

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

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

Form C-144  
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.  
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or

13656 Proposed Alternative Method Permit or Closure Plan Application

OIL CONS. DIV DIST. 3

- Type of action:  Below grade tank registration  
45-13034  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

DEC 08 2015

**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: Delhi Taylor #5  
API Number: 30-045-13034 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr A (NENE) Section 17 Township 26N Range 11W County: San Juan  
Center of Proposed Design: Latitude 36.49275 °N Longitude -108.02066 °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 \_\_\_\_\_

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 45 mil  HDPE  PVC  Other LLDPE

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 \_\_\_\_\_

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

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
 Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  
 Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC  
 Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC  
 Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  
 Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  
 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  
 Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
 Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
 Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17. **Operator Application Certification:**

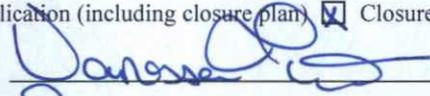
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

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

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

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

18. **OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

OCD Representative Signature:  Approval Date: 12/18/2015

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: November 17, 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: *Crystal Walker* Date: 12/7/15

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

**Burlington Resources Oil Gas Company, LP**  
**San Juan Basin**  
**Below Grade Tank Closure Report**

**Lease Name: Delhi Taylor #5**  
**API No.: 30-045-13034**

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. BR 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, BR will file the C144 Closure Report as required.
2. **The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.**
3. BR 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.**

4. BR 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.**

5. If there is any on-site equipment associated with a below-grade tank, then BR 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.**

6. BR 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.

7. A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.13 (B)(1)(b). (Sample results 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

8. If BR or the division determines that a release has occurred, then BR 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.**

9. 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 BR 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.**

10. 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 is missing.**

11. The surface owner shall be notified of BR'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 not found.**

12. 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.**

13. BR 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.**

14. 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.**

15. 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  
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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 <b>ConocoPhillips Company</b>	Contact <b>Lisa Hunter</b>
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 258-1607</b>
Facility Name: <b>Delhi Taylor 5</b>	Facility Type: <b>Gas Well (P&amp;A)</b>

Surface Owner <b>Federal</b>	Mineral Owner <b>Federal (NMSF-079679)</b>	API No. <b>3004513034</b>
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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
A	17	26N	11W	790	North	790	East	San Juan

Latitude **36.492743** Longitude **-108.020658**

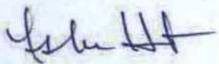
#### NATURE OF RELEASE

Type of Release <b>Produced Water</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>None</b>
Source of Release <b>Below Grade Tank (BGT) Closure Resampling</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>11/18/15</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? <b>N/A</b>	Date and Hour <b>N/A</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		

Describe Cause of Problem and Remedial Action Taken.\*  
**Below-Grade Tank Closure activities with samples taken resulting in Chloride constituent exceeded standards outlined by 19.15.17.13 NMAC.**

Describe Area Affected and Cleanup Action Taken.\*  
**NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 0. Samples were collected and analytical results for methods 418.1, 8015 & 8021 are below applicable NMOCD action levels. Although Chloride levels were above Regulatory Standards at 390 mg/Kg, the chloride contaminates are below surface and COPC believes they will not pose an environmental threat, and that no further work will be required. The final lab report is attached for review. Samples were collected by third-party environmental using a geo-probe in the center of former BGT area to the extent of 8 feet.**

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Lisa Hunter</b>	Approved by Environmental Specialist:	
Title: <b>Field Environmental Specialist</b>	Approval Date:	Expiration Date:
E-mail Address: <b>Lisa.Hunter@cop.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>December 4, 2015</b> Phone: <b>(505) 258-1607</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 7, 2011

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

**RE: Soil Sampling Results for Delhi Taylor #5 Below Ground Tank Closure  
San Juan County, New Mexico**

Dear Ms. Cowden-Cook:

Animas Environmental Services, LLC (AES) is pleased to provide the soil sampling results associated with the below ground tank (BGT) closure of a waste tank at ConocoPhillips (CoP) Delhi Taylor #5, located in San Juan County, New Mexico. Tank removal had been completed by CoP contractors prior to AES's work at the subject location.

