

District I  
425 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

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

OIL CONS. DIV DIST. 3  
AUG 01 2016

#15567

**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: ConocoPhillips Company OGRID #: 217817  
Address: PO BOX 4289, Farmington, NM 87499  
Facility or well name: MICHENER A 7  
API Number: 30-045-26568 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr B Section 33 Township 28N Range 9W County: San Juan  
Center of Proposed Design: Latitude 36.623894 °N Longitude -107.791946 °W 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  Multi-Well Fluid Management Low Chloride Drilling Fluid  yes  no  
 Lined  Unlined Liner type: Thickness \_\_\_\_\_ mil  LLDPE  HDPE  PVC  Other \_\_\_\_\_  
 String-Reinforced  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

Closed Prior to Closure Plan Approval

3.  
 **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 120 bbl Type of fluid: Produced Water  
Tank Construction material: Metal  
 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 UNSPECIFIED

Submit Separate C-144 Final

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.

<u>General siting</u>	
<b>Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.</b> - <input type="checkbox"/> NM Office of the State Engineer - iWATERS database search; <input type="checkbox"/> USGS; <input type="checkbox"/> Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<b>Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.</b> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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. <b>(Does not apply to below grade tanks)</b> - 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. <b>(Does not apply to below grade tanks)</b> - 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. <b>(Does not apply to below grade tanks)</b> - 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. <b>(Does not apply to below grade tanks)</b> - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b><u>Below Grade Tanks</u></b>	
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b><u>Temporary Pit using Low Chloride Drilling Fluid</u></b> (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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No

<p>Within 100 feet of a wetland.          - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><b><u>Temporary Pit Non-low chloride drilling fluid</u></b></p>	
<p>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</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 300 feet of a wetland.          - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p><b><u>Permanent Pit or Multi-Well Fluid Management Pit</u></b></p>	
<p>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</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>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</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within 500 feet of a wetland.          - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No

10.  
**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC  
*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

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

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

11.  
**Multi-Well Fluid Management Pit Checklist:** Subsection B of 19.15.17.9 NMAC  
*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

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

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

12.

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

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

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><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).<br>- 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.<br>- 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.<br>- 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.<br>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 (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

OCD Representative Signature: [Signature] Approval Date: 8/24/2016

Title: Environmental Specialist OCD Permit Number: \_\_\_\_\_

19.  
**Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC  
*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

Closure Completion Date: 12/14/2011

20.  
**Closure Method:**  
 Waste Excavation and Removal  On-Site Closure Method  Alternative Closure Method  Waste Removal (Closed-loop systems only)  
 If different from approved plan, please explain.

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

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

On-site Closure Location: Latitude °N Longitude °W 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) Crystal Walker Title: Regulatory Coordinator

Signature:  Date: 8/1/2016

e-mail address: crystal.walker@cop.com Telephone: (505) 326-9837

**ConocoPhillips Company**  
**San Juan Basin**  
**Below Grade Tank Closure Report**

**Lease Name: Michener A 7**

**API No.: 30-045-26568**

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

General Plan:

1. COPC shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, COPC will file the C144 Closure Report as required.

**The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.**

2. COPC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

**All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.**

3. COPC will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

**The below-grade tank was disposed of in a division-approved manner.**

4. If there is any on-site equipment associated with a below-grade tank, then COPC shall remove the equipment, unless the equipment is required for some other purpose.

**All on-site equipment associated with the below-grade tank was removed.**

5. COPC will test the soils beneath the below-grade tank to determine whether a release has occurred. COPC shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. COPC shall notify the division of its results on form C-141.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.0	250

6. If COPC or the division determines that a release has occurred, then COPC shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

**A release was determined for the above referenced well.**

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then COPC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

**The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.**

8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
- Operator's name
  - Location by Unit Letter, Section, Township, and Range. Well name and API number.

**Notification was not submitted.**

9. The surface owner shall be notified of COPC's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

**The closure process notification to the landowner was not sent.**

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

**The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.**

11. COPC shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. COPC will repeat seeding or planting will be continued until successful vegetative growth occurs.

**Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.**

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

**The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.**

13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:

- Soil Backfilling and Cover Installation **(See Report)**
- Re-vegetation application rates and seeding techniques **(See Report)**
- Photo documentation of the site reclamation **(Included as an attachment)**
- Confirmation Sampling Results **(Included as an attachment)**
- Proof of closure notice **(Not included)**

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 <b>ConocoPhillips Company</b>	Contact <b>Shelly Cook-Cowden</b>
Address <b>3401 E. 30<sup>th</sup> St., Farmington, NM 87402</b>	Telephone No. <b>505-324-5140</b>
Facility Name: <b>Michener A #7</b>	Facility Type: <b>Gas Well API 3004526568</b>
Surface Owner: <b>Federal</b>	Mineral Owner: <b>Federal</b>
Lease No.: <b>SF - 077107</b>	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>B</b>	<b>33</b>	<b>028N</b>	<b>009W</b>	<b>790'</b>	<b>North</b>	<b>2095'</b>	<b>East</b>	<b>San Juan County</b>

Latitude **36.623458° N** Longitude **-107.79147° W**

**NATURE OF RELEASE**

Type of Release - <b>Condensate</b>	Volume of Release - <b>48BBLS</b>	Volume Recovered - <b>1BBL</b>
Source of Release - <b>Production Tank</b>	Date and Hour of Occurrence - <b>12/8/11 @ 11:30 AM</b>	Date and Hour of Discovery - <b>12/8/11 @ 12:00 PM</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Brandon Powell - NMOCD</b> <b>Mark Kelly - BLM FFO</b>	
By Whom? <b>Shelly Cook-Cowden</b>	Date and Hour <b>NMOCD - 12/12/11 @ 7:03 AM</b> <b>BLM FFO - 12/12/11 @ 7:05 AM</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* **Oil/Production Tank (AST) developed a hole ~ 2" from the base of the tank near the sales valve, hole is about 1/4" in diameter. A small twig was used to plug tank until a spec truck arrived. Approximately 48BBLS of condensate leaked into the containment/berm area. Spec truck pulled ~ 1BBL of condensate from the bermed area.**

Describe Area Affected and Cleanup Action Taken.\* **The area affected was within the berm and 1BBL of condensate was recovered. COPC excavated 208 cubic yards of impacted soil. Performed confirmation sampling. Analytical results were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases; therefore no further action is needed.**

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: <i>Shelly Cook-Cowden</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Shelly Cook-Cowden</b>		Approved by District Supervisor:	
Title: <b>Field Environmental Specialist</b>	Approval Date:	Expiration Date:	
E-mail Address: <b>Shelly.g.Cook-Cowden@ConocoPhillips.com</b>	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <b>February 21, 2012</b>	Phone: <b>505-324-5140</b>		

\* Attach Additional Sheets If Necessary



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3274

December 15, 2011

Shelly Cook-Cowden  
ConocoPhillips  
3401 East 30<sup>th</sup> Street, Office #490  
Farmington, NM 87402

**RE: Production Tank Release Initial Assessment Michener A #7  
API No. 30-045-26568  
San Juan County, New Mexico**

Dear Ms. Cowden-Cook:

On December 14, 2011, Animas Environmental Services, LLC (AES) completed an initial assessment of a 48 barrel (bbl) natural gas condensate release associated with a production tank at the ConocoPhillips (CoP) Michener A #7, located in San Juan County, New Mexico.

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## 1.0 Site Information

### 1.1 Location

Location - NW¼ NE¼, Section 33, T28N, R9W, San Juan County, New Mexico

Latitude/Longitude - N36.62380 and W107.79213, respectively

Land Jurisdiction - Bureau of Land Management (BLM)

Figure 1 - Topographic Site Location

Figure 2 - Aerial Map and Site Plan

Figure 3 - Soil Sample Locations and Remediation Recommendations

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed. Based upon a Pit Closure Report dated September 2001, depth to groundwater at the site was reported to be greater than 100 feet below ground surface (bgs), distance to the nearest surface water was listed as greater than 1,000 feet, and the location was listed at greater than 1,000 feet from a well-head protection area. Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby private domestic water wells. No records of water wells were listed within the vicinity of the Michener A #7 location.

Once on-site, AES personnel assessed the previous NMOCD ranking information using topographical interpretation, Global Position System (GPS) elevation readings, and visual reconnaissance. Based on an elevation differential of 826 feet between the Michener A#7 location (6,797 feet above mean sea level (amsl)) and the Blanco Wash (5,971 feet amsl), groundwater is estimated at 800 feet bgs. Distance to the nearest surface water body, Blanco Wash, is approximately 1.47 miles southeast from the site location.

### 1.3 Site Activities

AES was initially contacted by Shelly Cowden-Cook of CoP on December 13, 2011, and on December 14, 2011, Ross Kenemer and Tami Ross of AES completed the on-site field work. No CoP representatives were on-site during assessment activities. AES personnel hand-augered eight test holes and collected 19 soil samples from the production tank release area. Test hole locations are shown on Figure 3.

