

District I  
1625 N. Frenach 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.

15772

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

- Type of action:  Below grade tank registration  
 Permit of a pit or proposed alternative method  
 Closure of a pit, below-grade tank, or proposed alternative method  
 Modification to an existing permit/or registration  
 Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

**Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request**

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: ConocoPhillips Company OGRID #: 217817  
Address: PO BOX 4289, Farmington, NM 87499  
Facility or well name: SAN JUAN 29-5 UNIT 7A  
API Number: 30-039-21340 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr I Section 7 Township 29N Range 5W County: Rio Arriba  
Center of Proposed Design: Latitude 36.737516 °N Longitude -107.392243 °W NAD:  1927  1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

OIL CONS. DIV DIST. 3  
JAN 10 2017

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 \_\_\_\_\_

\* Release Confirmed Due to elevated TPH Levels  
See Incident # N5K 1306648087

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

4.  
 **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.  
**Fencing:** Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  
 Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  
 Four foot height, four strands of barbed wire evenly spaced between one and four feet  
 Alternate. Please specify \_\_\_\_\_

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6. **Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- Screen  Netting  Other \_\_\_\_\_
- Monthly inspections (If netting or screening is not physically feasible)

7. **Signs:** Subsection C of 19.15.17.11 NMAC

- 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- Signed in compliance with 19.15.16.8 NMAC

8. **Variations and Exceptions:**

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

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

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

9. **Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

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

**General siting**

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

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

- Yes  No
- NA

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

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

- Yes  No
- NA

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

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

- Yes  No

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

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

- Yes  No

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

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

- Yes  No

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

- FEMA map

- Yes  No

**Below Grade Tanks**

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

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

- Yes  No

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

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

- Yes  No

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

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

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

- Yes  No

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

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

- Yes  No

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

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

- Yes  No

Within 100 feet of a wetland.

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

Yes  No

**Temporary Pit Non-low chloride drilling fluid**

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

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

Yes  No

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

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

Yes  No

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

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

Yes  No

Within 300 feet of a wetland.

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

Yes  No

**Permanent Pit or Multi-Well Fluid Management Pit**

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

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

Yes  No

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

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

Yes  No

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

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

Yes  No

Within 500 feet of a wetland.

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

Yes  No

10.

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

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

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

11.

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

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

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

12.

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

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

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including 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:**

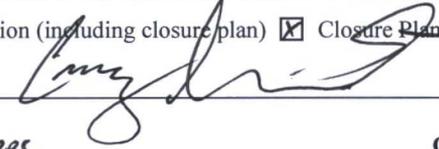
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18.  
**OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see <sup>Front</sup> attachment)

OCD Representative Signature:  Approval Date: 2/1/17

Title: Environmental Spec. 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: 11/22/2011

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: 1/6/2017

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

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

**Lease Name: San Juan 29-5 Unit 7A**

**API No.: 30-039-21340**

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 not 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 found.**

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 found.**

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 place 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 **(Missing)**

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 August 8, 2011

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company ConocoPhillips Company	Contact Crystal Walker
Address 3401 East 30 <sup>th</sup> St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: San Juan 29-5 Unit 7A	Facility Type: Gas Well

Surface Owner PRIVATE	Mineral Owner FEDERAL	API No. 30-039-21340
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**LOCATION OF RELEASE**

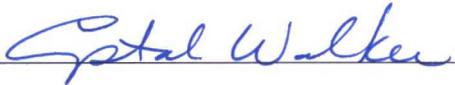
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	7	29N	5W	1700	South	810	East	Rio Arriba

Latitude 36.737516 Longitude -107.392243

**NATURE OF RELEASE**

Type of Release	Volume of Release	Volume Recovered
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* No release was encountered during the BGT Closure.		
Describe Area Affected and Cleanup Action Taken.* N/A		

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

Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Crystal Walker	Approved by Environmental Specialist:	
Title: Regulatory Coordinator	Approval Date:	Expiration Date:
E-mail Address: crystal.walker@cop.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <u>1/6/2017</u> Phone: (505) 326-9837		

\* 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

January 5, 2012

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

**RE: Soil Sampling Results for San Juan 29-5 #7A Below Grade Tank Closure  
Rio Arriba County, New Mexico**

Dear Ms. Cook-Cowden:

Animas Environmental Services, LLC (AES) is pleased to provide the soil sampling results associated with the below grade tank (BGT) closure of a waste tank (60 bbl) at ConocoPhillips (CoP) San Juan 29-5 #7A, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

---

## 1.0 Site Information

### 1.1 Location

The San Juan 29-5 #7A well site is located within the NE¼ SE¼, Section 7, T29N, R5W, Rio Arriba County, New Mexico. Latitude and longitude of the BGT were recorded as N36° 44.255' and W107°23.547', respectively. The site is located on private land owned by the Gomez family. A topographic site location map is included as Figure 1, and an aerial map with the BGT location is included as Figure 2.