---

## 1.0 Site Information

### 1.1 Location

The Delhi Taylor #5 well site is located within the NE $\frac{1}{4}$  NE $\frac{1}{4}$ , Section 17, T26N, R11W, San Juan County, New Mexico. Latitude and longitude of the BGT excavation were recorded as N36°29.566' and W108°01.241', respectively. The site is located on Bureau of Land Management (BLM) land. A topographic site location map is included as Figure 1, and an aerial map with the BGT location is included as Figure 2.

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed. Based upon a Pit Closure Report dated June 1999 on file with the NMOCD, 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 more than 1000 feet, and the location is not within a well-head protection area. Once on-site, AES personnel confirmed the NMOCD ranking information using topographical interpretation and visual reconnaissance.

### 1.2 Site Activities

AES was initially contacted by Sheldon Montoya of CoP on November 11, 2011, and on November 17, 2011, Ross Kennemer and Debbie Watson of AES went to the subject location.

AES personnel collected five soil samples from below the BGT liner. Four samples were collected from the middle of the excavation side walls, and one sample was collected from the center of the BGT footprint.

---

## 2.0 Soil Sampling

On November 17, 2011, AES personnel conducted field screening and collected five soil samples 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 were recorded and ranged from 0.0 to 0.2 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 12.1 mg/kg to 21.0 mg/kg, and TPH results are summarized in Table 1 and on Figure 2. Field screening reports are attached.

#### 2.1.3 Chlorides

Soil samples were field screened for chlorides using Chloride Quan Tab Test Strips. Sampling and analysis methods followed procedures provided by Hach Company. Four field tests for chloride showed concentrations below 32 mg/kg, while one field test for chlorides (S-3) showed a concentration of 126 mg/kg. Confirmation soil samples were also collected and submitted to the analytical laboratory. Chloride field screening results are summarized in Table 1 and on Figure 2. Field screening reports are attached.

**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 laboratories, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. The soil samples were laboratory analyzed for:

- Chlorides per EPA Method 300.0

**2.3 Soil Field and Laboratory Analytical Results**

Field and analytical laboratory results are summarized in the table below.

Table 1. Soil OVM, TPH, and Chlorides, Delhi Taylor #5

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth Below BGT (ft)</i>	<i>OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Field Chlorides (mg/kg)</i>	<i>Laboratory Confirmation Chlorides (mg/kg)</i>
<i>NMOCD Action Level</i>			<b>100</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>
S-1	11/17/11	0.5	0.0	12.1	<32	<30
S-2	11/17/11	0.5	0.0	15.1	<32	31
S-3	11/17/11	0.5	0.0	18.0	126	<30
S-4	11/17/11	0.5	0.2	15.1	<32	<30
S-5	11/17/11	0.5	0.0	21.0	<32	<30

OVM, TPH and chloride concentrations for the five soil samples were either below laboratory detection limits or below applicable NMOCD action levels for contaminants of concern. Laboratory analytical reports are attached.

**3.0 Conclusions and Recommendations**

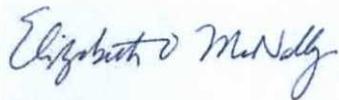
Based on field testing and laboratory analytical results for the soil samples collected on November 17, 2011, in association with the BGT closure for the Delhi Taylor #5, soil concentrations are below applicable NMOCD action levels for contaminants of concern.

