           |       |
| Benzene                        | ND     | 0.05      | mg/kg | 1        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Toluene                        | ND     | 0.05      | mg/kg | 1        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Ethylbenzene                   | ND     | 0.05      | mg/kg | 1        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| p,m-Xylene                     | ND     | 0.05      | mg/kg | 1        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| o-Xylene                       | ND     | 0.05      | mg/kg | 1        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Total Xylenes                  | ND     | 0.05      | mg/kg | i        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Total BTEX                     | ND     | 0.05      | mg/kg | 1        | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Surrogate: Bromochlorobenzene  |        | 81.6 %    | 80-   | 120      | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Surrogate: 1,4-Difluorobenzene |        | 88.4 %    | 80-   | 120      | 1324037 | 14-Jun-13   | 19\Jun-13 | EPA 8021B |       |
| Surrogate: Fluorobenzene       |        | 84.9 %    | 80-   | 120      | 1324037 | 14-Jun-13   | 19-Jun-13 | EPA 8021B |       |
| Cation/Anion Analysis          |        |           |       |          |         | <del></del> | *****     |           |       |
| Chloride                       | 189    | 10.0      | mg/kg | 1        | 1325006 | 17-Jun-13   | 17-Jun-13 | EPA 300.0 |       |

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Project Name:

Red Fern #1

322 Road 3100 Aztec NM, 87410 Project Number: Project Manager: 92270-1119 Toni Mckinght Reported:

23-Jun-13 12:55

#### Volatile Organics by EPA 8021 - Quality Control

#### **Envirotech Analytical Laboratory**

|  |        | Reporting      |       | Spike     | Source    |           | %REC      |     | RPD   |       |
|--|--------|----------------|-------|-----------|-----------|-----------|-----------|-----|-------|-------|
| Analyte                                  | Result | Limit          | Units | Level     | Result    | %REC      | Limits    | RPD | Limit | Notes |
| Batch 1324037 - Purge and Trap EPA 5030A |        |                |       |           | <u> </u>  |           | ·         |     |       |       |
| Blank (1324037-BLK1)                     |        |                |       | Prepared: | 14-Jun-13 | Analyzed: | 18-Jun-13 |     |       |       |
| Benzene                                  | ND     | 0.05           | mg/kg |           |           |           |           |     |       |       |
| Toluene                                  | ND     | 0.05           | **    |           |           |           |           |     |       |       |
| Ethylbenzene                             | ND     | 0,05           | •     |           |           |           |           |     |       |       |
| p,m-Xylene                               | ND     | 0.05           | **    |           |           |           |           |     |       |       |
| o-Xylene                                 | ND     | 0.05           | •     |           |           |           |           |     |       |       |
| Total Xylenes                            | ND     | 0.05           | 4     |           |           |           |           |     |       |       |
| Total BTEX                               | ND     | 0.05           | "     |           |           |           |           |     |       |       |
| Surrogate: Bromochlorobenzene            | 47.1   |                | ug/L  | 50.0      |           | 94.2      | 80-120    |     |       |       |
| Surrogate: 1,4-Difluorohenzene           | 50.2   |                | "     | 50.0      |           | 100       | 80-120    |     |       |       |
| Surrogate: Fluorobenzene                 | 49.3   |                | "     | 50.0      |           | 98.5      | 80-120    |     |       |       |
| Duplicate (1324037-DUP1)                 | Sou    | ırce: P306042- | 01    | Prepared: | 14-Jun-13 | Analyzed: | 18-Jun-13 |     |       |       |
| Benzene                                  | ND     | 0.05           | mg/kg |           | ND        |           |           |     | 30    |       |
| Toluene                                  | ND     | 0.05           | п     |           | ND        |           |           |     | 30    |       |
| Ethylbenzene                             | ND     | 0.05           | н     |           | ND        |           |           |     | 30    |       |
| p.m-Xylene                               | ND     | 0.05           | н     |           | ND        |           |           |     | 30    |       |
| o-Xylene                                 | ND     | 0.05           | 41    |           | ND        |           |           |     | 30    |       |
| Surrogate: Bromochlorobenzene            | 48.6   |                | ug/L  | 50.0      |           | 97.3      | 80-120    |     |       |       |
| Surrogate: 1,4-Difluorohenzene           | 49.7   |                | n     | 50.0      |           | 99.4      | 80-120    |     |       |       |
| Surrogate: Fluorohenzene                 | 49.2   |                | n     | 50.0      |           | 98.4      | 80-120    |     |       |       |
| Matrix Spike (1324037-MS1)               | Sou    | ırce: P306042- | -01   | Prepared: | 14-Jun-13 | Analyzed: | 18-Jun-13 |     |       |       |
| Benzene                                  | 50.2   |                | ug/L  | 50.0      | 0.32      | 99.7      | 39-150    |     |       |       |
| Toluene                                  | 50.1   |                | p     | 50.0      | 0.68      | 98.9      | 46-148    |     |       |       |
| Ethylbenzene                             | 49.7   |                | n     | 50.0      | 0.31      | 98.8      | 32-160    |     |       |       |
| p,m-Xylene                               | 99.2   |                |       | 100       | 0.57      | 98.7      | 46-148    |     |       |       |
| o-Xylene                                 | 49.6   |                |       | 50.0      | 0.55      | 98.1      | 46-148    |     |       |       |
| Surrogate: Bromochlorobenzene            | 48.3   |                | "     | 50.0      |           | 96.5      | 80-120    |     |       |       |
| Surrogate: 1,4-Difluorobenzene           | 49.5   |                | "     | 50.0      |           | 98.9      | 80-120    |     |       |       |
| Surrogate: Fluorobenzene                 | 49.3   |                | "     | 50.0      |           | 98.6      | 80-120    |     |       |       |