In order to determine a proper ranking score for the BGT closure, the New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer (NMOSE) databases were reviewed. Based on a pit closure report dated September 28, 2005, groundwater was recorded as being greater than 100 feet below ground surface (bgs). However, field observations and review of the topographic map indicated that depth to groundwater was less than 100 feet bgs. Additionally, a CoP cathodic well data sheet dated April 28, 1979, indicated groundwater was at 100 feet bgs. The review of NMOSE records did not show any well records within 1,000 feet of the well site. Distance to surface water is greater than 1,000 ft. Based on the records search, the BGT closure was given a NMOCD ranking score of 10.

## 1.2 Site Activities

AES was initially contacted by Doyle Clark of CoP on November 21, 2011, and on November 22, 2011, Debbie Watson and Tami Ross of AES mobilized to the location. AES personnel collected five soil samples from below the BGT. Note that a liner was not observed beneath the tank. Four samples were collected from the edges of the BGT footprint, and one sample was collected from the center of the BGT footprint.

---

## 2.0 Soil Sampling

On November 22, 2011, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) from below the BGT. A backhoe was used to collect soil samples from approximately 6 to 8 inches below the former BGT for volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chloride field-screening. Soil sample locations are included on Figure 2.

### 2.1 Soil Field Screening

#### 2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with isobutylene gas. VOC readings ranged from 2,938 to 9,275 parts per million (ppm). OVM measurement locations and results are presented in Table 1 and on Figure 2.

#### 2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting any soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*. TPH concentrations ranged from 243 mg/kg to 3,830 mg/kg. The TPH results are summarized in Table 1 and on Figure 2. A field screening report is attached.

#### 2.1.3 Chlorides

One background chloride field test was conducted on sample S-5. However, due to the high concentrations of VOC vapors and soil TPH, a field determination was made by Shelly Cook-Cowden not to run further field tests for chlorides.

## 2.2 Soil Laboratory Analyses

The five soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Laboratory soil sample results are summarized in Table 2. The soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- Total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

## 2.3 Soil Field and Laboratory Analytical Results

Field and analytical laboratory results are summarized in Tables 1 and 2 below.

Table 1. Soil OVM and Field Screening Results  
 San Juan 29-5 #7A BGT Closure

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth Below BGT (ft)</i>	<i>OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Field Chlorides (ppm)</i>
<b>NMOCB Action Level</b>			<b>100</b>	<b>1,000</b>	<b>500</b>
S-1	11/22/11	0.5	<b>2,938</b>	<b>3,830</b>	NS
S-2	11/22/11	0.5	<b>4,687</b>	243	NS
S-3	11/22/11	0.5	<b>9,275</b>	<b>2,470</b>	NS
S-4	11/22/11	0.5	<b>4,820</b>	<b>1,320</b>	NS
S-5	11/22/11	0.5	<b>4,725</b>	<b>3,110</b>	<30

Table 2. Laboratory Soil Sample Results, San Juan 29-5 #7A BGT Closure

Sample ID and Date	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-			BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
				benzene (mg/kg)	Xylene (mg/kg)				
NMOCD Action Level									
		10	NE	NE	NE	50	1000		
S-1 11/22/11	0.5	5.5	140	37	630	810	4800	1800	
S-2 11/22/11	0.5	<2.5	13	3.0	98	117	1100	400	
S-3 11/22/11	0.5	<2.5	54	14	280	350	2800	310	
S-4 11/22/11	0.5	2.7	67	16	330	420	3000	270	
S-5 11/22/11	0.5	2.7	63	14	270	350	2900	710	

OVM, BTEX, and TPH concentrations for the five soil samples were above applicable NMOCD action levels for contaminants of concern. The AES field screening report and laboratory analytical report are attached.