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,



Kelsey Christiansen  
Staff Scientist

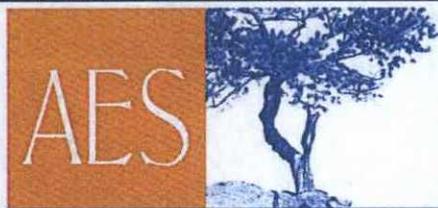
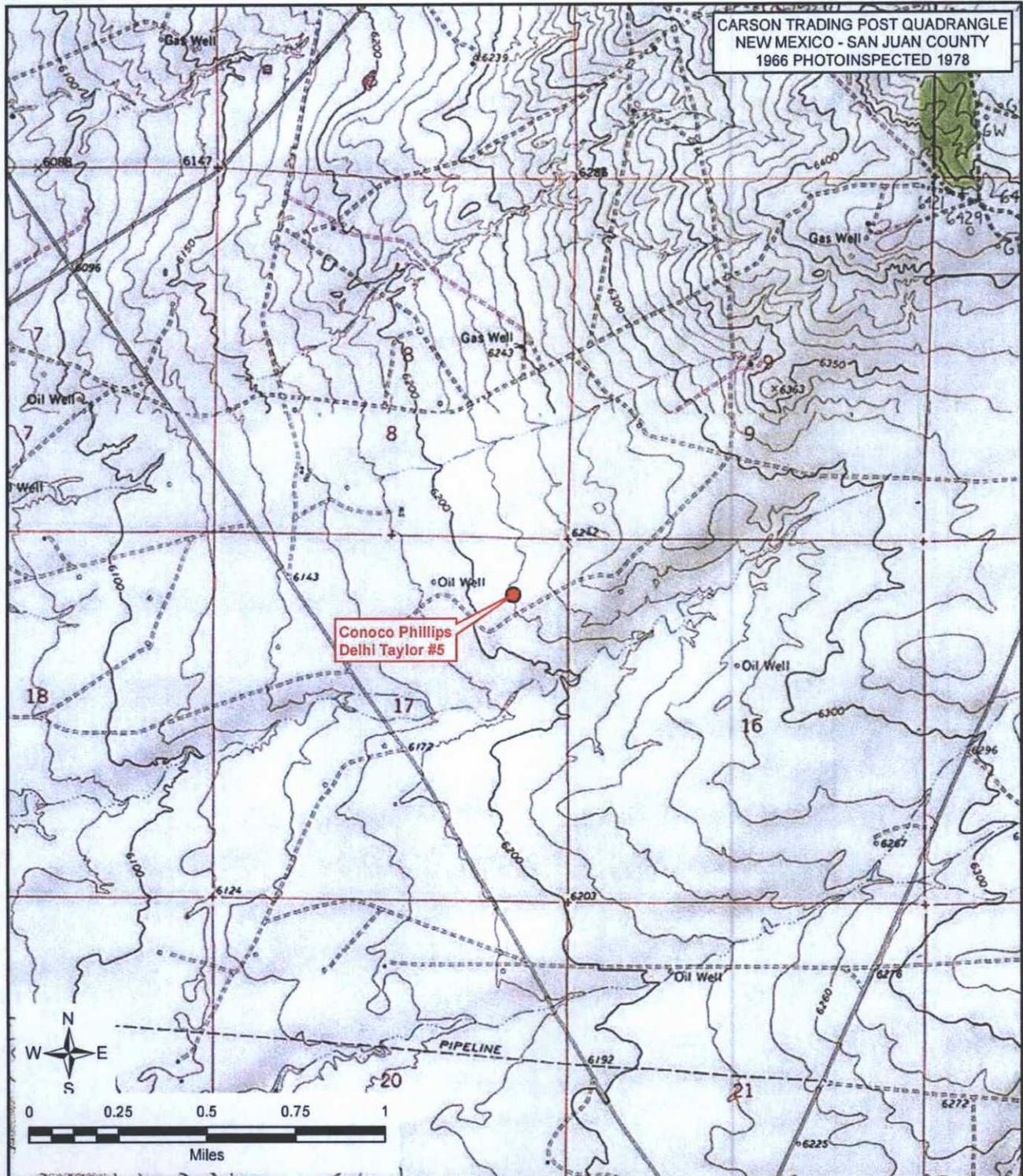


Elizabeth McNally, P.E.

