

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 June 6, 2013

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

11276

- 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

RCVD JUL 31 '13
OIL CONS. DIV.
DIST. 3

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: Chevron Midcontinent, L.P. OGRID #: 241333
Address: Post Office Box 36366 Houston, Texas 77236
Facility or well name: Redfern #1
API Number: 30-045-29035 OCD Permit Number: 1126
U/L or Qtr/Qtr Qtr/Qtr Section 14 Township 29N Range 13W County: San Juan
Center of Proposed Design: Latitude _____ Longitude _____ NAD: 1927 1983
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 Chloride Drilling Fluid yes no
 Lined Unlined Liner type: Thickness _____
 String-Reinforced
Liner Seams: Welded Factory Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

DENIED
Closure Details in Report do not match those in Approved Closure Plan
BY: Jonathan Kelly
DATE: 9/4/2013 (505) 334-6178 Ext. 122

3.
 Below-grade tank (BGT 1 - NE): 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 _____

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.

Variations and Exceptions:

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

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

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

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting

Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.

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

- Yes No
- NA

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

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

- Yes No
- NA

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

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

- Yes No

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

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

- Yes No

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

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

- Yes No

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

- FEMA map

- Yes No

Below Grade Tanks

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

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

- Yes No

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

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

- Yes No

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

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

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

- Yes No

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

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

- Yes No

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

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

- Yes No

Within 100 feet of a wetland.

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

Yes No

Temporary Pit Non-low chloride drilling fluid

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

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

Yes No

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

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

Yes No

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

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

Yes No

Within 300 feet of a wetland.

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

Yes No

Permanent Pit or Multi-Well Fluid Management Pit

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

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

Yes No

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

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

Yes No

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

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

Yes No

Within 500 feet of a wetland.

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

Yes No

10.

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

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

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

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

11.

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

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

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

- Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12. **Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

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

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

13. **Proposed Closure:** 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

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

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

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

15. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

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

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

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 (include conditions) Other Conditions (see attachment)

OCD Representative Signature: _____ Approval Date: _____

Title: _____ Number: _____

DENIED

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: June 12, 2013

20. **Closure Method:**

Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)

If different from approved plan, please explain.

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

- Proof of Closure Notice (surface owner and division) *See Attached Closure Notices*
- Proof of Deed Notice (required for on-site closure for private land only) *N/A*
- Plot Plan (for on-site closures and temporary pits) *N/A*
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (required for on-site closure) *N/A*
- 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 _____ 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): Adam Oliver Title: Lead Facilities Engineer

Signature: Adam Oliver Date: 7/30/2013

e-mail address: Adam.Oliver@chevron.com Telephone: (505) 333-1942

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. Chevron North America is the landowner for this well site; therefore, no notification was required.
- 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.

Sample ID	TPH (418.1)	GRO+DRO (8015M)	Benzene (8021B)	BTEX (8021B)	Chlorides (300.0)
Closure Criteria (< 50 ft to GW)	100 mg/kg	N/A	10 mg/kg	50 mg/kg	600 mg/kg
BGT NE	92	NS	< 0.05	< 0.05	57.3
BGT SW	76	NS	< 0.05	< 0.05	189

- 7) 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. **Due to a change in the "Pit Rule" on June 6, 2013, the above mentioned regulatory standards are now in accordance with 19.15.17.9 Subsection C Paragraph (3a) NMAC. The new standards for groundwater less than 50 foot below the BGT are 10 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 600 mg/kg chlorides. The BGT pit was backfilled with clean earthen material in accordance with 19.15.17.13 Subsection C Paragraph (3c) 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.**

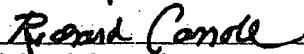
REPORTING

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 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: Thursday, 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 #: 92270-1119
Sample No.: 1 Date Reported: 7/24/2013
Sample ID: BGT NE Date Sampled: 6/12/2013
Sample Matrix: Soil Date Analyzed: 6/12/2013
Preservative: Cool Analysis Needed: TPH-418.1
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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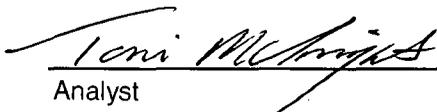
Total Petroleum Hydrocarbons 92 5.0