### 3.0 Conclusions

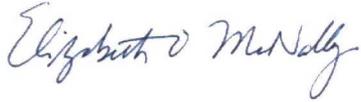
Based on field screening and laboratory analytical results for the five soil samples (S-1 through S-5) collected on November 22, 2011, in association with the BGT closure for the San Juan 29-5 #7A, soil concentrations were above applicable NMOCD action levels for contaminants of concern. AES recommends further field work to address the source removal of the petroleum hydrocarbon contamination to include further excavation of the BGT area. Additional confirmation soil samples should be collected upon completion of the recommended field activities.

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

Sincerely,



Tami C. Ross, CHMM  
 Project Manager

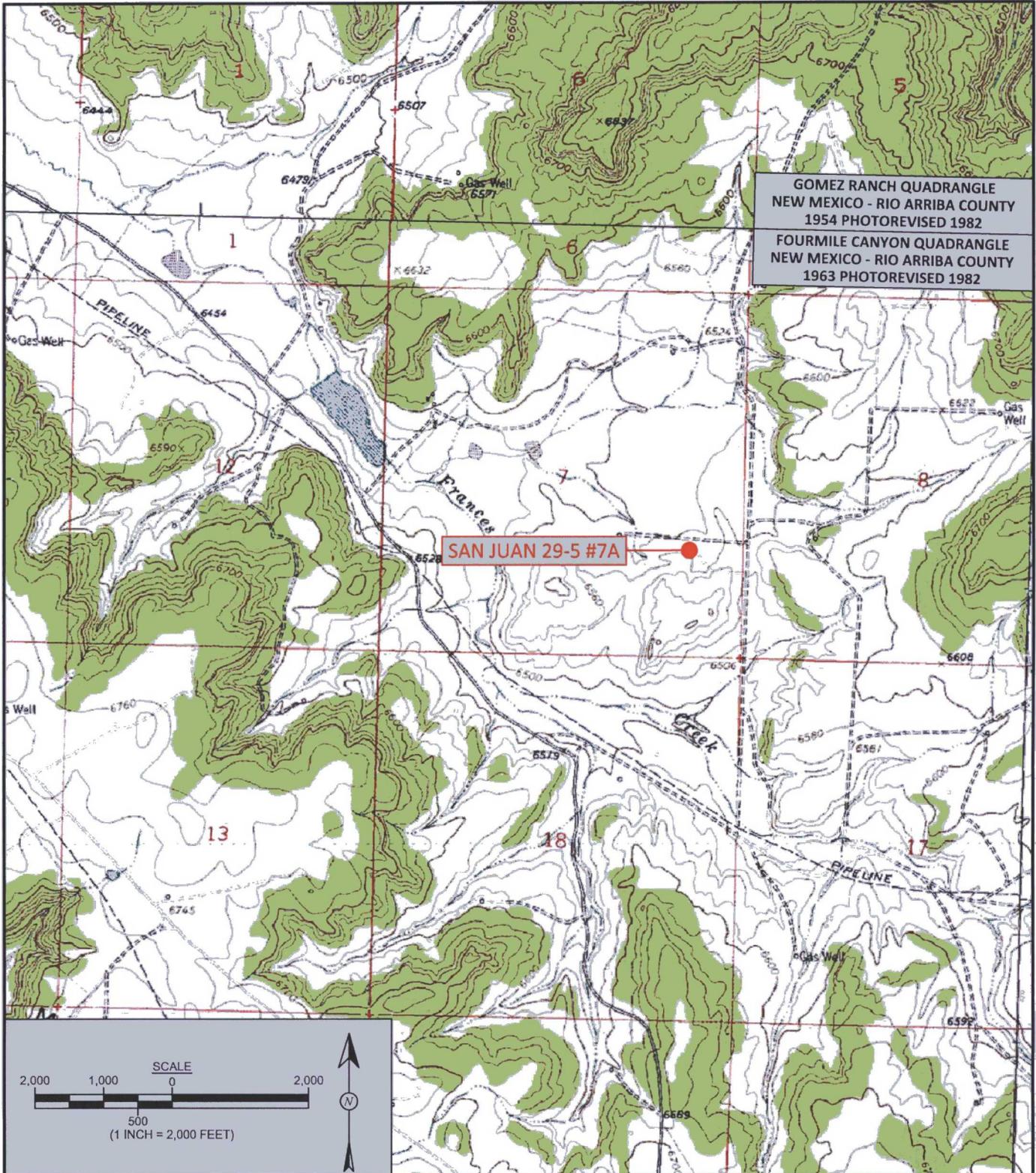


Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. General Site Plan, November 2011
- AES Field Screening Report 112211
- Hall Analytical Report 1111892