**Attachments:**

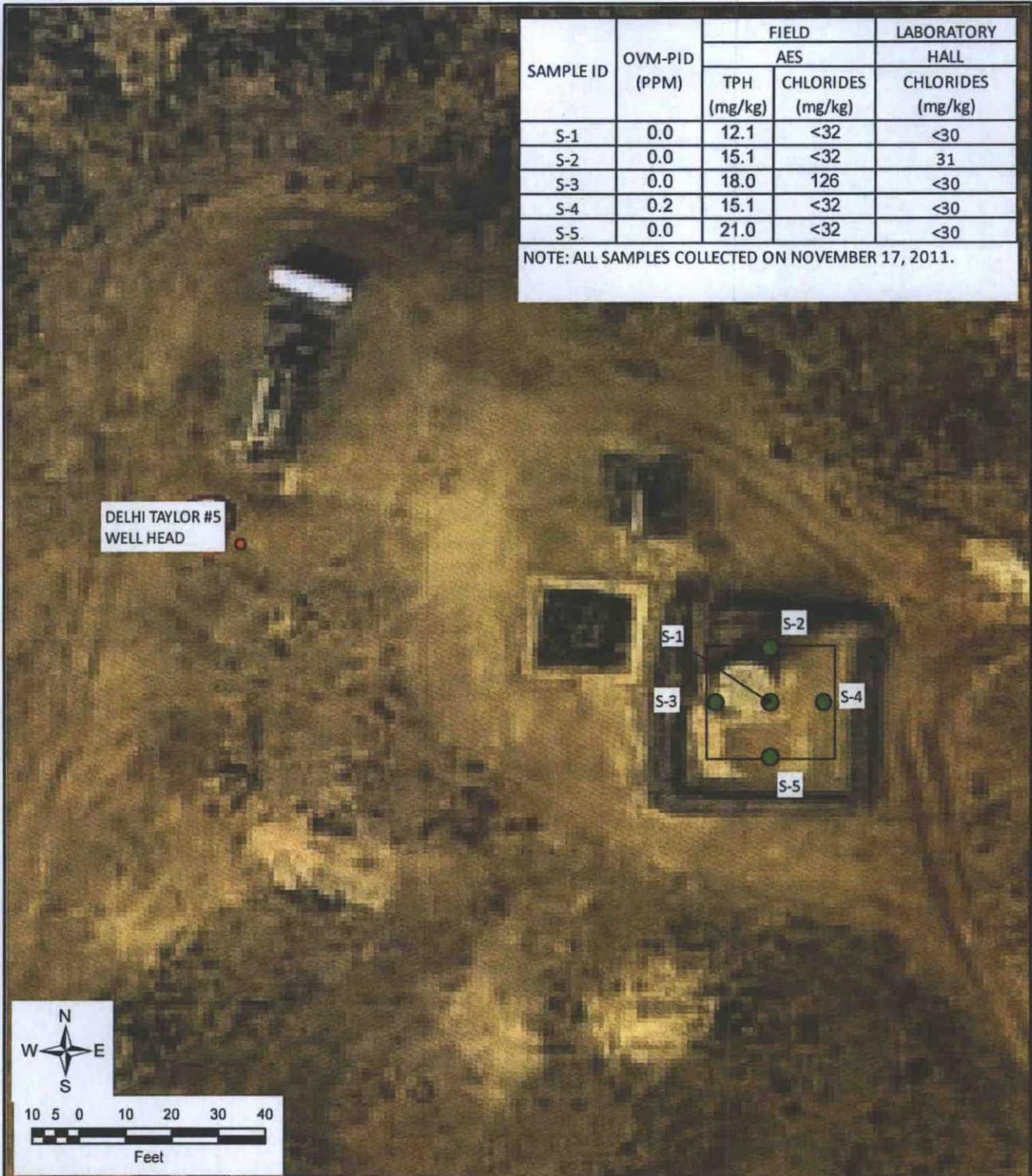
- Figure 1. Topographic Site Location Map
- Figure 2. General Site Plan, November 2011
- AES TPH and Chloride Field Screening Report 111711
- Hall Analytical Report 1111780

S:\Animas 2000\2011 Projects\Conoco Phillips\Delhi Taylor #5\Reports\Delhi Taylor #5 Letter report  
120711 final.docx



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> December 7, 2011	<b>FIGURE 1</b>  <b>TOPOGRAPHIC SITE LOCATION MAP</b>  CONOCO PHILLIPS DELHI TAYLOR #5 SAN JUAN COUNTY, NEW MEXICO NE1/4, NE1/4, Section 17, T26N, R11W N36° 29.572', W108° 01.254'
<b>REVISED BY:</b> C. Lameman	<b>DATE REVISED:</b> December 7, 2011	
<b>CHECKED BY:</b> E. McNally	<b>DATE CHECKED:</b> December 7, 2011	
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 7, 2011	



SAMPLE ID	OVM-PID (PPM)	FIELD		LABORATORY
		AES		HALL
		TPH (mg/kg)	CHLORIDES (mg/kg)	CHLORIDES (mg/kg)
S-1	0.0	12.1	<32	<30
S-2	0.0	15.1	<32	31
S-3	0.0	18.0	126	<30
S-4	0.2	15.1	<32	<30
S-5	0.0	21.0	<32	<30

NOTE: ALL SAMPLES COLLECTED ON NOVEMBER 17, 2011.

