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.

12632
45-23904

RECEIVED
By OCD at 10:41 am, Jan 29, 2015

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: Federal 9E
API Number: 30-045-23904 OCD Permit Number:
U/L or Qtr/Qtr P (SESE) Section 9 Township 29N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.73600000 °N Longitude -108.09779000 °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
Closed Prior to Closure Plan Approval
☐ 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_____

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.

Variances 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_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 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	☐ 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 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	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

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

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:** Apr 24, 2015

Title: Environmental Specialst **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:** 3/15/13

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 _____ Longitude _____ NAD: ☐1927 ☐ 1983

22.

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): Kenny Davis Title: Staff Regulatory Technician

Signature: Date: 12/3/14

e-mail address: kenny.r.davis@conocophillips.com Telephone: 505-599-4045

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

Lease Name: Federal 9E
API No.: 3004523904

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.

12/8/2014

7. **A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(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 300.1	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:
    i. Operator's name
    ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

    Notification is missing due to employee turnovers. ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour notification.

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. COPC was not aware that the original notification sent at the time of Permitting was not the only closure notification required.
    ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour notification.

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 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.

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 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 **(Included as an attachment)**

Closure Documentation was not submitted within the 60 day requirement due to employee turnovers. ConocoPhillips has reviewed our internal processes and has updated them to ensure closure documentation is submitted with the 60 day time frame.

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

July 26, 2013

Crystal Tafoya
ConocoPhillips
San Juan Business Unit
Office 214-05
5525 Hwy 64
Farmington, New Mexico 87401

Via electronic mail to: SJBUE-Team@ConocoPhillips.com

RE: Below Grade Tank Closure, Release Assessment, and Final Excavation Report
Federal #9E
San Juan County, New Mexico

Dear Ms. Tafoya:

On March 15 and 20, and June 3, 2013, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, an initial release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Federal #9E, located in San Juan County, New Mexico. A historical release was discovered during BGT closure sampling at the location, and an initial release assessment was completed on March 20, 2013. The final excavation was completed by contractors while AES was on location on June 3, 2013.

1.0 Site Information

1.1 Location

Site Name – Federal #9E
Legal Description – SE¼ SE¼, Section 9, T29N, R12W, San Juan County, New Mexico
Well Latitude/Longitude – N36.73618 and W108.09796, respectively
BGT/Release Latitude/Longitude – N36.73611 and W108.09765, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, March 2013

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Pit Remediation and Closure Report dated June 1999 for the Federal

#9E reported depth to water as greater than 100 feet below ground surface (bgs); however, a C-144 dated June 2007 for the Ropco Federal FC 9 #2T located approximately 320 feet north-northwest of the location reported depth to water as between 50 and 99 feet bgs. The New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells were located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (http://ford.nmt.edu/react/project.html) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was between 50 and 99 feet bgs. An ephemeral wash which drains to San Juan River is located approximately 90 feet east of the location. Based on this information, the location was assessed a ranking score of 30 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Assessments

AES was initially contacted by Jess Henson, CoP representative, on March 15, 2013, for BGT closure sampling at the location, and on the same day, Heather Woods and Corwin Lameman of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample. Two additional composite samples and one waste characterization sample were collected from an excavation initiated while AES was onsite. Sample locations are included on Figure 2.

On March 20, 2013, AES personnel returned to the location to complete the release assessment field work. The assessment included collection and field screening of 12 soil samples from 6 test holes (TH-1 through TH-6). Based on field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On June 3, 2013, AES personnel returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-2 through SC-6) of the walls and base of the excavation. The final excavation measured 24.5 feet by 22.5 feet by 7 feet in depth. The depth of the excavation was limited by a confining sandstone layer encountered at 7 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

On March 15, 2013, during BGT closure sampling, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis. Based on field TPH results, CoP contractors began excavating while AES was onsite. Samples were collected from the north base and north wall of the initial excavation and were field screened for VOCs and TPH. Additionally, the sample labeled North Base was submitted for laboratory analysis. A sample from the excavation stockpile was also submitted to the analytical laboratory for waste characterization.

A total of 12 soil samples (TH-1 through TH-6) and 5 composite samples (SC-2 through SC-6) were collected during the release and excavation assessments. All soil samples were field screened for VOCs, and selected samples were analyzed for TPH. One composite sample (SC-6) collected during the excavation was submitted for confirmation laboratory analysis.