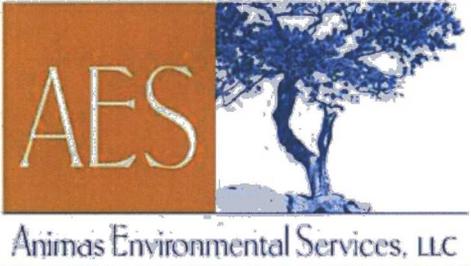
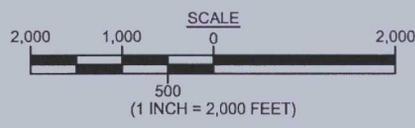
S:\Animas 2000\2012 Projects\Conoco Phillips\San Juan 29-5 #7A\SJ 29-5 #7A BGT Letter report  
010512.docx



GOMEZ RANCH QUADRANGLE  
 NEW MEXICO - RIO ARriba COUNTY  
 1954 PHOTOREVISED 1982

FOURMILE CANYON QUADRANGLE  
 NEW MEXICO - RIO ARriba COUNTY  
 1963 PHOTOREVISED 1982

**SAN JUAN 29-5 #7A**



<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> December 23, 2011
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> January 5, 2012
<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> January 5, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 5, 2012

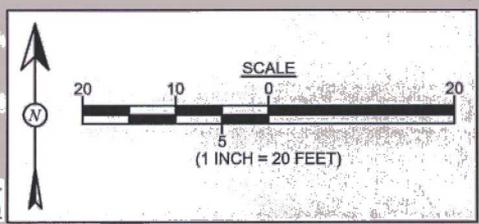
**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**

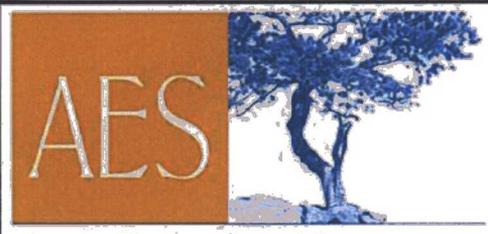
ConocoPhillips  
 SAN JUAN 29-5 #7A  
 RIO ARriba COUNTY, NEW MEXICO  
 NE¼, SE¼, SECTION 7, T29N, R5W  
 N36°44.246', W107°23.530'

**LEGEND**  
 **SAMPLE LOCATIONS**

Sample ID and Date	Depth Below BGT (ft)	OVM Result (ppm)	Field TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylene (mg/kg)	BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOCD Action Level</b>		<b>100</b>	<b>1000</b>	<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>1000</b>	
S-1 11/22/11	0.5	2,938	3,830	5.5	140	37	630	810	4,800	1,800
S-2 11/22/11	0.5	4,687	243	<2.5	13	3	98	117	1,100	400
S-3 11/22/11	0.5	9,275	2,470	<2.5	54	14	280	350	2,800	310
S-4 11/22/11	0.5	4,820	1,320	2.7	67	16	330	420	3,000	270
S-5 11/22/11	0.5	4,725	3,110	2.7	63	14	270	350	2,900	710



MAP SOURCE: (c) 2011 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE (c) 2010 NAVTEQ



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> December 27, 2011
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> January 5, 2012
<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> January 5, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> January 5, 2012

**FIGURE 2**  
**GENERAL SITE MAP**  
**BELOW GRADE TANK CLOSURE**  
**NOVEMBER 2011**  
 ConocoPhillips  
 SAN JUAN 29-5 #7A  
 RIO ARRIBA COUNTY, NEW MEXICO  
 NE¼, SE¼, SECTION 7, T29N, R5W  
 N36°44.246', W107°23.530'

# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3274

Client: ConocoPhillips

Project Location: SJ 29-5 #7A

Date: 11/22/2011

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (ppm)	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	11/22/2011	10:22	NORTH	2,938	NA	3830	200	10	DAW
S-2	11/22/2011	10:30	EAST	4,687	NA	243	20.0	1	DAW
S-3	11/22/2011	10:37	SOUTH	9,275	NA	2470	200	10	DAW
S-4	11/22/2011	10:42	WEST	4,820	NA	1320	20.0	1	DAW
S-5	11/22/2011	10:45	CENTER	4,725	<30	3110	200	10	DAW