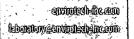
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Project Name:

Red Fern #1

322 Road 3100 Aztec NM, 87410 Project Number:

92270-1119

Reported:

Project Manager:

Toni Mckinght

23-Jun-13 12:55

#### Volatile Organics by EPA 8021 - Quality Control

#### **Envirotech Analytical Laboratory**

| Analyte                                  | Result | Reporting<br>Limit | Units | Spike<br>Level                          | Source<br>Result   | %REC        | %REC<br>Limits | <b>RP</b> D | RPD<br>Limit | Notes |
|--|--------|--------------------|-------|---|--------------------|-------------|----------------|-------------|--------------|-------|
| Batch 1325001 - Purge and Trap EPA 5030A |        |                    |       |   |                    |             |                |             |              |       |
| Blank (1325001-BLK1)                     |        |                    |       | Prepared.                               | 17-Jun-13 A        | Analyzed: 1 | 8-Jun-13       |             |              |       |
| Benzene                                  | ND     | 0.05               | mg/kg | p                                       |                    |             |                |             |              |       |
| Toluene                                  | ND     | 0.05               | "     |   |                    |             |                |             |              |       |
| Ethylbenzene                             | ND     | 0.05               | p     |   |                    |             |                |             |              |       |
| p,m-Xylene                               | ND     | 0.05               |       |   |                    |             |                |             |              |       |
| 0-Xylene                                 | ND     | 0.05               |       |   |                    |             |                |             |              |       |
| Total Xylenes                            | ND     | 0.05               | "     |   |                    |             |                |             |              |       |
| Total BTEX                               | ND     | 0.05               | a     |   |                    |             |                |             |              |       |
| Surrogate: Bromochlorobenzene            | 49.5   |                    | ug/L  | 50.0                                    |                    | 99.0        | 80-120         |             |              |       |
| Surrogate: 1,4-Difluorobenzene           | 51.1   |                    | "     | 50.0                                    |                    | 102         | 80-120         |             |              |       |
| Surrogate: Fluorobenzene                 | 50.6   |                    | **    | 50.0                                    |                    | 101         | 80-120         |             |              |       |
| Duplicate (1325001-DUP1)                 | Sou    | rce: P306075-      | 01    | Prepared:                               | 17-Jun-13 <i>A</i> | Analyzed: I | 8-Jun-13       |             |              |       |
| Benzene                                  | ND     | 0.05               | mg/kg | , | ND                 |             |                |             | 30           |       |
| Toluene                                  | ND     | 0.05               | *     |   | ND                 |             |                |             | 30           |       |
| Ethylbenzene                             | ND     | 0.05               | **    |   | ND                 |             |                |             | 30           |       |
| p,m-Xylene                               | ND     | 0.05               |       |   | ND                 |             |                |             | 30           |       |
| o-Xylene                                 | ND     | 0.05               | н     |   | ND                 |             |                |             | 30           |       |