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 100 parts per million (ppm) isobutylene gas.

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 soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

2.1.3 Chlorides

Soil samples were field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

The soil samples (SC-1, North Base, and SC-6) collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed

on ice, and logged onto sample chain of custody records. The samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8260B/8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B/8015D.

The soil sample (SC-1) collected on March 15, 2013, was also analyzed for:

- Chlorides per USEPA Method 300.0.

2.3 Soil Field and Laboratory Analytical Results

On March 15, 2013, BGT closure field screening readings for VOCs via OVM were 0.0 ppm in each sample (S-1 through S-5 and SC-1); however, field TPH concentrations ranged from 145 mg/kg in S-2 to 2,690 mg/kg in S-3. The field chloride concentration in SC-1 was reported at 60 mg/kg.

Initial excavation field screening on March 15, 2013, showed VOCs via OVM of 0.0 ppm (North Wall) and 1,428 ppm (North Base). Field TPH concentrations were 30.2 mg/kg (North Wall) and 644 mg/kg (North Base).

On March 20, 2013, assessment field screening readings for VOCs via OVM ranged from 0.6 ppm in TH-1 up to 4,562 ppm in TH-2. Field TPH concentrations ranged from less than 20.0 mg/kg in TH-1 to 3,620 mg/kg in TH-2.

On June 3, 2013, final excavation field screening results for VOCs via OVM ranged from 0.8 ppm in SC-3 up to 792 ppm in SC-6. Field TPH concentrations ranged from 44.0 mg/kg in SC-3 to 1,870 mg/kg in SC-6. Field screening VOC and TPH results are summarized in Table 1 and on Figures 2 through 4. The AES field screening reports are attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results
Federal #9E BGT Closure, Release Assessment, and Final Excavation Report
March and June 2013

Sample ID	Date Sampled	Sample Depth (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Chloride (mg/kg)
NMOCD Action Level*			100	100	250
S-1	3/15/13	4	0.0	**1,270**	NA
S-2	3/15/13	4	0.0	**145**	NA
S-3	3/15/13	4	0.0	**2,690**	NA
S-4	3/15/13	4	0.0	**1,910**	NA
S-5	3/15/13	4	0.0	**331**	NA
SC-1	3/15/13	4	0.0	NA	60
North Base	3/15/13	7	**1,428**	**644**	NA
North Wall	3/15/13	4 to 7	0.0	30.2	NA
TH-1	3/20/13	1.5	0.6	NA	NA
		7	1.2	<20.0	NA
TH-2	3/20/13	5.5	3.3	26.9	NA
		7	**4,562**	**3,620**	NA
TH-3	3/20/13	4.5	4.7	26.9	NA
		8	5.5	30.5	NA
TH-4	3/20/13	4.5	5.6	25.6	NA
		8	6.8	51.4	NA
TH-5	3/20/13	4.5	3.9	31.8	NA
		8	4.0	33.0	NA
TH-6	3/20/13	4.5	11.9	41.6	NA
		9	5.4	45.2	NA
SC-2	6/3/13	1 to 7	0.9	57.8	NA
SC-3	6/3/13	1 to 7	0.8	44.0	NA
SC-4	6/3/13	1 to 7	1.3	81.2	NA
SC-5	6/3/13	1 to 7	1.0	52.3	NA
SC-6	6/3/13	7	**792**	**1,870**	NA

NA – not analyzed
*Action levels determined by NMAC 19.15.17.13E and the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

Laboratory analytical results for SC-1 collected on March 15, 2013, reported benzene and total BTEX concentrations below laboratory detection limits of 0.050 mg/kg and 0.25 mg/kg, respectively. The TPH as GRO/DRO concentration was reported at 300 mg/kg. The chloride concentration was below the laboratory detection limit of 30 mg/kg. The north base sample reported benzene and total BTEX concentrations as less than 0.050 mg/kg and 6.1 mg/kg, respectively. The TPH concentration as GRO/DRO was reported at 1,160 mg/kg.