<p>Animas Environmental Services, LLC</p>	<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> December 7, 2011	<b>FIGURE 2</b>  <b>GENERAL SITE PLAN</b> <b>BELOW GRADE TANK CLOSURE</b> <b>NOVEMBER 2011</b> CONOCO PHILLIPS DELHI TAYLOR #5 SAN JUAN COUNTY, NEW MEXICO NE1/4, NE1/4, Section 17, T26N, R11W N36° 29.572', W108° 01.254'
	<b>REVISED BY:</b> C. Lameman	<b>DATE REVISED:</b> December 7, 2011	
	<b>CHECKED BY:</b> E. McNally	<b>DATE CHECKED:</b> December 7, 2011	
	<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> December 7, 2011	

# 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: Delhi Taylor #5

Date: 11/17/2011

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	11/17/2011	12:19	CENTER	0.0	<32	12.1	20.0	1	DAW
S-2	11/17/2011	12:23	NORTH	0.0	<32	15.1	20.0	1	DAW
S-3	11/17/2011	12:26	EAST	0.0	126	18.0	20.0	1	DAW
S-4	11/17/2011	12:30	SOUTH	0.2	<32	15.1	20.0	1	DAW
S-5	11/17/2011	12:33	WEST	0.0	<32	21.0	20.0	1	DAW

PQL Practical Quantitation Limit  
 ND Not Detected at the Reporting Limit  
 DF Dilution Factor

\*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: *Deborah Water*



COVER LETTER

Monday, November 21, 2011

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

TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Conoco Phillips Delhi Taylor #5 BGT Closure

Order No.: 1111780

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 5 sample(s) on 11/18/2011 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901  
AZ license # AZ0682

**Hall Environmental Analysis Laboratory, Inc.**

Date: 21-Nov-11

**CLIENT:** Animas Environmental Services **Lab Order:** 1111780  
**Project:** Conoco Phillips Delhi Taylor #5 BGT Closure

**Lab ID:** 1111780-01 **Collection Date:** 11/17/2011 12:19:00 PM  
**Client Sample ID:** S-1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						
Chloride	ND	30		mg/Kg	20	Analyst: BRM 11/18/2011 12:10:15 PM

**Lab ID:** 1111780-02 **Collection Date:** 11/17/2011 12:33:00 PM  
**Client Sample ID:** S-2 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						
Chloride	31	30		mg/Kg	20	Analyst: BRM 11/18/2011 12:27:40 PM

**Lab ID:** 1111780-03 **Collection Date:** 11/17/2011 12:26:00 PM  
**Client Sample ID:** S-3 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						
Chloride	ND	30		mg/Kg	20	Analyst: BRM 11/18/2011 12:45:04 PM

**Lab ID:** 1111780-04 **Collection Date:** 11/17/2011 12:30:00 PM  
**Client Sample ID:** S-4 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						
Chloride	ND	30		mg/Kg	20	Analyst: BRM 11/18/2011 1:02:29 PM

**Lab ID:** 1111780-05 **Collection Date:** 11/17/2011 12:33:00 PM  
**Client Sample ID:** S-5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						
Chloride	ND	30		mg/Kg	20	Analyst: BRM 11/18/2011 1:19:54 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

## QA/QC SUMMARY REPORT

Client: Animas Environmental Services  
 Project: Conoco Phillips Delhi Taylor #5 BGT Closure

Work Order: 1111780

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
<b>Method: EPA Method 300.0: Anions</b>											
Sample ID: 1111780-05AMSD		MSD									
Chloride	ND	mg/Kg	30	15	10.07	84.8	79.6	112	0	20	
Sample ID: MB-29434		MBLK									
Chloride	ND	mg/Kg	1.5								
Sample ID: LCS-29434		LCS									
Chloride	14.11	mg/Kg	1.5	15	0	94.1	90	110			
Sample ID: 1111780-05AMS		MS									
Chloride	ND	mg/Kg	30	15	10.07	92.9	79.6	112			

## Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL

Date Received: 11/18/2011

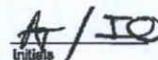
Work Order Number 1111780

Received by: AT

Checklist completed by:



Sample ID labels checked by:



Signature

Date

11/18/11

Matrix:

Carrier name FedEx

- |   |  |                              |   |   |
|---|--|------------------------------|---|---|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  | Not Present <input type="checkbox"/>    |   |
| Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  | Not Present <input type="checkbox"/>    | Not Shipped <input type="checkbox"/>              |
| Custody seals intact on sample bottles?                 | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  | N/A <input type="checkbox"/>            |   |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>                    | No <input type="checkbox"/>  |   |   |
| Water - VOA vials have zero headspace?                  | No VOA vials submitted <input checked="" type="checkbox"/> | Yes <input type="checkbox"/> | No <input type="checkbox"/>             | Number of preserved bottles checked for pH: _____ |
| Water - Preservation labels on bottle and cap match?    | Yes <input type="checkbox"/>                               | No <input type="checkbox"/>  | N/A <input checked="" type="checkbox"/> |   |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>                               | No <input type="checkbox"/>  | N/A <input checked="" type="checkbox"/> | <2 >12 unless noted below.                        |
| Container/Temp Blank temperature?                       | 1.4°   | <6° C Acceptable             |   |   |

If given sufficient time to cool.

COMMENTS:

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

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

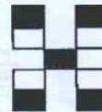
Comments: \_\_\_\_\_

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

# Chain-of-Custody Record

Client: Animas Environmental Service, LLC  
 Mailing Address: 624 E Comanche Farmington, NM  
 Phone #: 505-564-2281  
 email or Fax#: \_\_\_\_\_  
 QA/QC Package:  
 Standard       Level 4 (Full Validation)  
 Accreditation  
 NELAP       Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard       Rush Same day  
 Project Name: Conoco Phillips Delhi Taylor #5 BGT Closure  
 Project #: \_\_\_\_\_  
 Project Manager: Ross Kennemer  
 Sampler: R. Kennemer  
 Sample temperature: 77



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

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)	30.0 Chlorides	Air Bubbles (Y or N)
											X	
											X	
											X	
											X	
											X	

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
11/17/11	1219	Soil	S-1	1-4oz glass	—	—
	1223		S-2		—	—
	1226		S-3		—	—
	1230		S-4		—	—
	1233		S-5		—	—

Date: 11/17/11 Time: 1611 Relinquished by: [Signature]  
 Date: 11/17/11 Time: 0915 Received by: [Signature]

Remarks:  
 Authorized by Sheldon Montoya  
 charge code: 10305111  
 Direct bill to Conoco Phillips

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.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

November 30, 2015

Emilee Skyles  
Animas Environmental  
604 Pinon Street  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX

RE: COPC Delhi Taylor 5

OrderNo.: 1511850

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/19/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. 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. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental

Client Sample ID: BGT S-1

Project: COPC Delhi Taylor 5

Collection Date: 11/18/2015 1:58:00 PM

Lab ID: 1511850-001

Matrix: SOIL

Received Date: 11/19/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>TOM</b>
Petroleum Hydrocarbons, TR	41	20		mg/Kg	1	11/24/2015	22425
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	390	30		mg/Kg	20	11/24/2015 7:07:47 PM	22509
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/24/2015 9:49:27 AM	22442
Surr: DNOP	102	70-130		%REC	1	11/24/2015 9:49:27 AM	22442
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2015 5:50:54 PM	22419
Surr: BFB	80.5	75.4-113		%REC	1	11/20/2015 5:50:54 PM	22419
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	11/20/2015 5:50:54 PM	22419
Toluene	ND	0.049		mg/Kg	1	11/20/2015 5:50:54 PM	22419
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2015 5:50:54 PM	22419
Xylenes, Total	ND	0.099		mg/Kg	1	11/20/2015 5:50:54 PM	22419
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	11/20/2015 5:50:54 PM	22419