| Surrogate: Bromochlorobenzene            | 96.9   |                    | ug/L  | 100                                     |                    | 96.9        | 80-120         |             |              |       |
| Surrogate: 1,4-Difluorobenzene           | 100    |                    | "     | 100                                     |                    | 100         | 80-120         |             |              |       |
| Surrogate: Fluorobenzene                 | 99.4   |                    | **    | 100                                     |                    | 99.4        | 80-120         |             |              |       |
| Matrix Spike (1325001-MS1)               | Sou    | rce: P306075-      | 01    | Prepared:                               | 17-Jun-13 A        | Analyzed: 1 | 8-Jun-13       |             |              |       |
| Benzene                                  | 52.2   |                    | ug/L  | 50.0                                    | 0,28               | 104         | 39-150         |             |              |       |
| Foluene                                  | 52.5   |                    | P     | 50.0                                    | 0.57               | 104         | 46-148         |             |              |       |
| Ethylbenzene                             | 52.1   |                    |       | 50.0                                    | 0.29               | 104         | 32-160         |             |              |       |
| o,m-Xylene                               | 104    |                    | n     | 100                                     | 0.35               | 104         | 46-148         |             |              |       |
| p-Xylene                                 | 51.8   |                    |       | 50.0                                    | 0.45               | 103         | 46-148         |             |              |       |
| Surrogate: Bromochlorobenzene            | 51.7   |                    | "     | 50.0                                    |                    | 103         | 80-120         |             |              |       |
| Surrogate: 1,4-Difluarohenzene           | 51.8   |                    | **    | 50.0                                    |                    | 104         | 80-120         |             |              |       |
| Surrogate: Fluorobenzene                 | 51.4   |                    | "     | 50.0                                    |                    | 103         | 80-120         |             |              |       |

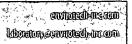
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Project Name:

Red Fern #1

322 Road 3100 Aztec NM, 87410 Project Number:

92270-1119

Project Manager:

Toni Mckinght

Reported:

23-Jun-13 12:55

#### Cation/Anion Analysis - Quality Control

#### **Envirotech Analytical Laboratory**

|  |        | Reporting     |       | Spike      | Source    |           | %REC   |       | RPD                                   |       |
|--|--------|---------------|-------|------------|-----------|-----------|--------|-------|---------------------------------------|-------|
| Analyte                                    | Result | Limit         | Units | Level      | Result    | %REC      | Limits | RPD   | Limit                                 | Notes |
| Batch 1325006 - Anion Extraction EPA 300.0 |        |               |       |            |           |           |        |       | · · · · · · · · · · · · · · · · · · · |       |
| Blank (1325006-BLK1)                       |        |               |       | Prepared & | Analyzed: | 17-Jun-13 |        |       |                                       |       |
| Chloride                                   | ND     | 10.0          | mg/kg |            |           |           |        |       |                                       |       |
| Duplicate (1325006-DUP1)                   | Sou    | rce: P306075- | 01    | Prepared & | Analyzed: | 17-Jun-13 |        |       |                                       |       |
| Chloride                                   | 14000  | 99,9          | mg/kg |            | 14000     |           |        | 0.272 | 30                                    |       |