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## 2.0 Soil Sampling

A hand auger was used to collect soil samples from the ground surface to 1 foot bgs, 3 feet bgs, and 6 feet bgs. Hard sandstone was encountered between 5.5 and 6 feet bgs, which precluded full vertical contaminant delineation. The number of samples collected from each test hole was dependent on field screening results. Each sample collected was field-screened for volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Field-screening for VOCs was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). TPH samples were analyzed per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer. Soil sample results are presented below in Table 1, and sample locations are included on Figure 3.

Table 1. Soil OVM and TPH Field Screening  
 Michener A #7 Spill Assessment

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>
		<i>NMOCD Action Level</i>	<i>100</i>	<i>5,000</i>
TH-1	12/14/11	0	2,398	10,100
	12/14/11	4	4,323	123
	12/14/11	6	2,686	1,500
TH-2	12/14/11	1	1,349	7,600
	12/14/11	3	1,927	1,330
TH-3	12/14/11	1	31.3	30.9
	12/14/11	3	32.1	24.5

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>OVM Reading (ppm)</b>	<b>Field TPH (mg/kg)</b>
	12/14/11	6	<b>1,566</b>	<b>15,100</b>
TH-4	12/14/11	3	18.2	25.7
	12/14/11	6	5.6	33.4
TH-5	12/14/11	1	5.6	19.3
	12/14/11	3	4.7	24.5
	12/14/11	5.5	8.7	37.3
TH-6	12/14/11	1	<b>1,839</b>	4,340
	12/14/11	3	<b>1,364</b>	3,490
	12/14/11	5.5	<b>1,462</b>	1,890
TH-7	12/14/11	3	14.1	25.7
	12/14/11	6	13.2	46.2
TH-8	12/14/11	6	2.8	28.3

### 3.0 Conclusions and Recommendations

AES conducted an initial release assessment at the Michener A #7 on December 14, 2011. The 48 bbl condensate release was associated with a production tank at the site location. Surficial soils on the south side of the 300 bbl production tank and below grade waste tank were observed to be saturated with water from recent precipitation and residual condensate. Soil stratigraphy is sandy-clay from the surface to 5.5 bgs overlying hard sandstone.

VOC and TPH field- screening results indicate that excavation of approximately 118 yd<sup>3</sup> of contaminated soil needs to be completed. It is unlikely that the depth of the excavation should exceed 6 feet bgs due to the presence of hard sandstone. The recommended excavation area is shown on Figure 3.

If you have any questions about this report or site conditions, please do not hesitate to contact me at (505) 564-2281.

Sincerely,



Ross Kenemer  
Project Manager



Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. General Site Plan
- Figure 3. Soil Sampling Locations and Recommendations for Excavation  
TPH and Field Screening Report 121411

S:\Animas 2000\2011 Projects\Conoco Phillips\Michener A#7\Spill Assessment Michener A7 121411.docx



February 20, 2012

Project Number 96052-2109

Ms. Shelly Cowden  
ConocoPhillips  
3401 East 30<sup>th</sup> Street  
Farmington, New Mexico 87401

Phone: (505) 324-5140

**RE: CONFIRMATION SAMPLING DOCUMENTATION FOR THE MICHENER A #7 WELL SITE,  
SAN JUAN COUNTY, NEW MEXICO**

Dear Ms. Cowden,

Enclosed please find the field notes and analytical results for confirmation sampling activities performed at the Michener A #7 well site located in Section 33, Township 28 North, Range 9 West, San Juan County, New Mexico. Upon Envirotech personnel's arrival, a brief site assessment was conducted. The regulatory standards for the site were determined to be 5000 parts per million (ppm) total petroleum hydrocarbons (TPH) and 100 ppm organic vapors due to a horizontal distance to surface water greater than 1000 feet, a depth to groundwater greater than 100 feet, and a horizontal distance to private or public water well greater than 1000 feet, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases.

Prior to Envirotech personnel's arrival on January 19, 2012, contaminated soil in a below grade tank pit had been excavated to extents of approximately 28.6 feet by 36 feet by eight (8) feet deep. Five (5) composite samples were collected from the excavation. One (1) sample was collected from the bottom at eight (8) feet below ground surface (BGS). One (1) sample was collected from each of the four (4) walls and designated as the north, east, south, and west wall samples. The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a photoionization detector (PID). All five (5) samples returned results below the regulatory standards for TPH and organic vapors; see enclosed *Field Notes* and *Analytical Results*. The sample collected from the south wall of the excavation returned a result very close to the 5000 ppm TPH standard, therefore, at the request of Shelly Cowden, it was also collected into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015. The sample returned results below the regulatory standard for TPH; see enclosed *Analytical Results*. Therefore, Envirotech, Inc. recommends no further action in regards to this incident.