Laboratory analytical results for SC-6 collected on June 3, 2013, from the base of the final excavation, had a benzene concentration reported below the laboratory detection limit of 0.12 mg/kg. The total BTEX concentration was 4.3 mg/kg. The TPH concentration as GRO/DRO was 840 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figures 2 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides
Federal #9E BGT Closure, Release Assessment, and Final Excavation Report
March and June 2013

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level*			0.2/10	50	100		250
SC-1	3/15/13	4	<0.050	<0.25	<5.0	**300**	<30
North Base	3/15/13	7	<0.050	6.1	**180**	**980**	NA
SC-6	6/3/13	7	<0.12	4.3	**130**	**710**	NA

*Action levels determined by NMAC 19.15.17.13E and the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in each sample, with the highest concentration reported in S-3 with 2,690 mg/kg. Laboratory analytical results for TPH (as GRO/DRO) in SC-1 were also reported above the NMOCD action level of 100 mg/kg with 300 mg/kg DRO. However, benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations were reported below the NMOCD action level of 250 mg/kg. Based on field and laboratory analytical results, a release was confirmed at the location.

On March 20, 2013, AES conducted an assessment associated with a historical release discovered during BGT closure confirmation sampling. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking of 30. Field screening results for VOCs via OVM were above the NMOCD action level of 100 ppm in TH-2 (4,562 ppm). Field TPH concentrations above the NMOCD action level of 100 mg/kg were also reported in TH-2 (3,620 mg/kg).

On June 3, 2013, final clearance of the excavation area was completed. Field screening results of the excavation showed that concentrations of VOCs and TPH were below NMOCD action levels for each of the final four walls of the excavation (SC-2 through SC-5). However, the base of the excavation (SC-6) exceeded NMOCD action levels for VOCs with 792 ppm and TPH with 1,870 mg/kg. Laboratory analytical results for SC-6 (base) showed benzene and total BTEX concentrations below applicable NMOCD action levels. However, TPH concentrations as GRO/DRO exceeded the NMOCD action level of 100 mg/kg with 840 mg/kg. Note that further excavation of the base was not possible due to a competent layer of sandstone encountered at 7 feet bgs.

CoP consulted with Brandon Powell of NMOCD, and on June 5, 2013, was granted approval to backfill the excavation. No further work is recommended for the Federal #9E.

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

Sincerely,

Landrea R. Cupps

Landrea Cupps
Environmental Scientist

Elizabeth McNally

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, March 2013
Figure 3. Initial Assessment Sample Locations and Results, March 2013
Figure 4. Final Excavation Sample Locations and Results, June 2013
AES Field Screening Reports (031513, 032013, and 060313)
Hall Analytical Reports (1303647, 1303648, and 1306072)