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Project Name:

Red Fern #1

322 Road 3100 Aztec NM, 87410 Project Number: Project Manager: 92270-1119 Toni Mckinght Reported:

23-Jun-13 12:55

#### Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference

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## CHAIN OF CUSTODY RECORD

15696

| CHEVRON   | N. A.          | Pi             | roject Name / Location | on:    |                                       | ····             |             |        |                   |                    |                   |               | A              | NALY     | /SIS          | / PAF          | RAME        | ETER                                    | ıs     | <del></del> |             | 0.600         |
|---|----------------|----------------|------------------------|--------|---------------------------------------|------------------|-------------|--------|-------------------|--------------------|-------------------|---------------|----------------|----------|---------------|----------------|-------------|---|--------|-------------|-------------|---------------|
| Email results to:   | abilin         | COS            | ampler Name:           | riali- | · · · · · · · · · · · · · · · · · · · |                  | <del></del> |        | 15)               | (021)              | (093              |               |                |          |               |                |             |   |        |             |             |               |
| CHEVRON Email results to: +mcKnight Cenui Client Phone No.: | (IOFCOLP)      | CI             | ient No.:              | 11910  | <u> </u>                              |                  |             |        | TPH (Method 8015) | BTEX (Method 8021) | VOC (Method 8260) | RCRA 8 Metals | nion           |          | H/P           | CO Table 910-1 | ÷.          | Ā                                       |        |             | -<br>00     | Itact         |
|   | <del></del>    |                | 92270-                 | 1117   |                                       |                  |             |        | Met               | (R                 | (Met              | 8             | ¥/٦            |          | with          | able           | 418         | RID                                     |        |             | e<br>C      | le ch         |
| Sample No./ Identification                                  | Sample<br>Date | Sample<br>Time | Lab No.                | of Co  | Volume<br>intainers                   | HNO <sub>3</sub> | HCI         | tive.  | TPH (             | BTEX               | VOC               | RCR/          | Cation / Anion | <u>Б</u> | TCLP with H/P | 1 00           | TPH (418.1) | CHLORIDE                                |        |             | Sample Cool | Sample Intact |
| BGT NE  | 6/12/13        | 8155           | P306057-01             | 4-0    | 72                                    |                  |             | V      |                   | V                  |                   |               |                |          |               |                |             | 1                                       |        |             | 4           | Y             |
| BGTSW   | 6/12/13        | 13:45          | P306057-02             | 407    |                                       |                  |             | V      |                   | 1                  |                   |               |                |          |               |                |             |   |        |             | 1           | 1             |
|   |                |                |                        |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                |             |   |        |             |             |               |
|   |                |                |                        |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                |             |   |        |             |             |               |
|   |                |                |                        |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                |             |   |        |             |             |               |
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|   |                |                |                        |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                |             |   |        |             |             |               |
|   |                |                |                        |        |                                       |                  |             |        |                   |                    |                   | ,             |                |          |               |                |             |   |        |             |             |               |
|   |                |                |                        |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                |             |   |        |             |             |               |
| Relinquished by: (Signature)                                |                | 4              |                        | Date   | Time                                  | Rece             | ived I      | by: (S | ignat             | ture)              | ا ۔۔۔۔ا           |               |                |          |               |                |             | L                                       |        | Date        | 1           | me            |
| Relinquished by: (Signature)                                | and a          |                |                        | /12/13 | 15:48                                 |                  | ived !      | by: (S | ionat             | ure                | 12                | 50            | 4              |          |               |                |             |   |        | 6/12/12     | 10.         | 40            |
| riomiquioned by (orginature)                                |                |                |                        |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                | ٧           | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |        |             |             |               |
| Sample Matrix<br>Soil X Solid ☐ Sludge ☐                    | Aqueous 🗌      | Other [        | ]                      |        |                                       |                  |             |        |                   |                    |                   |               |                |          |               |                |             |   |        |             |             |               |
| ☐ Sample(s) dropped off after                               | hours to sec   | cure drop o    | <del></del>            |        |                                       | ilytic           | al Lo       | bor    | ator              | Y .                | urand             | go, C         | 0 813          | • 108    | iabo          | aton           | /@en        | virote                                  | ch-inc | .com        | .1          |               |



