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

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

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

10292

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.

1.
Operator: Four Star Oil and Gas Company OGRID #: 131994
Address: Post Office Box 36366 Houston, TX 77236
Facility or well name: Farming E #4 (BGT 1)
API Number: 30-039-22350 OCD Permit Number:
U/L or Qtr/Qtr L5 Section 2 Township 24N Range 6W County: Rio Arriba
Center of Proposed Design: Latitude 36.345780° Longitude -107.443243° NAD: ☐ 1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

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

RCVD AUG 2'12
OIL CONS. DIV.
DIST. 3

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 95 bbl Type of fluid: Produced Water
Tank Construction material: Fiberglass
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other Buried
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☒ Other None

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

30

6.

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

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

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

☐ Alternate. Please specify

7.

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)

8.

Signs: Subsection C of 19.15.17.11 NMAC

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

☐ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

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

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

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

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

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - 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	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ 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 ☐ 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	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

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

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

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

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

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

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

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

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

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

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

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

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

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

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

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

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

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

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ 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; Data obtained from nearby wells	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - 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 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; 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	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

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

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 8/10/2012

Title: Compliance Officer OCD Permit Number: _____

21.

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

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

☒ Closure Completion Date: July 9, 2012

22.

Closure Method:

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

☐ If different from approved plan, please explain.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

24.

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

☒ Proof of Closure Notice (surface owner and division) **See Attached 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's Landfarm #2, Permit #: NM-01-0011**

☒ Soil Backfilling and Cover Installation **See Attached Site Photographs**

☒ Re-vegetation Application Rates and Seeding Technique **Pursuant to the BLM MOU and Approved Closure Plan**

☒ Site Reclamation (Photo Documentation) **See Attached Site Photographs**

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

25.

Operator Closure Certification:

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

Name (Print): Ms. Laura Clenney Title: Facilities Engineer

Signature: _____ Date: 8/1/12

e-mail address: laura.clenney@chevron.com Telephone: (281) 881-0322

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Four Star Oil and Gas Company	Contact: Ms. Laura Clenney
Address: Post Office Box 36366, Houston, TX 77236	Telephone No. (281) 881-0322
Facility Name: Farming E #4 (BGT 1)	Facility Type: Gas Well

Surface Owner: State	Mineral Owner:	Lease No.: E0-1207-0004

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L5	2	24N	6W	1450	North	920	West	Rio Arriba

Latitude 36.345780° Longitude -107.443243°

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: Not Applicable
Source of Release: Below Grade Tank	Date and Hour of Occurrence: Historical	Date and Hour of Discovery: Not Applicable
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
No watercourse impacted.

Describe Cause of Problem and Remedial Action Taken.*
Produced water from a gas well at the above mentioned location formerly discharged into a Below Grade Tank (BGT) on location. The Below Grade Tank was removed on July 2, 2012. Soil sampling from directly beneath the tank in accordance with Subsection E of 19.15.17.13 NMAC was performed on July 2, 2012, and indicated that a release had occurred. Please reference the final C-141 documentation for remedial action taken.

Describe Area Affected and Cleanup Action Taken.*
A five (5)-point composite sample was collected from directly beneath the former BGT immediately once it was removed. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, and in Envirotech's Analytical Laboratory for TPH using USEPA Method 8015, for benzene and total BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500B. The sample returned results at or below the "Pit Rule" standards of 0.2 mg/kg benzene, 50 mg/kg total BTEX and 250 mg/kg total chlorides. The sample returned results above the 100 mg/kg TPH "Pit Rule" standard using USEPA Method 418.1, confirming that a release had occurred. The sample returned results above the regulatory cleanup standard of 1000 ppm TPH determined for this site. Please reference the final C-141 documentation for cleanup action taken.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Laura Clenney	Approved by District Supervisor:	
Title: Facilities Engineer	Approval Date:	Expiration Date:
E-mail Address: laura.clenney@chevron.com	Conditions of Approval:	Attached ☐
Date: 8/1/12 Phone: 281-881-0322		

* Attach Additional Sheets If Necessary

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Four Star Oil and Gas Company	Contact: Ms. Laura Clenney
Address: Post Office Box 36366, Houston, TX 77236	Telephone No. (281) 881- 0322
Facility Name: Farming E #4 (BGT 1)	Facility Type: Gas Well

Surface Owner: State	Mineral Owner:	Lease No.: E0-1207-0004

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L5	2	24N	6W	1450	North	920	West	Rio Arriba

Latitude 36.345780° Longitude -107.443243°

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: Not Applicable
Source of Release: Below Grade Tank	Date and Hour of Occurrence: Historical	Date and Hour of Discovery: Not Applicable
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
No watercourse impacted.