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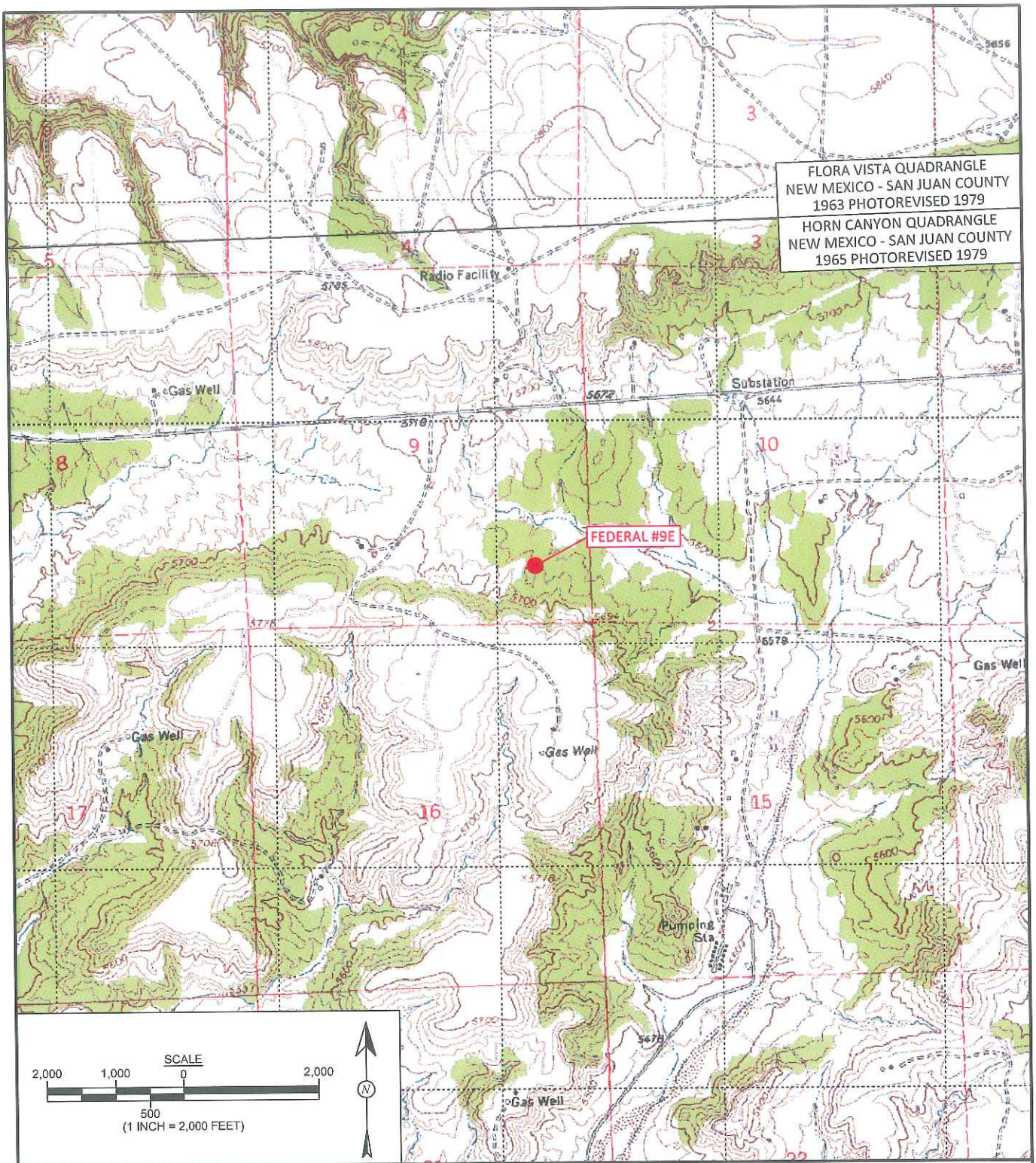
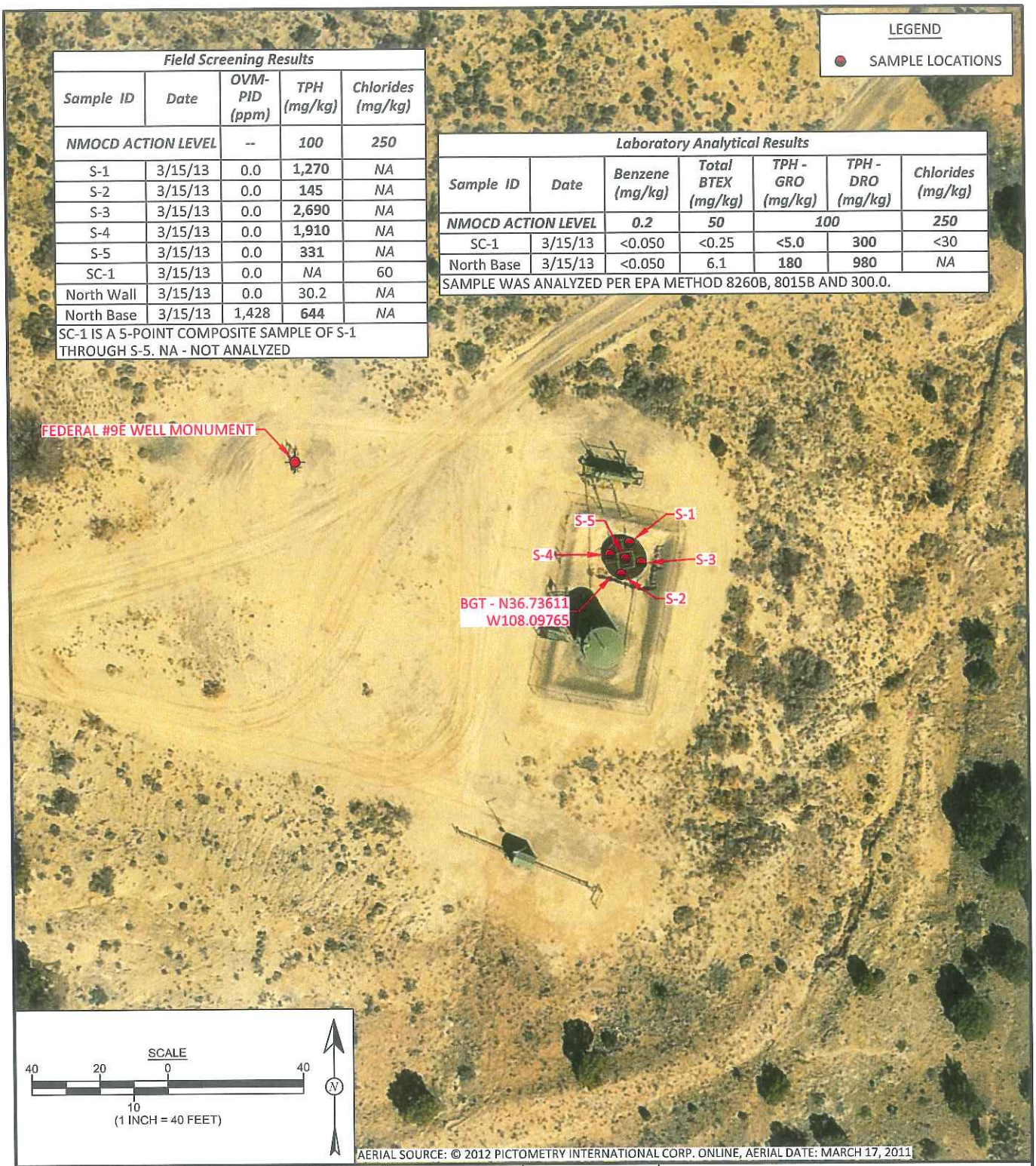