PAINT FILTER TEST

### Bill of Lading

ANIFEST # 43925

DATE 6-12-13

JOB 42270-12

| PHONE  | E: (505) 632-0615 • 5796 U | .S. HIGHWAY 64 | <ul> <li>FARMINGTON</li> </ul>        | , NEW ME | XICO 874 | 01   |                                       |        |                                       |                  |
|--------|----------------------------|----------------|---------------------------------------|----------|----------|------|---------------------------------------|--------|---------------------------------------|------------------|
| LOAD   | COMI                       | PLETE DESCRIPT | TION OF SHIPME                        | TV       |          |      | TRANSPO                               | PRTING | COMPAN                                | NY .             |
| NO.    | POINT OF ORIGIN            | DESTINATION    | MATERIAL                              | GRID     | YDS      | BBLS | COMPANY                               | TRK#   | TIME                                  | DRIVER SIGNATURE |
| 2      | Cherchod Repferd # 2       | BF             | HANK,<br>Both M5                      |          |          | 5    | Rockies                               | 218    | 16:09                                 | stalla/          |
| 2      | 6 4                        | a de           | wash och                              |          |          | 5    | 4 9                                   | 218    | 16:05                                 | Bella/           |
|        |                            |                |                                       |          | _        |      |                                       |        |                                       |                  |
|        | ·                          |                |                                       |          |          | 10   |                                       |        |                                       |                  |
|        |                            |                |                                       |          |          |      |                                       |        |                                       |                  |
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|        |                            |                |                                       |          |          |      |                                       |        |                                       |                  |
|        | ·.                         |                |                                       |          |          |      |                                       |        |                                       |                  |
|        |                            |                |                                       |          |          |      |                                       |        |                                       |                  |
|        |                            |                |                                       |          |          |      |                                       |        |                                       |                  |
|        |                            |                |                                       |          |          |      |                                       |        |                                       |                  |
|        |                            |                |                                       |          |          | 1    |                                       |        |                                       |                  |
| RESULT |                            | LANDFARM       | (1)                                   |          |          |      | NOTES:                                |        | · · · · · · · · · · · · · · · · · · · |                  |
| 1 10   |                            | - CALLINIA     | (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII |          | · v      | 7    | · · · · · · · · · · · · · · · · · · · |        |                                       |                  |

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. Rockies Const NAME BIETH WILLIAMS SIGNATURE SIGNATURE COMPANY CONTACT CLAYTON SPURGEON PHONE SOS 334 1977 DATE 6-12-13

Signatures required prior to distribution of the legal document.

Certification of above receival & placement

Site Photography Chevron North America Redfern #1 Well Site Below Grade Tank Closure Project No. 92270-1119 June 12, 2013

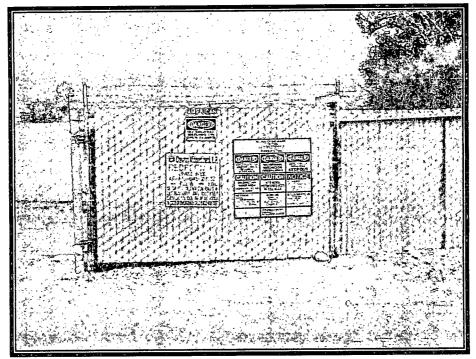


Photo 1: Redfern #1 Well Site

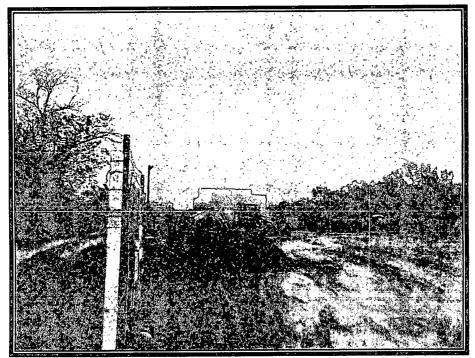


Photo 2: BGT NE Location

Site Photography Chevron North America Redfern #1 Well Site Below Grade Tank Closure Project No. 92270-1119 June 12, 2013