Describe Cause of Problem and Remedial Action Taken.*
Produced water from a gas well at the above mentioned location formerly discharged into a Below Grade Tank (BGT) on location. The Below Grade Tank was removed on July 2, 2012. Soil sampling from directly beneath the tank in accordance with Subsection E of 19.15.17.13 NMAC was performed on July 2, 2012, and indicated that a release had occurred. Contaminated soil was excavated from the area of the former BGT and a sample collected. The sample returned results below the NMOCD regulatory cleanup standards determined for the site.

Describe Area Affected and Cleanup Action Taken.*
A five (5)-point composite sample was collected from directly beneath the former BGT immediately once it was removed. The sample was analyzed in the field for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, and in Envirotech's Analytical Laboratory for TPH using USEPA Method 8015, for benzene and total BTEX using USEPA Method 8021 and for total chlorides using USEPA Method 4500B. The sample returned results at or below the "Pit Rule" standards of 0.2 mg/kg benzene, 50 mg/kg total BTEX and 250 mg/kg total chlorides. The sample returned results above the 100 mg/kg TPH "Pit Rule" standard using USEPA Method 418.1, confirming that a release had occurred. Approximately 24 cubic yards of contaminated soil was excavated from the area of the former BGT and a sample collected. The sample returned results below the regulatory cleanup standard of 1000 ppm TPH determined for this site. Analytical results are attached for your reference. Approximately 24 cubic yards of contaminated soil was removed from the site and transported to Envirotech's NMOCD permitted Landfarm 2.

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

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Laura Clenney	Approved by District Supervisor:	
Title: Facilities Engineer	Approval Date:	Expiration Date:
E-mail Address: laura.clenney@chevron.com	Conditions of Approval:	Attached ☐
Date: 8/1/12 Phone: 281-881-0322		

Attach Additional Sheets If Necessary

CHEVRON
SAN JUAN BASIN
BELOW GRADE TANK CLOSURE PLAN
FARMING E #4 BGT #1

INTRODUCTION

In accordance with NMAC 19.15.17.9 (B) (4) and 19.15.17.13, Chevron (representing Chevron USA Inc, Chevron Midcontinent, L.P., and Four Star Oil and Gas Company) submits this Closure Plan for below grade tanks (BGTs) in New Mexico. This Closure Plan contains standard conditions that attach to multiple BGTs. If needed for a particular BGT, a modified Closure Plan for a proposed alternative closure will be submitted to the New Mexico Oil Conservation Division (NMOCD or the division) for approval prior to closure.

CLOSURE PLAN PROCEDURES AND PROTOCOLS (NMAC 19.15.17.9 (C) AND 19.15.17.13)

1) Chevron, or a contractor acting on the behalf of Chevron, will close a BGT within the time periods provided in NMAC 19.15.17.13 (A), or by an earlier date required by NMOCD to prevent an imminent danger to fresh water, public health, or the environment. NMAC 19.15.17.13 (A).

2) Chevron, or a contractor acting on behalf of Chevron, will close as existing BGT that does not meet the requirements of NMAC 19.15.17.11 (I) (1 through 4) or is not included in NMAC 19.15.17.11 (I) (5) within five years after June 16, 2008, if not retrofitted to comply with NMAC 19.15.17.11 (I) (1 through 4). NMAC 19.15.17.13 (A) (4).

3) Chevron shall close an existing below-grade tank that does not meet the requirements of Paragraphs (1) though (4) of Subsection I of 19.15.17.11 NMAC. If not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, prior to any sale or change of operator pursuant to 19.15.9.9 NMAC.
   a. **The Farming E #4 BGT #1 is being closed in accordance to 1 and 2 above. The site was not up for sale or change of operator prior to closure activities.**

4) Chevron, or a contractor acting on behalf of Chevron, will close a permitted BGT within 60 days of cessation of the BGT's operation or as required by the transitional provisions of NMAC 19.15.17.17 (B) in accordance with a closure plan that the appropriate division district office approves. NMAC 19.15.17.13 (A)(9) and 19.15.17.9 (C).
   a. **The Closure Plan was submitted on March 4, 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 on June 19, 2012, by Mr. Brad Jones with the NMOCD, Santa Fe Office.**