DRAWN BY: C. Lameman	**DATE DRAWN:** March 20, 2013	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** March 20, 2013	**TOPOGRAPHIC SITE LOCATION MAP** ConocoPhillips FEDERAL #9E SE¼ SE¼, SECTION 9, T29N, R12W SAN JUAN COUNTY, NEW MEXICO N36.73618, W108.09796
CHECKED BY: D. Watson	**DATE CHECKED:** March 20, 2013	
APPROVED BY: E. McNally	**DATE APPROVED:** March 20, 2013	

AES
Animas Environmental Services, LLC



Field Screening Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	3/15/13	0.0	1,270	NA
S-2	3/15/13	0.0	145	NA
S-3	3/15/13	0.0	2,690	NA
S-4	3/15/13	0.0	1,910	NA
S-5	3/15/13	0.0	331	NA
SC-1	3/15/13	0.0	NA	60
North Wall	3/15/13	0.0	30.2	NA
North Base	3/15/13	1,428	644	NA

SC-1 IS A 5-POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5. NA - NOT ANALYZED

Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2	50	100		250
SC-1	3/15/13	<0.050	<0.25	<5.0	300	<30
North Base	3/15/13	<0.050	6.1	180	980	NA

SAMPLE WAS ANALYZED PER EPA METHOD 8260B, 8015B AND 300.0.