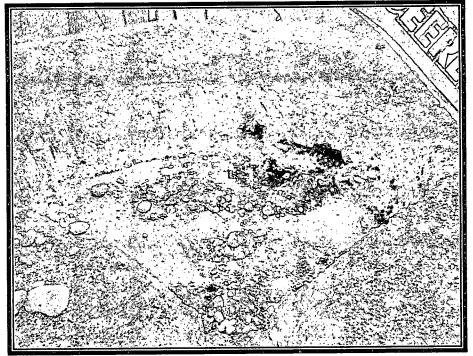


Photo 3: BGT NE Excavation

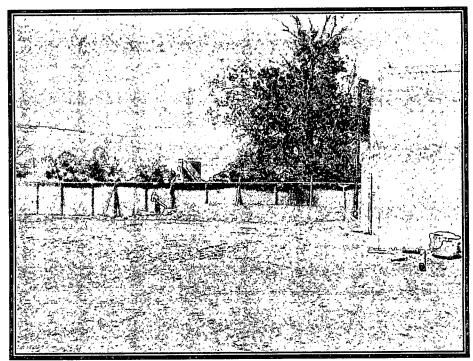


Photo 4: BGT NE Backfill

District I 1625 N French Dr., Hobbs, NM 88240 District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S St. Francis Dr., Sonta Fe, NM 87505