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

NA Not Analyzed

\*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: *Debrah Water*



## COVER LETTER

Monday, November 28, 2011

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401

TEL: (505) 564-2281

FAX (505) 324-2022

RE: SJ 29-5 #7A

Order No.: 1111892

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 5 sample(s) on 11/23/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901  
AZ license # AZ0682

# Hall Environmental Analysis Laboratory, Inc.

Date: 28-Nov-11  
Analytical Report

<b>CLIENT:</b> Animas Environmental Services	<b>Client Sample ID:</b> S-1
<b>Lab Order:</b> 1111892	<b>Collection Date:</b> 11/22/2011 10:22:00 AM
<b>Project:</b> SJ 29-5 #7A	<b>Date Received:</b> 11/23/2011
<b>Lab ID:</b> 1111892-01	<b>Matrix:</b> MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JB
Diesel Range Organics (DRO)	1800	99		mg/Kg	10	11/23/2011 3:58:47 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	11/23/2011 3:58:47 PM
Surr: DNOP	0	77.4-131	S	%REC	10	11/23/2011 3:58:47 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	4800	250		mg/Kg	50	11/23/2011 11:08:15 AM
Surr: BFB	195	75.2-136	S	%REC	50	11/23/2011 11:08:15 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	5.5	2.5		mg/Kg	50	11/23/2011 11:08:15 AM
Toluene	140	2.5		mg/Kg	50	11/23/2011 11:08:15 AM
Ethylbenzene	37	2.5		mg/Kg	50	11/23/2011 11:08:15 AM
Xylenes, Total	630	20		mg/Kg	200	11/28/2011 1:46:13 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	50	11/23/2011 11:08:15 AM

**Qualifiers:**

- |  |  |
|--|--|
| * Value exceeds Maximum Contaminant Level    | B Analyte detected in the associated Method Blank    |
| E Estimated value                            | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | MCL Maximum Contaminant Level                        |
| NC Non-Chlorinated                           | ND Not Detected at the Reporting Limit               |
| PQL Practical Quantitation Limit             | S Spike recovery outside accepted recovery limits    |

# Hall Environmental Analysis Laboratory, Inc.

Date: 28-Nov-11  
Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	S-2
<b>Lab Order:</b>	1111892	<b>Collection Date:</b>	11/22/2011 10:30:00 AM
<b>Project:</b>	SJ 29-5 #7A	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111892-02	<b>Matrix:</b>	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JB</b>
Diesel Range Organics (DRO)	400	100		mg/Kg	10	11/23/2011 1:41:42 PM
Motor Oil Range Organics (MRO)	ND	510		mg/Kg	10	11/23/2011 1:41:42 PM
Surr: DNOP	0	77.4-131	S	%REC	10	11/23/2011 1:41:42 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	1100	250		mg/Kg	50	11/23/2011 11:38:30 AM
Surr: BFB	0	75.2-136	S	%REC	50	11/23/2011 11:38:30 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	2.5		mg/Kg	50	11/23/2011 11:38:30 AM
Toluene	13	2.5		mg/Kg	50	11/23/2011 11:38:30 AM
Ethylbenzene	3.0	2.5		mg/Kg	50	11/23/2011 11:38:30 AM
Xylenes, Total	98	5.0		mg/Kg	50	11/23/2011 11:38:30 AM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	50	11/23/2011 11:38:30 AM

**Qualifiers:**

- |  |  |
|--|--|
| * Value exceeds Maximum Contaminant Level    | B Analyte detected in the associated Method Blank    |
| E Estimated value                            | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | MCL Maximum Contaminant Level                        |
| NC Non-Chlorinated                           | ND Not Detected at the Reporting Limit               |
| PQL Practical Quantitation Limit             | S Spike recovery outside accepted recovery limits    |