Animas Environmental Services, LLC

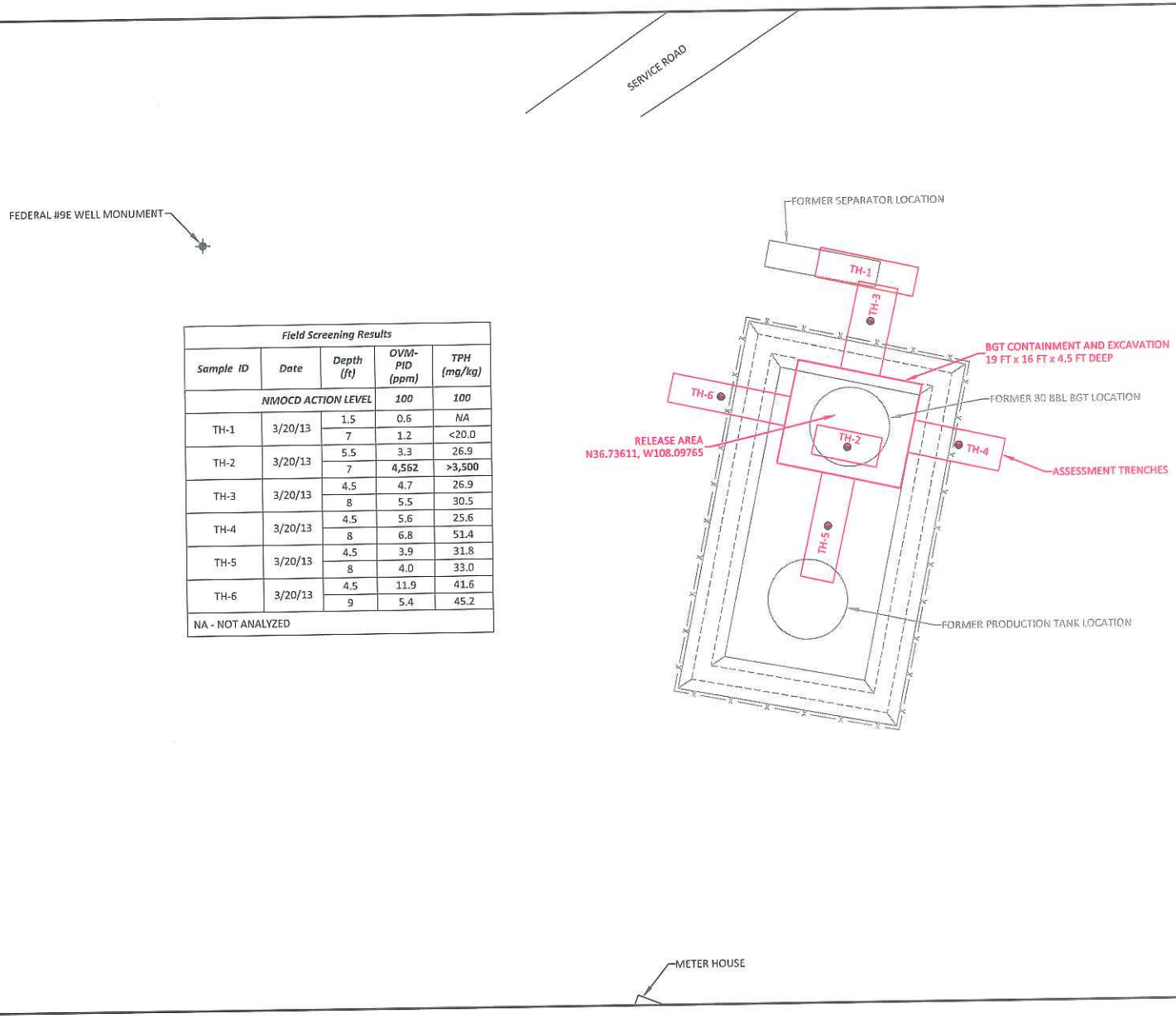
DRAWN BY: C. Lameman	DATE DRAWN: March 20, 2013
REVISIONS BY: C. Lameman	DATE REVISED: March 20, 2013
CHECKED BY: D. Watson	DATE CHECKED: March 20, 2013
APPROVED BY: E. McNally	DATE APPROVED: March 20, 2013

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
MARCH 2013
ConocoPhillips
FEDERAL #9E
SE¼ SE¼, SECTION 9, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO
N36.73618, W108.09796

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
MARCH 2013
ConocoPhillips
FEDERAL #9E
SE¼ SE¼, SECTION 9, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO
N36.73618, W108.09796



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
TH-1	3/20/13	1.5	0.6	NA
		7	1.2	<20.0
TH-2	3/20/13	5.5	3.3	26.9
		7	4,562	>3,500
TH-3	3/20/13	4.5	4.7	26.9
		8	5.5	30.5
TH-4	3/20/13	4.5	5.6	25.6
		8	6.8	51.4
TH-5	3/20/13	4.5	3.9	31.8
		8	4.0	33.0
TH-6	3/20/13	4.5	11.9	41.6
		9	5.4	45.2
NA - NOT ANALYZED				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: March 20, 2013
REVISIONS BY: C. Lameman	DATE REVISED: March 20, 2013
CHECKED BY: D. Watson	DATE CHECKED: March 20, 2013
APPROVED BY: E. McNally	DATE APPROVED: March 20, 2013