## State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

#### Release Notification and Corrective Action

|   |  |   |  |  |                                | OPERAT  | $\boxtimes$   | Final Report                       |   |  |                                 |                                   |  |  |  |
|---|--|---|--|--|--------------------------------|---|---|------------------------------------|---|--|---------------------------------|-----------------------------------|--|--|--|
| Name of Co  |  |   |  |  |                                | Contact: Mr. Adam Oliver                      |   |                                    |   |  |                                 |                                   |  |  |  |
| Address: Po   | st Office I  | 36366, F  | louston.   | TX 77236   |                                | Telephone No. (505) 333-19422                 |   |                                    |   |  |                                 |                                   |  |  |  |
| Facility Nan  | ne: Redfer   | n #1  |  |  |                                | Facility Type: Gas Well                       |   |                                    |   |  |                                 |                                   |  |  |  |
| Surface Owi   | ner: Privat  | e   |  | Mineral Ov   | vner:                          |   |   |                                    | Lease N   | lo.: N/A                                   |                                 |                                   |  |  |  |
|   |  |   |  | LOCA   | ror                            | OF REI  | LEASE   |                                    |   |  |                                 |                                   |  |  |  |
| Unit Letter   | Section  | Township  | Range  |  |                                | South Line                                    | Feet from the   | East/V                             | Vest Line   | County                                     |                                 |                                   |  |  |  |
| K   | 14   | 29N   | 13W  | 1688   | :                              | South   | 1848  | \                                  | Vest  | San Juan                                   |                                 |                                   |  |  |  |
| **************************************                              |  |   | Latitu   | de_ <u>36_723047°</u>  |                                | Longitude                                     | -108.179558°  | ·<br>·                             | _   |  | <del></del>                     |                                   |  |  |  |
|   |  |   |  | NATU   | JRE                            | OF RELI                                       | EASE  |                                    |   |  |                                 |                                   |  |  |  |
| Type of Relea   | ise: Produc  | ed Water  | <del></del>  |  |                                | Volume of                                     | Release: No Rele  | ease                               | Volume F  | Recovered: N                               | lot App                         | licable                           |  |  |  |
| Source of Re  |  |   |  |  |                                | Date and H<br>Not Applie                      | our of Occurrence   | e:                                 |   | Hour of Dis                                |                                 |                                   |  |  |  |
| Was Immedia   | te Notice C  | liven?  | <u> </u>   |  |                                | If YES. To                                    |   |                                    | тострул   | icanic                                     |                                 |                                   |  |  |  |
|   |  |   | Yes  | No 🛛 Not Req   | uired                          |   |   |                                    |   |  |                                 |                                   |  |  |  |
| By Whom?  |  |   |  |  |                                | Date and E                                    |   |                                    |   | RCUD AL                                    | G 27                            | 119                               |  |  |  |
| Was a Watero  | course Read  |   | Yes 🗵  | No   |                                | If YES, Vo                                    | lume Impacting t  | he Wate                            | ercourse.   | OIL CON                                    | (S. D)<br>T. 3                  | [U.                               |  |  |  |
| If a Watercou<br>No Release   | rse was Im   | pacted. Descr                                   | ihe Fully.   | •  |                                |   |   |                                    |   |  |                                 |                                   |  |  |  |
| Tank was ren  | noved on Ju  |   | Soil samp  | tioned location form<br>ling from directly be<br>curred.   |                                |   |   |                                    |   |  |                                 |                                   |  |  |  |
| A five (5) po<br>the field for to<br>using USEPA                    | int compos<br>otal petrole<br>Method 86<br>0.2 mg/kg b | um hydrocarb<br>021 and for to<br>senzene, 50 m | s collected<br>ons (TPH)<br>tal chlorid            | en.* I from directly bend<br>using USEPA Me<br>es using USEPA M<br>BTI:X and 250 mg                                | thod 4<br>lethod               | 18.1, and in E<br>4500B. The                  | invirotech's Analysample returned r                         | ytical La<br>esults a              | aboratory for the state of the | or benzene a<br>the 'Pit Rule              | ind tota<br>" stand:            | I BTEX<br>ards of 100             |  |  |  |
| regulations al<br>public health<br>should their o<br>or the environ | I operators<br>or the environe homent. In a            | are required to ronment. The ave failed to a    | o report ar<br>acceptant<br>adequately<br>CD accep | is true and comple<br>id/or file certain rel<br>te of a C-141 report<br>investigate and rer<br>tance of a C-141 re | ease no<br>t by the<br>nediate | otifications as<br>e NMOCD m<br>e contaminati | nd perform correct<br>arked as "Final Roon that pose a thre | tive acti<br>eport" d<br>eat to gr | ions for rela<br>loes not reli<br>ound water  | eases which<br>leve the oper<br>surface wa | may en<br>rator of<br>iter, hur | danger<br>liability<br>nan health |  |  |  |
|   | 1.   |   |  |  |                                | OIL CONSERVATION DIVISION                     |   |                                    |   |  |                                 |                                   |  |  |  |
| Signature:  | Ab   | m oll   | 3V   |  |                                |   |   |                                    |   |  |                                 |                                   |  |  |  |
| Printed Name  | : Adam O   | liver   |  |  |                                | Approved by                                   | District Supervis   | от:                                | r:  |  |                                 |                                   |  |  |  |
| Title: Lead F   | acilities En   | gineer.   |  |  |                                | Approval Date:                                |   |                                    | Expiration Date:  |  |                                 |                                   |  |  |  |
| F-mail Addre  | ss: AdamC  | liver@chevr                                     | on.com   |  |                                | Conditions of Approval:                       |   |                                    | Attached  |  |                                 |                                   |  |  |  |
| Date: S   | 126  | 12013   | Phone:   | 505-333-1942   |                                |   |   |                                    |   |  |                                 |                                   |  |  |  |

<sup>\*</sup> Attach Additional Sheets If Necessary