5) In accordance with NMAC 19.15.17.13 (J)(1), Chevron will notify the surface owner by certified mail, return receipt requested, of its plans to close a BGT prior to beginning closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance. Chevron will notify the appropriate division district office verbally or by other means at least 72 hours, but no more than one (1) week, prior to any closure operation. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range. If the closure is associated with a particular well, then the notice shall also include the well's name, number and API number. NMAC 19.15.17.13 (J)(2).
   a. **Please find attached the written notification to the district office sent on July 5, 2012.**

   b. **Please find attached the written notification to the landowner sent on June 21, 2012.**

6) Chevron North America, or a contractor acting on behalf of Chevron, will remove all liquids and sludge from a BGT prior to implementing a closure method and will dispose of the liquids and sludge in a division approved facility. NMAC 19.15.17.13(E)(1). A list of Chevron currently approved disposal facilities is included at the end of this document.
   a. **All waste material was removed from the BGT by Riley Services and transported to Envirotech's NMOCD approved Landfarm #2 on June 29, 2012; see attached Bill of Lading.**

7) The proposed method of closure for this Closure Plan is waste excavation and removal. NMAC 19.15.17.13(E)(1).
   a. **Approximately 24 cubic yards of contaminated soil were excavated from beneath the former BGT. The soil was transported to Envirotech's NMOCD approved Landfarm #2 on July 10, 2012; see attached Bill of Lading.**

8) Chevron North America, or a contractor acting on behalf of Chevron, shall remove the BGT and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. When required, prior approval for disposal will be obtained. NMAC 19.15.17.13(E)(2). Documentation regarding disposal of the BGT and its associated liner, if any, will be included in the closure report.
   a. **A liner was not associated with this BGT. The BGT was made of fiber-glass material and will be disposed of at the San Juan Regional Landfill in compliance with NMAC 19.15.35.8 allowable materials.**

9) Waste generated during closure will be handled and disposed of in accordance with applicable laws. NMAC 19.15.35.8 (C)(1)(m) provides that plastic pit liners may be disposed at a solid waste facility without testing before disposal, provided they are cleaned well.
   a. **A plastic liner was not associated with this BGT.**

10) Chevron, or a contractor acting on behalf of Chevron, will remove on-site equipment associated with a BGT unless the equipment is required for some other purpose. NMAC 19.15.17.13(E)(3).
   a. **Chevron has removed the BGT and associated equipment that will not be reused on-site; see attached Site Photography.**

11) Chevron, or a contractor acting on behalf of Chevron, will test the soils beneath the BGT to determine whether a release has occurred. At a minimum, 5 point composite samples will be collected along with individual grab samples from any area that is wet, discolored, or showing other evidence of a release. Samples will be analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA Method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves , does not exceed 250 mg/kg; or the background concentration, whichever is greater. Chevron, or a contractor acting on behalf of Chevron, will notify the NMOCD Division District office of its results on form C-141. NMAC 19.15.17.13(E)(4).

Sample ID	TPH (418.1)	TPH (8015)	Benzene (8021)	Total BTEX (8021)	Chlorides (4500B)
5 Pt. Composite	5,756 ppm	1,010 ppm	<0.01 ppm	0.0387 ppm	100 ppm

12) If Chevron or the division determines that a release has occurred, Chevron will comply with NMAC 19.15.29 and 19.15.30, as appropriate. NMAC 19.15.17.13(E)(5).
    a. **The TPH using EPA Method 418.1 levels were above the release limit of 100 mg/kg for this BGT; see attached C-141 for release notification.**
    b. **The spill closure standards were determined to be 1,000 mg/kg (ppm) due to the depth of groundwater being between 50 feet and 100 feet, the distance to surface water being greater than 1000 feet and the distance to a domestic freshwater water well or spring being greater than 1000 feet.**
    c. **Approximately 24 cubic yards of contaminated soil were removed from the area beneath the former BGT. One (1) composite soil sample was collected from the excavated area and the TPH using EPA Method 418.1 level was 212 ppm, which is below the NMOCD Guidelines for the Remediation of Spill, Leaks, and Releases. Therefore no further action was required for BGT 1.**