**Hall Environmental Analysis Laboratory, Inc.**

Date: 28-Nov-11  
Analytical Report

**CLIENT:** Animas Environmental Services      **Client Sample ID:** S-3  
**Lab Order:** 1111892      **Collection Date:** 11/22/2011 10:37:00 AM  
**Project:** SJ 29-5 #7A      **Date Received:** 11/23/2011  
**Lab ID:** 1111892-03      **Matrix:** MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						<b>Analyst: JB</b>
Diesel Range Organics (DRO)	310	98		mg/Kg	10	11/23/2011 2:16:10 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	11/23/2011 2:16:10 PM
Surr: DNOP	0	77.4-131	S	%REC	10	11/23/2011 2:16:10 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						<b>Analyst: RAA</b>
Gasoline Range Organics (GRO)	2800	250		mg/Kg	50	11/23/2011 12:08:41 PM
Surr: BFB	161	75.2-136	S	%REC	50	11/23/2011 12:08:41 PM
<b>EPA METHOD 8021B: VOLATILES</b>						<b>Analyst: RAA</b>
Benzene	ND	2.5		mg/Kg	50	11/23/2011 12:08:41 PM
Toluene	54	2.5		mg/Kg	50	11/23/2011 12:08:41 PM
Ethylbenzene	14	2.5		mg/Kg	50	11/23/2011 12:08:41 PM
Xylenes, Total	280	5.0		mg/Kg	50	11/23/2011 12:08:41 PM
Surr: 4-Bromofluorobenzene	108	80-120		%REC	50	11/23/2011 12:08:41 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

Date: 28-Nov-11

Analytical Report

<b>CLIENT:</b>	Animas Environmental Services	<b>Client Sample ID:</b>	S-4
<b>Lab Order:</b>	1111892	<b>Collection Date:</b>	11/22/2011 10:42:00 AM
<b>Project:</b>	SJ 29-5 #7A	<b>Date Received:</b>	11/23/2011
<b>Lab ID:</b>	1111892-04	<b>Matrix:</b>	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JB</b>
Diesel Range Organics (DRO)	270	98		mg/Kg	10	11/23/2011 2:49:50 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	11/23/2011 2:49:50 PM
Surr: DNOP	0	77.4-131	S	%REC	10	11/23/2011 2:49:50 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	3000	250		mg/Kg	50	11/23/2011 12:38:50 PM
Surr: BFB	168	75.2-136	S	%REC	50	11/23/2011 12:38:50 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	2.7	2.5		mg/Kg	50	11/23/2011 12:38:50 PM
Toluene	67	2.5		mg/Kg	50	11/23/2011 12:38:50 PM
Ethylbenzene	16	2.5		mg/Kg	50	11/23/2011 12:38:50 PM
Xylenes, Total	330	5.0		mg/Kg	50	11/23/2011 12:38:50 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	50	11/23/2011 12:38:50 PM

**Qualifiers:**

- |  |  |
|--|--|
| * Value exceeds Maximum Contaminant Level    | B Analyte detected in the associated Method Blank    |
| E Estimated value                            | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | MCL Maximum Contaminant Level                        |
| NC Non-Chlorinated                           | ND Not Detected at the Reporting Limit               |
| PQL Practical Quantitation Limit             | S Spike recovery outside accepted recovery limits    |

# Hall Environmental Analysis Laboratory, Inc.

Date: 28-Nov-11

Analytical Report

<b>CLIENT:</b> Animas Environmental Services	<b>Client Sample ID:</b> S-5
<b>Lab Order:</b> 1111892	<b>Collection Date:</b> 11/22/2011 10:45:00 AM
<b>Project:</b> SJ 29-5 #7A	<b>Date Received:</b> 11/23/2011
<b>Lab ID:</b> 1111892-05	<b>Matrix:</b> MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: JB
Diesel Range Organics (DRO)	710	99		mg/Kg	10	11/23/2011 3:24:23 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	11/23/2011 3:24:23 PM
Surr: DNOP	0	77.4-131	S	%REC	10	11/23/2011 3:24:23 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	2900	250		mg/Kg	50	11/23/2011 1:09:04 PM
Surr: BFB	176	75.2-136	S	%REC	50	11/23/2011 1:09:04 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	2.7	2.5		mg/Kg	50	11/23/2011 1:09:04 PM
Toluene	63	2.5		mg/Kg	50	11/23/2011 1:09:04 PM
Ethylbenzene	14	2.5		mg/Kg	50	11/23/2011 1:09:04 PM
Xylenes, Total	270	5.0		mg/Kg	50	11/23/2011 1:09:04 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	50	11/23/2011 1:09:04 PM

**Qualifiers:**

- |  |  |
|--|--|
| * Value exceeds Maximum Contaminant Level    | B Analyte detected in the associated Method Blank    |
| E Estimated value                            | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | MCL Maximum Contaminant Level                        |
| NC Non-Chlorinated                           | ND Not Detected at the Reporting Limit               |
| PQL Practical Quantitation Limit             | S Spike recovery outside accepted recovery limits    |