LEGEND

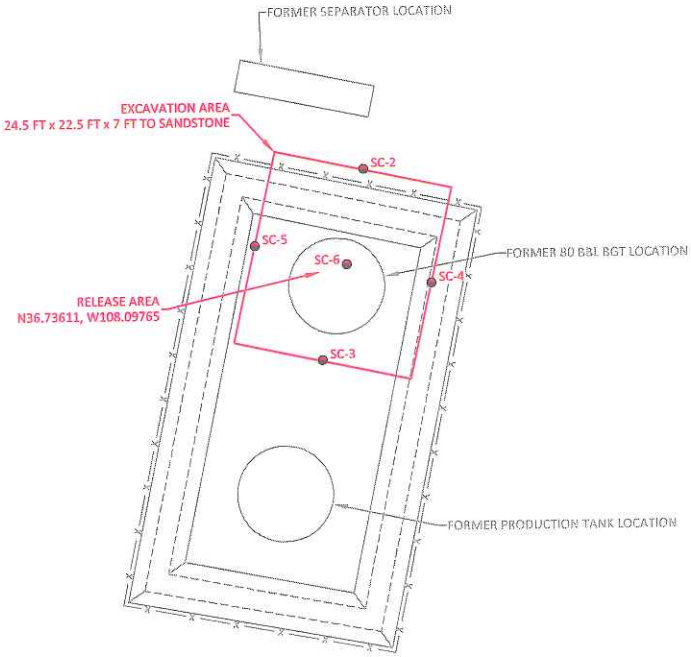
- SAMPLE LOCATIONS
- FORMER SECONDARY CONTAINMENT BERM

SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS JUNE 2013

ConocoPhillips
FEDERAL #9E
SE¼ SE¼, SECTION 9, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO
N36.73618, W108.09796



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-2	6/3/13	1 to 7	0.9	57.8
SC-3	6/3/13	1 to 7	0.8	44.0
SC-4	6/3/13	1 to 7	1.3	81.2
SC-5	6/3/13	1 to 7	1.0	52.3
SC-6	6/3/13	7	792	1,870
ALL SAMPLES WERE COMPOSITE SAMPLES.				

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	100	
SC-6	6/3/13	7	<0.12	4.3	130	710
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.						

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: June 4, 2013
REVISIONS BY: C. Lameman	DATE REVISED: June 4, 2013
CHECKED BY: D. Watson	DATE CHECKED: June 4, 2013
APPROVED BY: E. McNally	DATE APPROVED: June 4, 2013

LEGEND

- SAMPLE LOCATIONS
- FORMER SECONDARY CONTAINMENT BERM

SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Federal #9E

Date: 3/15/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	3/15/2013	11:12	North	0.0	NA	11:56	1,270	20.0	1	HMW
S-2	3/15/2013	11:14	South	0.0	NA	11:59	145	20.0	1	HMW
S-3	3/15/2013	11:17	East	0.0	NA	12:01	2,690	20.0	1	HMW
S-4	3/15/2013	11:19	West	0.0	NA	12:04	1,910	20.0	1	HMW
S-5	3/15/2013	11:22	Center	0.0	NA	12:06	331	20.0	1	HMW
SC-1	3/15/2013	11:28	Composite	0.0	60	*Not Analyzed for TPH.*				
North Base	3/15/2013	13:32	North Base	1,428	NA	13:48	644	20.0	1	HMW
North Wall	3/15/2013	13:34	North Wall	0.0	NA	13:51	30.2	20.0	1	HMW

PQL Practical Quantitation Limit
ND Not Detected at the Reporting Limit
NA Not Analyzed
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: Heather M. Woods

Report Finalized: 03/15/13

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Federal #9E

Date: 3/20/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 1.5'	3/20/2013	7:45	0.6	*Not Analyzed for TPH*				
TH-1 @ 7'	3/20/2013	7:50	1.2	8:17	11.6	20.0	1	HMW
TH-2 @ 5.5'	3/20/2013	7:58	3.3	10:04	26.9	20.0	1	HMW
TH-2 @ 7'	3/20/2013	8:07	4,562	8:25	3,620	40.0	1	HMW
TH-3 @ 4.5'	3/20/2013	8:20	4.7	10:07	26.9	20.0	1	HMW
TH-3 @ 8'	3/20/2013	8:25	5.5	8:45	30.5	20.0	1	HMW
TH-4 @ 4.5'	3/20/2013	8:40	5.6	9:04	25.6	20.0	1	HMW
TH-4 @ 8'	3/20/2013	8:45	6.8	9:12	51.4	20.0	1	HMW
TH-5 @ 4.5'	3/20/2013	8:55	3.9	10:10	31.8	20.0	1	HMW
TH-5 @ 8'	3/20/2013	9:02	4.0	9:20	33.0	20.0	1	HMW
TH-6 @ 4.5'	3/20/2013	9:30	11.9	10:12	41.6	20.0	1	HMW
TH-6 @ 9'	3/20/2013	9:36	5.4	9:57	45.2	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