13) If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in NMAC 19.15.17.13(E)(4), Chevron will backfill the excavation with compacted, non-waste containing, earthen materials; construct a division prescribed soil cover; re-contour and re-vegetate the site. The division prescribed soil cover, re-contouring and re-vegetation requirements shall comply with NMAC 19.15.17.13(G, H and I). NMAC 19.15.17.13 (E)(6).
    a. **BGT pit was backfilled with clean earthen material in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC.**
    b. **Well site is still in use – re-vegetation will occur upon the decommissioning of the well site.**

14) As per NMAC 19.15.17.13(G)(1), once Chevron has closed a BGT or is no longer using the BGT or an area associated with the BGT, Chevron will reclaim the BGT location and all areas associated with it including associated access roads not needed by the surface estate owner to a safe and stable condition the blends with the surrounding undisturbed area. Chevron will substantially restore impacted surface area to the condition that existed prior to its oil and gas operations by placement of soil cover as provided in NMAC 19.15.17.13(H) (see below), re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography, and re-vegetate according to NMAC 19.15.17.13(I). NMAC 19.15.17.13(G)(1).

15) Chevron may propose an alternative to the re-vegetation requirement of NMAC 19.15.17.13(G)(1) if it demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human health and the environment. The proposed alternative must be agreed upon in writing by the surface owner. Chevron will submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division for approval. NMAC 19.15.17.13(G)(2).

16) Soil cover for closures where Chevron has removed the pit contents or remediated the contaminated soil to the division's satisfaction will consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. NMAC 19.15.17.13(H)(1).

17) Chevron will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material. NMAC 19.15.17.13(H)(3).

18) As per NMAC 19.15.17.13(I)(1) and 19.15.17.13(G)(2), Chevron will seed or plant disturbed areas during the first growing season after it is no longer using a BGT or an area associated with the BGT including access roads unless needed by the surface estate owner as evidenced by a written agreement with the surface estate owner, if any and written approval by NMOCD.

19) Seeding will be accomplished by drilling on the contour whenever practical or by other division approved methods. Chevron will obtain vegetative cover that equals 70% or the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, Chevron will not artificially irrigate the vegetation. NMAC 19.15.17.13(I)(2)

20) Chevron will notify the division when it has seeded or planted and when it successfully achieves re-vegetation. NMAC 19.15.17.13(I)(5)

21) Seeding or planting will be repeated until Chevron successfully achieves the required vegetative cover. NMAC 19.15.17.13(I)(3)

22) When conditions are not favorable for the establishment of vegetation, such as periods of drought, the division may allow Chevron to delay seeding or planting until soil moisture conditions become favorable or may require Chevron to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices. NMAC 19.15.17.13(I)(4).
    a. **The well site and area around the BGT are still in use and will be re-contoured and re-vegetated in accordance with steps 14 through 22 upon decommissioning of the well site.**

23) As per NMAC 19.15.17.13(K), within 60 days of closure completion, Chevron will submit a closure report containing the elements required by NMAC 19.15.17.13(K) including:
    a. Confirmation sampling results,
    b. A plot plan, **- not Required for Below-grade Tanks**
    c. Details on back-filling, capping and covering, where applicable, including re-vegetation application rates and seeding technique, - **BGT Area still in use for Daily Operational Activities**
    d. Proof of closure notice to the surface owner, if any, and the division,
    e. Name and permit number of disposal facility, and
    f. Photo documentation.

24) The closure report will be filed on NMOCD Form C-144. Chevron will certify that all information in the closure report and attachments is correct and that it has been complied with all applicable closure requirements and conditions specified in the approved closure plan. NMAC 19.15.17.13(K)
    a. **Please find attached the C-144 BGT Closure Documentation.**

25) As requested, the following are the current Chevron approved Waste Disposal Sites for the identified waste streams:

Soils and Sludges

i) Envirotech, Inc. Soil Remediation Facility, Permit No. NM-01-0011

Solids

ii) San Juan County Regional Landfill (NMAC 19.15.35.8 items only, with prior NMOCD approval when required)

Liquids

iii) Key Energy Disposal Facility, Permit No. NM-01-0009

iv) Basin Disposals Facility, Permit No. NM-01-005

26) These waste disposal sites are subject to change if their certification is lost or they are closed or other more appropriate, equally protective sites become available. Chevron will provide notice if such a change is affected.