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511850

30-Nov-15

Client: Animas Environmental

Project: COPC Delhi Taylor 5

Sample ID	<b>MB-22509</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>22509</b>	RunNo:	<b>30484</b>					
Prep Date:	<b>11/24/2015</b>	Analysis Date:	<b>11/24/2015</b>	SeqNo:	<b>930523</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-22509</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>22509</b>	RunNo:	<b>30484</b>					
Prep Date:	<b>11/24/2015</b>	Analysis Date:	<b>11/24/2015</b>	SeqNo:	<b>930524</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1511850

30-Nov-15

**Client:** Animas Environmental  
**Project:** COPC Delhi Taylor 5

Sample ID <b>MB-22425</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 418.1: TPH</b>								
Client ID: <b>PBS</b>	Batch ID: <b>22425</b>	RunNo: <b>30453</b>								
Prep Date: <b>11/19/2015</b>	Analysis Date: <b>11/24/2015</b>	SeqNo: <b>929502</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID <b>LCS-22425</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 418.1: TPH</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>22425</b>	RunNo: <b>30453</b>								
Prep Date: <b>11/19/2015</b>	Analysis Date: <b>11/24/2015</b>	SeqNo: <b>929503</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	116	83.6	116			

Sample ID <b>LCSD-22425</b>	SampType: <b>LCSD</b>	TestCode: <b>EPA Method 418.1: TPH</b>								
Client ID: <b>LCSS02</b>	Batch ID: <b>22425</b>	RunNo: <b>30453</b>								
Prep Date: <b>11/19/2015</b>	Analysis Date: <b>11/24/2015</b>	SeqNo: <b>929504</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	120	20	100.0	0	116	83.6	116	0	20	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1511850

30-Nov-15

**Client:** Animas Environmental

**Project:** COPC Delhi Taylor 5

Sample ID <b>MB-22442</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>22442</b>		RunNo: <b>30413</b>							
Prep Date: <b>11/20/2015</b>	Analysis Date: <b>11/23/2015</b>		SeqNo: <b>928213</b>	Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		110	70	130			

Sample ID <b>LCS-22442</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>22442</b>		RunNo: <b>30413</b>							
Prep Date: <b>11/20/2015</b>	Analysis Date: <b>11/23/2015</b>		SeqNo: <b>928361</b>	Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	57.4	139			
Surr: DNOP	5.5		5.000		110	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511850

30-Nov-15

Client: Animas Environmental

Project: COPC Delhi Taylor 5

Sample ID	<b>MB-22419</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>22419</b>	RunNo:	<b>30395</b>					
Prep Date:	<b>11/19/2015</b>	Analysis Date:	<b>11/20/2015</b>	SeqNo:	<b>927446</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	810		1000		80.6	75.4	113			

Sample ID	<b>LCS-22419</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>22419</b>	RunNo:	<b>30395</b>					
Prep Date:	<b>11/19/2015</b>	Analysis Date:	<b>11/20/2015</b>	SeqNo:	<b>927447</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.2	79.6	122			
Surr: BFB	1100		1000		106	75.4	113			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1511850

30-Nov-15

**Client:** Animas Environmental  
**Project:** COPC Delhi Taylor 5

Sample ID <b>MB-22419</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>22419</b>		RunNo: <b>30395</b>							
Prep Date: <b>11/19/2015</b>	Analysis Date: <b>11/20/2015</b>		SeqNo: <b>927494</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID <b>LCS-22419</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>22419</b>		RunNo: <b>30395</b>							
Prep Date: <b>11/19/2015</b>	Analysis Date: <b>11/20/2015</b>		SeqNo: <b>927495</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	103	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.6	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		127	80	120			S

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **Animas Environmental**

Work Order Number: **1511850**

RcptNo: 1

Received by/date:

*[Signature]*

11/19/15

Logged By: **Lindsay Mangin**

11/19/2015 7:30:00 AM

*[Signature]*

Completed By: **Lindsay Mangin**

11/19/2015 9:18:50 AM

*[Signature]*

Reviewed By:

*[Signature]*

11/19/15

### Chain of Custody

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

### Log In

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No  # of preserved bottles checked for pH:   
 (Note discrepancies on chain of custody)   
 (<2 or >12 unless noted)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  Adjusted?
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No  Checked by:
- (If no, notify customer for authorization.)

### Special Handling (if applicable)

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Yes			