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

Respectfully submitted,  
**ENVIROTECH, INC.**

  
John Rollins  
Environmental Field Technician  
[jrollins@envirotech-inc.com](mailto:jrollins@envirotech-inc.com)

Enclosure(s): Field Notes  
Analytical Results

Cc: Client File 96052

Client:

Conoco


**envirotech**  
 (505) 632-0615 (800) 362-1879  
 5786 U.S. Hwy 64, Farmington, NM 87401

Location No:

C.O.C. No:

**FIELD REPORT: SPILL CLOSURE VERIFICATION**
PAGE NO: 1 OF 1DATE STARTED: 1/19/12DATE FINISHED: 1/19/12LOCATION: NAME: Mickener WELL #: A 27QUAD/UNIT: B SEC: 33 TWP: 28N RNG: 9W PM: NM CNTY: JS ST: NMQTR/FOOTAGE: \_\_\_\_\_ CONTRACTOR: NMT corp ENVIRONMENTAL SPECIALIST: JREXCAVATION APPROX: 28.6 FT. X 36 FT. X 8 FT. DEEP CUBIC YARDAGE: \_\_\_\_\_

DISPOSAL FACILITY: \_\_\_\_\_ REMEDIATION METHOD: \_\_\_\_\_

LAND USE: P.I./Ic LEASE: \_\_\_\_\_ LAND OWNER: \_\_\_\_\_CAUSE OF RELEASE: BGO MATERIAL RELEASED: BGO materialsSPILL LOCATED APPROXIMATELY: 67.8 FT. N FROM Motor RunDEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM
**SOIL AND EXCAVATION DESCRIPTION:**

SAMPLE DESCRIPTION	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	ML FREON	DILUTION	READING	CALC. ppm
200 STD	10:35	STD	-	-	-	-	208	-
B TM	10:50	1	-	5	20	4	257	3004
North Wall	10:53	2	-	5	20	4	9	36
East Wall	10:56	3	-	5	20	4	17	64
South Wall	11:00	4	-	5	20	4	1243	4972
West Wall	11:03	5	-	5	20	4	69	276

**SPILL PERIMETER**
**OVM RESULTS**
**SPILL PROFILE**

SAMPLE ID	FIELD HEADSPACE (ppm)	PID
1	27	
2	ND	
3	ND	
4	41	
5	ND	

LAB SAMPLES		
SAMPLE ID	ANALYSIS	TIME
South Wall	TPH	11:00

TRAVEL NOTES: \_\_\_\_\_ CALLED OUT: \_\_\_\_\_ ONSITE: \_\_\_\_\_



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-2109
Sample No.:	1	Date Reported:	1/25/2012
Sample ID:	Bottom @ 8' BGS	Date Sampled:	1/19/2012
Sample Matrix:	Soil	Date Analyzed:	1/19/2012
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	3,000	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: **Michener A #7**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
Analyst

John Rollins

Printed

  
Review

Toni McKnight, EIT

Printed



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: ConocoPhillips Project #: 96052-2109  
Sample No.: 2 Date Reported: 1/25/2012  
Sample ID: North Wall Date Sampled: 1/19/2012  
Sample Matrix: Soil Date Analyzed: 1/19/2012  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	36	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: **Michener A #7**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
Analyst

John Rollins  
Printed

  
Review

Toni McKnight, EIT  
Printed



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: ConocoPhillips Project #: 96052-2109  
Sample No.: 3 Date Reported: 1/25/2012  
Sample ID: East Wall Date Sampled: 1/19/2012  
Sample Matrix: Soil Date Analyzed: 1/19/2012  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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<b>Total Petroleum Hydrocarbons</b>	<b>68</b>	<b>5.0</b>
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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: **Michener A #7**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
Analyst

John Rollins  
Printed

  
Review

Toni McKnight, EIT  
Printed



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: ConocoPhillips Project #: 96052-2109  
Sample No.: 4 Date Reported: 1/25/2012  
Sample ID: South Wall Date Sampled: 1/19/2012  
Sample Matrix: Soil Date Analyzed: 1/19/2012  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	4,970	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.