April E. Pohl
Regulatory Specialist
Midcontinent Business Unit

Chevron North America
Exploration and Production Company
(A Chevron U.S.A. Inc. Division)
332 Road 3100
Aztec, New Mexico 87410
Tel: 505-333-1941
Fax: 505-334-7134
April.Pohl@chevron.com

VIA CERTIFIED MAIL

June 21, 2012

Larry J. Roybal
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

RE: BELOW GRADE TANK CLOSURE NOTIFICATION

FARMING E #1E WELL SITE API 30-039-22367
FARMING E #4 WELL SITE API 30-039-22350
KEYS COM #1 WELL SITE API 30-045-07641

Dear Mr. Roybal,

This letter serves as surface owner notification for Below Grade Tank closure activities at the following well sites:

FARMING E #1E API 30-039-22367 SECTION 2, TOWNSHIP 24N, RANGE 6W RIO ARRIBA COUNTY
FARMING E #4 API 30-039-22350 SECTION 2, TOWNSHIP 24N, RANGE 6W RIO ARRIBA COUNTY
KEYS COM #1 API 30-045-07641 SECTION 32, TOWNSHIP 29N, RANGE 10W SAN JUAN COUNTY

The listed wells are all on leases operated by Four Star Oil & Gas Co. Closure activities are anticipated to occur and be completed during the latter part of June and July, 2012.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact me at (505) 333-1941.

Respectfully submitted,

April E Pohl

April E. Pohl
Regulatory Specialist
Midcontinent Business Unit
32 Road 3100
Aztec, New Mexico 87410

7011 1570 0001 0603 3533

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

BLT notice Farming E1E E4 Keys Com 1

Sent To: New Mexico State Land Office
Street, Apt. No.; or PO Box No.: 310 Old Santa Fe Trail
City, State, ZIP+4: Santa Fe NM 87501

PS Form 3800, August 2006 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Larry J. Roybal
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe NM. 87501
Farming E1E, E4
Keys Com 1

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name)
C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7011 1570 0001 0603 3533

PS Form 3811, February 2004 — Domestic Return Receipt — 102595-02-M-154

Toni McKnight

From: Pohl, April E [April.Pohl@chevron.com]
Sent: Thursday, July 05, 2012 9:00 AM
To: Toni McKnight
Subject: FW: BGT notification Farming E #4

Sorry about that!

From: Pohl, April E
Sent: Thursday, July 05, 2012 8:39 AM
To: 'Powell, Brandon, EMNRD'
Cc: Clenney, Laura E
Subject: BGT notification Farming E #4

Good morning Mr. Powell:

This note per your request, will satisfy the NMOCD requirement for notification regarding removal of a below grade tank at the Farming E #4. The surface owner has been notified by certified mail.

Farming E #4 API 30-039-22350 NW/NW, S2, T24N, R6WSan Juan County, New Mexico

Thank you,

April E. Pohl
Regulatory Specialist
Aztec, NM
Office 505-333-1941
Fax 505-334-7134
Cell 505-386-8074
April.Pohl@chevron.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Chevron North America	Project #:	92270-0968
Sample No.:	1	Date Reported:	7/18/2012
Sample ID:	BGT 1 Composite	Date Sampled:	7/2/2012
Sample Matrix:	Soil	Date Analyzed:	7/2/2012
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**5,760**	**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: **Farming E #4**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Kory Peine
Printed

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 2-Jul-12

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	191
	500	
	1000	

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

Analyst — Date: 7/18/2012

Kory Peine
Print Name

Review — Date: 7/18/2012

Toni McKnight, EIT
Print Name

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

Field Chloride

Client:	Chevron North America	Project #:	92270-0968
Sample No.:	1	Date Reported:	7/18/2012
Sample ID:	BGT 1 Composite	Date Sampled:	7/2/2012
Sample Matrix:	Soil	Date Analyzed:	7/2/2012
Preservative:	Cool	Analysis Needed:	Chloride
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Field Chloride	**136**	**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: **Farming E #4**

Analyst

Kory Peine
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Chevron North America	Project #:	92270-0968
Sample No.:	1	Date Reported:	7/24/2012
Sample ID:	Excv. Composite	Date Sampled:	7/9/2012
Sample Matrix:	Soil	Date Analyzed:	7/9/2012
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**212**	**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: **Farming E #4**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Felipe Aragon
Printed