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

Toni McKnight, EIT

Printed



Review

Felipe Aragon, CES

Printed

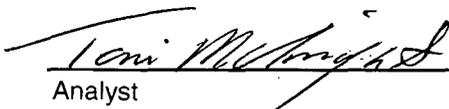


CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 12-Jun-13

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	207
	500	
	1000	

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



Analyst

7/24/2013

Date

Toni McKnight, EIT

Print Name



Review

7/24/2013

Date

Felipe Aragon, CES

Print Name



Field Chloride

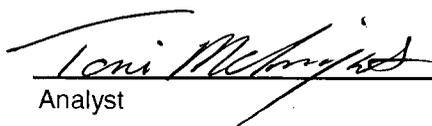
Client: Chevron North America Project #: 92270-1119
Sample No.: BGT NE Date Reported: 7/24/2013
Sample ID: Five-point Composite Date Sampled: 6/12/2013
Sample Matrix: Soil Date Analyzed: 6/12/2013
Preservative: Cool Analysis Needed: Chloride
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (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

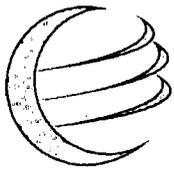
Comments: Redfern #1


Analyst

Toni McKnight, EIT
Printed


Review

Felipe Aragon, CES
Printed



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Analytical Laboratory

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

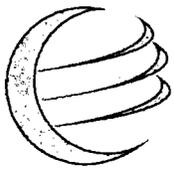
Project Name/Location: Red Fern #1

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.



Chevron 322 Road 3100 Aztec NM, 87410	Project Name: Red Fern #1 Project Number: 92270-1119 Project Manager: Toni Mckingt	Reported: 23-Jun-13 12:55
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Analytical 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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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
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**BGT NE
P306057-01 (Solid)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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	1	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	1	1325001	17-Jun-13	19-Jun-13	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1325001	17-Jun-13	19-Jun-13	EPA 8021B	
<i>Surrogate: Bromochlorobenzene</i>		82.5 %	80-120		1325001	17-Jun-13	19-Jun-13	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		96.0 %	80-120		1325001	17-Jun-13	19-Jun-13	EPA 8021B	
<i>Surrogate: Fluorobenzene</i>		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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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
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**BGT SW
P306057-02 (Solid)**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
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	1	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	
<i>Surrogate: Bromochlorobenzene</i>		81.6 %			1324037	14-Jun-13	19-Jun-13	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		88.4 %			1324037	14-Jun-13	19-Jun-13	EPA 8021B	
<i>Surrogate: Fluorobenzene</i>		84.9 %			1324037	14-Jun-13	19-Jun-13	EPA 8021B	
Cation/Anion Analysis									
Chloride	189	10.0	mg/kg	1	1325006	17-Jun-13	17-Jun-13	EPA 300.0	

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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
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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
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Batch 1324037 - Purge and Trap EPA 5030A

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	"							
Total BTEX	ND	0.05	"							
<i>Surrogate: Bromochlorobenzene</i>	47.1		ug/L	50.0		94.2	80-120			
<i>Surrogate: 1,4-Difluorobenzene</i>	50.2		"	50.0		100	80-120			
<i>Surrogate: Fluorobenzene</i>	49.3		"	50.0		98.5	80-120			

Duplicate (1324037-DUP1)			Source: P306042-01		Prepared: 14-Jun-13 Analyzed: 18-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	"		ND					30
<i>Surrogate: Bromochlorobenzene</i>	48.6		ug/L	50.0		97.3	80-120			
<i>Surrogate: 1,4-Difluorobenzene</i>	49.7		"	50.0		99.4	80-120			
<i>Surrogate: Fluorobenzene</i>	49.2		"	50.0		98.4	80-120			

Matrix Spike (1324037-MS1)			Source: 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		"	50.0	0.68	98.9	46-148			
Ethylbenzene	49.7		"	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			
<i>Surrogate: Bromochlorobenzene</i>	48.3		"	50.0		96.5	80-120			
<i>Surrogate: 1,4-Difluorobenzene</i>	49.5		"	50.0		98.9	80-120			
<i>Surrogate: Fluorobenzene</i>	49.3		"	50.0		98.6	80-120			