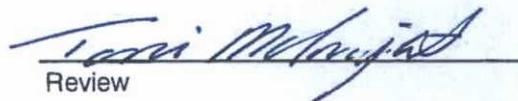
Comments: **Michener A #7**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
Analyst

John Rollins

Printed

  
Review

Toni McKnight, EIT

Printed



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client: ConocoPhillips Project #: 96052-2109  
Sample No.: 5 Date Reported: 1/25/2012  
Sample ID: West Wall Date Sampled: 1/19/2012  
Sample Matrix: Soil Date Analyzed: 1/19/2012  
Preservative: Cool Analysis Needed: TPH-418.1  
Condition: Cool and Intact

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	276	5.0

ND = Parameter not detected at the stated detection limit.

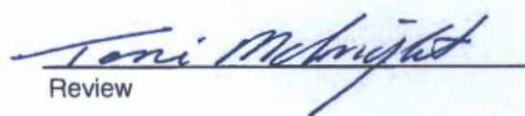
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Michener A #7**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

  
Analyst

John Rollins  
Printed

  
Review

Toni McKnight, EIT  
Printed



CONTINUOUS CALIBRATION  
EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Cal. Date: 19-Jan-12

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	208
	200	
	500	
	1000	

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

  
Analyst

1/25/2012  
Date

John Rollins  
Print Name

  
Review

1/25/2012  
Date

Toni McKnight, EIT  
Print Name

Client:	ConocoPhillips	Project #:	96052-2109
Sample ID:	South Wall	Date Reported:	01-20-12
Laboratory Number:	60875	Date Sampled:	01-19-12
Chain of Custody No:	13256	Date Received:	01-19-12
Sample Matrix:	Soil	Date Extracted:	01-19-12
Preservative:	Cool	Date Analyzed:	01-20-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	114	0.2
Diesel Range (C10 - C28)	6.7	0.1
Total Petroleum Hydrocarbons	121	

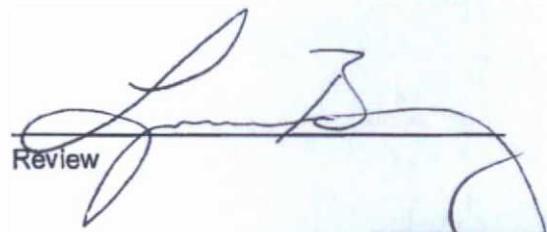
ND - Parameter not detected at the stated detection limit.

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

Comments: Michener A #7



\_\_\_\_\_  
Analyst



\_\_\_\_\_  
Review



**EPA Method 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons**

**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	01-20-12 QA/QC	Date Reported:	01-20-12
Laboratory Number:	60875	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-20-12
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	40928	9.996E+02	1.000E+03	0.04%	0 - 15%
Diesel Range C10 - C28	40928	9.996E+02	1.000E+03	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	0.4	0.2
Diesel Range C10 - C28	0.4	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Range
Gasoline Range C5 - C10	114	115	0.52%	0 - 30%
Diesel Range C10 - C28	6.7	6.8	1.30%	0 - 30%

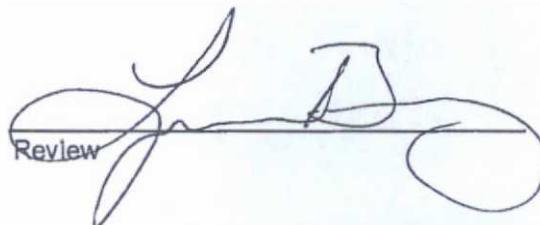
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	114	250	332	91.1%	75 - 125%
Diesel Range C10 - C28	6.7	250	309	120%	75 - 125%

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: **QA/QC for Samples 60875**

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

\*RUSH\*

# CHAIN OF CUSTODY RECORD

13256

Client: <i>Conoco</i>		Project Name / Location: <i>Michener A #7</i>			ANALYSIS / PARAMETERS													
Email results to:		Sampler Name: <i>John R</i>			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
Client Phone No.:		Client No.: <i>96052-2109</i>																

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	
					HgCl <sub>2</sub>	HCl	Cu <sub>2</sub>															
<i>South Wall</i>	<i>1/19/12</i>	<i>11:00</i>	<i>60875</i>	<i>4 02</i> <i>JAR</i>			<input checked="" type="checkbox"/>														<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relinquished by: (Signature) <i>[Signature]</i>	Date <i>1/19/12</i>	Time <i>13:05</i>	Received by: (Signature) <i>Jessie Winters</i>	Date <i>1-19-12</i>	Time <i>1:05</i>
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Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
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Sample Matrix  
 Soil  Solid  Sludge  Aqueous  Other  \_\_\_\_\_

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

\*RUSH\*



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