Review

Toni McKnight, EIT
Printed

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 9-Jul-12

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	
	500	501
	1000	

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

Analyst — 7/24/2012 Date

Felipe Aragon
Print Name

Review — 7/24/2012 Date

Toni McKnight, EIT
Print Name

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
info@envirotech-inc.com

envirotech
Analytical Laboratory

Report Summary

Client: Chevron

Chain of Custody Number: 14968

Samples Received: 07-02-12

Job Number: 92270-0968

Sample Number(s): 62504-62505

Project Name/Location: BGT Closure: Farming E #4

Entire Report Reviewed By: _____ Date: 7/11/12

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Chevron	Project #:	92270-0968
Sample ID:	BGT #1	Date Reported:	07-03-12
Laboratory Number:	62504	Date Sampled:	07-02-12
Chain of Custody No:	14968	Date Received:	07-02-12
Sample Matrix:	Soil	Date Extracted:	07-02-12
Preservative:	Cool	Date Analyzed:	07-03-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**1,080**	**0.1**
Total Petroleum Hydrocarbons	**1,080**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **BGT Closure: Farming E #4**

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	0703TCAL QA/QC	Date Reported:	07-03-12
Laboratory Number:	62493	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-03-12
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	07-03-12	9.9960E+02	1.0000E+03	**0.04%**	**0 - 15%**
Diesel Range C10 - C28	07-03-12	9.9960E+02	1.0000E+03	**0.04%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**282**	**113%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**266**	**107%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Was SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 62493-62494 and 62503-62505.**

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron	Project #:	92270-0968
Sample ID:	BGT#1	Date Reported:	07-03-12
Laboratory Number:	62504	Date Sampled:	07-02-12
Chain of Custody:	14968	Date Received:	07-02-12
Sample Matrix:	Soil	Date Analyzed:	07-03-12
Preservative:	Cool	Date Extracted:	07-02-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**10.0**
Toluene	**23.4**	**10.0**
Ethylbenzene	**ND**	**10.0**
p,m-Xylene	**ND**	**10.0**
o-Xylene	**15.3**	**10.0**
Total BTEX	**38.7**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**81.5 %**
	1,4-difluorobenzene	**90.5 %**
	Bromochlorobenzene	**88.4 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846. USEPA, December 1996.

Comments: **BGT Closure: Farming E #4**

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0703BCAL QA/QC	Date Reported:	07-05-12
Laboratory Number:	62504	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-03-12
Condition:	N/A	Analysis:	BTEX
		Dilution:	50

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF: Accept. Range 0-15%	%Diff.	Blank Conc	Detect. Limit
Benzene	6.6898E-06	6.6898E-06	**0.000**	**ND**	**0.2**
Toluene	6.7724E-06	6.7724E-06	**0.000**	**ND**	**0.2**
Ethylbenzene	7.7670E-06	7.7670E-06	**0.000**	**ND**	**0.2**
p,m-Xylene	5.7065E-06	5.7065E-06	**0.000**	**ND**	**0.2**
o-Xylene	8.3153E-06	8.3153E-06	**0.000**	**ND**	**0.2**

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	**ND**	**ND**	**0.00**	**0 - 30%**	**10**
Toluene	**23.4**	**22.1**	**0.06**	**0 - 30%**	**10**
Ethylbenzene	**ND**	**ND**	**0.00**	**0 - 30%**	**10**
p,m-Xylene	**ND**	**ND**	**0.00**	**0 - 30%**	**10**
o-Xylene	**15.3**	**11.4**	**0.25**	**0 - 30%**	**10**

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	**ND**	**2500**	**2650**	**106**	**39 - 150**
Toluene	**23.4**	**2500**	**2650**	**105**	**46 - 148**
Ethylbenzene	**ND**	**2500**	**2600**	**104**	**32 - 160**
p,m-Xylene	**ND**	**5000**	**5130**	**103**	**46 - 148**
o-Xylene	**15.3**	**2500**	**2600**	**103**	**46 - 148**

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 62493-62494, 62496 and 62504-62505**

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

envirotech
Analytical Laboratory

Chloride

Client:	Chevron	Project #:	92270-0968
Sample ID:	BGT #1	Date Reported:	07-05-12
Lab ID#:	62504	Date Sampled:	07-02-12
Sample Matrix:	Soil	Date Received:	07-02-12
Preservative:	Cool	Date Analyzed:	07-03-12
Condition:	Intact	Chain of Custody:	14968

Parameter	Concentration (mg/Kg)
Total Chloride	**100**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **BGT Closure: Farming E #4**

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

Rush Pls.