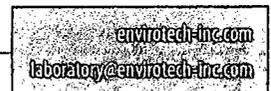
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Chevron 322 Road 3100 Aztec NM, 87410	Project Name: Red Fern #1 Project Number: 92270-1119 Project Manager: Toni Mcknight	Reported: 23-Jun-13 12:55
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Volatile Organics by EPA 8021 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1325001 - Purge and Trap EPA 5030A

Blank (1325001-BLK1)			Prepared: 17-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	"							
Total BTEX	ND	0.05	"							
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)			Source: P306075-01		Prepared: 17-Jun-13 Analyzed: 18-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	"		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)			Source: P306075-01		Prepared: 17-Jun-13 Analyzed: 18-Jun-13					
Benzene	52.2		ug/L	50.0	0.28	104	39-150			
Toluene	52.5		"	50.0	0.57	104	46-148			
Ethylbenzene	52.1		"	50.0	0.29	104	32-160			
p,m-Xylene	104		"	100	0.35	104	46-148			
o-Xylene	51.8		"	50.0	0.45	103	46-148			
Surrogate: Bromochlorobenzene	51.7		"	50.0		103	80-120			
Surrogate: 1,4-Difluorobenzene	51.8		"	50.0		104	80-120			
Surrogate: Fluorobenzene	51.4		"	50.0		103	80-120			

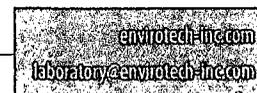
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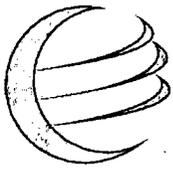
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Analytical Laboratory

Chevron	Project Name:	Red Fern #1	
322 Road 3100	Project Number:	92270-1119	Reported:
Aztec NM, 87410	Project Manager:	Toni Mckinght	23-Jun-13 12:55

Cation/Anion Analysis - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	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)										
					Source: P306075-01 Prepared & Analyzed: 17-Jun-13					
Chloride	14000	99.9	mg/kg		14000			0.272	30	

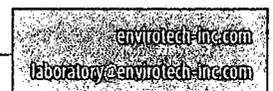
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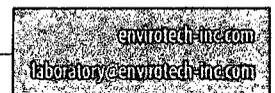


Chevron 322 Road 3100 Aztec NM, 87410	Project Name: Red Fern #1 Project Number: 92270-1119 Project Manager: Toni Mckinght	Reported: 23-Jun-13 12:55
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Notes and Definitions

- 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

Client: CHEVRON N.A.	Project Name / Location: Red Fern #1	ANALYSIS / PARAMETERS			
Email results to: tmcknight@envirotech-inc.com	Sampler Name: Toni McKnight	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals
Client Phone No.:	Client No.:				
	92270-1119	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
					HNO ₃	HCl	COOL												
BGT NE	6/12/13	8:55	P306057-01	4-0Z			✓	✓									✓	Y	Y
BGT SW	6/12/13	13:45	P306057-02	40Z			✓	✓									✓	L	L

Relinquished by: (Signature) <i>Toni McKnight</i>	Date 6/12/13	Time 15:40	Received by: (Signature) <i>Dore J Zazzi</i>	Date 6/12/13	Time 15:40
Relinquished by: (Signature)			Received by: (Signature)		
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>					

Sample(s) dropped off after hours to secure drop off area.



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Bill of Lading

MANIFEST # 43925

DATE 6-12-13 JOB # 92270-1121

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
2	Cherokee Red Fern II I	BF	tank Bottoms		-	5	Rockies	218	16:05	<i>[Signature]</i>	
2	"	"	WASH OUT		-	5	"	218	16:05	<i>[Signature]</i>	
						10					
RESULTS:		LANDFARM EMPLOYEE:		<i>[Signature]</i>				NOTES:			
612	CHLORIDE TEST	1									
	PAINT FILTER TEST	1		Certification of above receipt & placement							

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 Brett Williams SIGNATURE *[Signature]*
 COMPANY CONTACT CLAYTON SPURGEON PHONE 505 334 1977 DATE 6-12-13

Signatures required prior to distribution of the legal document.