# QA/QC SUMMARY REPORT

**Client:** Animas Environmental Services  
**Project:** SJ 29-5 #7A

**Work Order:** 1111892

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 8015B: Diesel Range Organics</b>											
<b>Sample ID: MB-29501</b>		<i>MBLK</i>				<b>Batch ID: 29501</b>		<b>Analysis Date: 11/23/2011 11:23:32 AM</b>			
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Motor Oil Range Organics (MRO)	ND	mg/Kg	50								
<b>Sample ID: LCS-29501</b>		<i>LCS</i>				<b>Batch ID: 29501</b>		<b>Analysis Date: 11/23/2011 11:58:12 AM</b>			
Diesel Range Organics (DRO)	47.51	mg/Kg	10	50	0	95.0	62.7	139			
<b>Sample ID: LCSD-29501</b>		<i>LCSD</i>				<b>Batch ID: 29501</b>		<b>Analysis Date: 11/23/2011 12:32:37 PM</b>			
Diesel Range Organics (DRO)	46.24	mg/Kg	10	50	0	92.5	62.7	139	2.70	20	

<b>Method: EPA Method 8015B: Gasoline Range</b>											
<b>Sample ID: 5ML-RB</b>		<i>MBLK</i>				<b>Batch ID: R49271</b>		<b>Analysis Date: 11/28/2011 12:30:55 PM</b>			
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								

<b>Method: EPA Method 8021B: Volatiles</b>											
<b>Sample ID: MB-2946</b>		<i>MBLK</i>				<b>Batch ID: R49246</b>		<b>Analysis Date: 11/22/2011 11:53:07 PM</b>			
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
<b>Sample ID: 5ML-RB</b>		<i>MBLK</i>				<b>Batch ID: R49271</b>		<b>Analysis Date: 11/28/2011 12:30:55 PM</b>			
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								

**Qualifiers:**

- |  |  |
|--|--|
| E Estimated value                            | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | NC Non-Chlorinated                                   |
| ND Not Detected at the Reporting Limit       | R RPD outside accepted recovery limits               |

Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL

Date Received:

11/23/2011

Work Order Number 1111892

Received by: AMG

Checklist completed by:

Signature: [Handwritten Signature]

Date: 11/23/11

Sample ID labels checked by:

Initials: [Handwritten Initials]

Matrix:

Carrier name: Courier

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present  Not Shipped
- Custody seals intact on sample bottles? Yes  No  N/A
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No
- Water - Preservation labels on bottle and cap match? Yes  No  N/A
- Water - pH acceptable upon receipt? Yes  No  N/A
- Container/Temp Blank temperature? 1.6° <6° C Acceptable  
If given sufficient time to cool.

Number of preserved bottles checked for pH: \_\_\_\_\_  
<2 >12 unless noted below.

COMMENTS:

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Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Corrective Action \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

### Chain-of-Custody Record

Client: Animas Environmental

Mailing Address: 624 E Comanche  
Farmington NM 87401

Phone #: 505 564 2281

email or Fax#: dyw@animasenviro.com

QA/QC Package:  
 Standard  Level 4 (Full Validation)

Accreditation  
 NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush SAME DAY

Project Name: SJ 29-5 #7A

Project #: \_\_\_\_\_

Project Manager: R. Kennemer

Sampler: Tami Ross

On Ice:  Yes  No

Sample Temperature: 6



### HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com  
4901 Hawkins NE - Albuquerque, NM 87109  
Tel. 505-345-3975 Fax 505-345-4107

#### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
11/22/11	1022	SOIL	S-1	4oz glass	NDA	1111892	✓	✓	✓	✓	✓	✓						
11/22/11	1030	SOIL	S-2			-2	✓	✓	✓	✓	✓	✓						
11/22/11	1037	SOIL	S-3			-3	✓	✓	✓	✓	✓	✓						
11/22/11	1042	SOIL	S-4			-4	✓	✓	✓	✓	✓	✓						
11/22/11	1045	SOIL	S-5			-5	✓	✓	✓	✓	✓	✓						

Date: 11/22/11 Time: 1505 Relinquished by: Tami Ross Received by: Christie Waalen Date: 11/22/11 Time: 1525

Date: 11/22/11 Time: 1707 Relinquished by: Christie Waalen Received by: [Signature] Date: 11/23/11 Time: 10:12

Remarks: BILL TO COP NETWORK 10313443 CODE: T110 (LABOR)

ID: BENALE  
LEAD: MICK FERRARI

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