CHAIN OF CUSTODY RECORD

14968

Client:	Project Name / Location:
Chevron	BGT Closure ; Farming #4
Email results to: K. Peine	**Sampler Name:** K. Peine
Client Phone No.:	**Client No.:** 92270-0968

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative $HgCl_2$	Preservative HCl	Preservative Cool	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
BGT#1	7-2-12	10:00	62504	1 4oz Jar			X	X	X								X				X	X
BGT#2	7-2-12	10:30	62505	1 4oz Jar			X	X	X								X				X	X

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	7-2-12	13:50	[signature]	7-02-12	1:35
Relinquished by: (Signature)			Received by: (Signature)		

Sample Matrix
Soil ☑ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐ ____________

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

Rush Pls.

envirotech
Analytical Laboratory

5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com

envirotech

Bill of Lading

MANIFEST # 41680

DATE 7/10/12 JOB # 2270-0771

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
1	Chevron C/OE-4 ~~Farming-E-Front~~	LF-II	Cont. Soil	R-39	12	—	High Stand	7	14:24	Adam Ruhl
2	( )	LF-II	"	R-39	12	—	"	4	14:25	Tony Martinez
					24					
						10				

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
292	CHLORIDE TEST	1		
	PAINT FILTER TEST	1	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. High Standard NAME Adam Ruhl SIGNATURE 564 5183

COMPANY CONTACT Cory or Laura PHONE 564-2107 DATE Jul 10

Signatures required prior to distribution of the legal document.

White - Company Records, Yellow - Billing, Pink - Customer

envirotech

Bill of Lading

MANIFEST # 41645

DATE 6-29-12 JOB # 2270-0969

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
1	Chevron Farming E-4	BF LFII-5	Tank Bottoms	H-8	—	25	Riley	19008	15:15	
						25				

RESULTS:		LANDFARM EMPLOYEE:	NOTES:
192	CHLORIDE TEST |		
	PAINT FILTER TEST |	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley Ind Ser. NAME Lonny Brumley SIGNATURE

COMPANY CONTACT Antonio PHONE 505-215-1711 DATE 6-29-12

Signatures required prior to distribution of the legal document.

White - Company Records, Yellow - Billing, Pink - Customer

san juan reproduction 579-126

Site Photography
Chevron North America
Farming E #4 Well Site (BGT 1)
Below Grade Tank Closure
Project Number 92270-0968
July 9, 2012

Picture 1: Farming E #4 Well Site

Picture 2: Reclaimed area from BGT 1.

envirotech

RCVD AUG 2'12
OIL CONS. DIV.
DIST. 3

July 27, 2012

Project Number: 92270-0968

Mr. Brandon Powell
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Phone: (505) 334-6178

RE: BELOW-GRADE TANK CLOSURE DOCUMENTATION FOR THE FARMING E #4 WELL SITE (BGT 1), RIO ARRIBA COUNTY, NEW MEXICO

Dear Mr. Powell:

On behalf of Chevron North America, please find enclosed the Below-Grade Tank (BGT) Closure Documentation for BGT closure activities conducted at the Farming E #4 well site located in Section 2, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.

This report details results above the release determination limit of 100 ppm for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, confirming a release had occurred; see attached ***BGT Closure Documentation***. Approximately 24 cubic yards of contaminated soil was excavated from the area of the former BGT and transported to Envirotech's New Mexico Oil Conservation Division (NMOCD) permitted soil remediation facility, Landfarm 2. One (1) composite sample was collected from the excavation and analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a PID. The sample returned results below the NMOCD Guidelines for Remediation of Leaks, Spill and Releases closure standards determined for this site. Envirotech, Inc. recommends no further action in regards to this incident.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,
ENVIROTECH, INC.

Toni McKnight, EIT
Environmental Project Manager
tmcknight@envirotech-inc.com

Enclosures: Below Grade Tank Closure Documentation

Email Cc: Ms. Laura Clenney – Chevron NA
Mr. Don Lindsey – Chevron NA