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

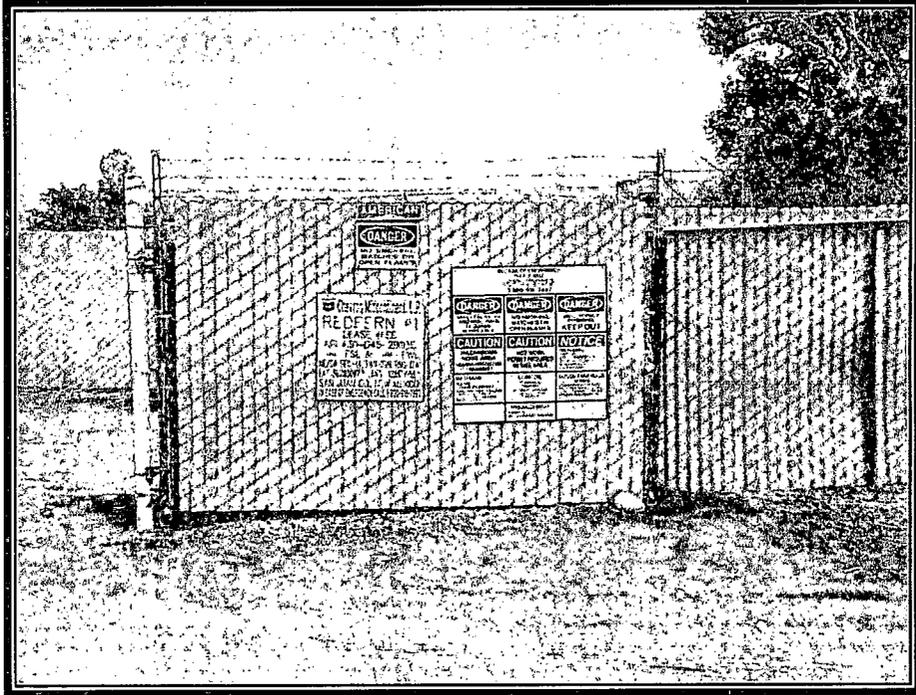


Photo 1: Redfern #1 Well Site

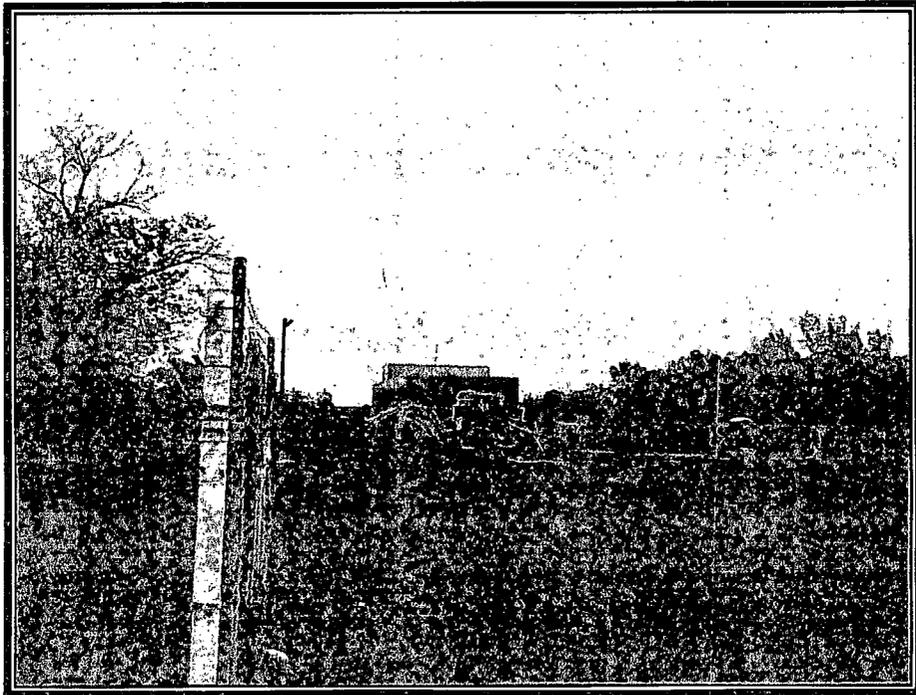


Photo 2: BGT NE Location

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