Report Finalized: 03/20/13

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Federal #9E

Date: 6/3/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-2	6/3/2013	13:30	North Wall	0.9	14:00	57.8	20.0	1	SL
SC-3	6/3/2013	13:22	South Wall	0.8	14:03	44.0	20.0	1	SL
SC-4	6/3/2013	13:25	East Wall	1.3	14:07	81.2	20.0	1	SL
SC-5	6/3/2013	13:23	West Wall	1.0	14:10	52.3	20.0	1	SL
SC-6	6/3/2013	13:27	Base	792	14:13	1,870	40.0	1	SL

PQL Practical Quantitation Limit
ND Not Detected at the Reporting Limit
NA Not Analyzed
DF Dilution Factor
**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Stephanie Alyn

Report Finalized: 06/03/13

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 25, 2013

Debbie Watson
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX:

RE: CoP Federal #9E

OrderNo.: 1303647

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/16/2013 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 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1303647**
Date Reported: **3/25/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP Federal #9E
Lab ID: 1303647-001 **Matrix:** SOIL

Client Sample ID: NORTH BASE
Collection Date: 3/15/2013 1:32:00 PM
Received Date: 3/16/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	980	10		mg/Kg	1	3/18/2013 9:57:22 AM
Surr: DNOP	137	72.4-120	S	%REC	1	3/18/2013 9:57:22 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	3/18/2013 11:18:22 AM
Toluene	ND	0.050		mg/Kg	1	3/18/2013 11:18:22 AM
Ethylbenzene	0.57	0.050		mg/Kg	1	3/18/2013 11:18:22 AM
Xylenes, Total	5.5	0.10		mg/Kg	1	3/18/2013 11:18:22 AM
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	3/18/2013 11:18:22 AM
Surr: 4-Bromofluorobenzene	147	70-130	S	%REC	1	3/18/2013 11:18:22 AM
Surr: Dibromofluoromethane	96.4	70-130		%REC	1	3/18/2013 11:18:22 AM
Surr: Toluene-d8	99.4	70-130		%REC	1	3/18/2013 11:18:22 AM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	180	5.0		mg/Kg	1	3/18/2013 11:18:22 AM
Surr: BFB	147	70-130	S	%REC	1	3/18/2013 11:18:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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 greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP Federal #9E
Lab ID: 1303647-002 **Matrix:** SOIL

Client Sample ID: STOCKPILE
Collection Date: 3/15/2013 1:36:00 PM
Received Date: 3/16/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **TMG**
Mercury	ND	0.033		mg/kg	1	3/19/2013 10:06:18 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **JLF**
Arsenic	ND	5.0		mg/Kg	2	3/20/2013 7:39:21 AM
Barium	11	0.20		mg/Kg	2	3/20/2013 7:39:21 AM
Cadmium	ND	0.20		mg/Kg	2	3/20/2013 7:39:21 AM
Chromium	2.8	0.60		mg/Kg	2	3/20/2013 7:39:21 AM
Lead	7.7	0.50		mg/Kg	2	3/20/2013 7:39:21 AM
Selenium	ND	5.0		mg/Kg	2	3/20/2013 7:39:21 AM
Silver	ND	0.50		mg/Kg	2	3/20/2013 7:39:21 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH greater than 2
RL	Reporting Detection Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: **MB-6531** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **6531** RunNo: **9236**
Prep Date: **3/18/2013** Analysis Date: **3/18/2013** SeqNo: **262767** Units: **mg/Kg**

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	72.4	120			

Sample ID: **LCS-6531** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **6531** RunNo: **9236**
Prep Date: **3/18/2013** Analysis Date: **3/18/2013** SeqNo: **262769** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	47.4	122			
Surr: DNOP	5.4		5.000		107	72.4	120			

Sample ID: **MB-6507** SampType: **MBLK** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS** Batch ID: **6507** RunNo: **9236**
Prep Date: **3/15/2013** Analysis Date: **3/18/2013** SeqNo: **263399** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	72.4	120			

Sample ID: **LCS-6507** SampType: **LCS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **6507** RunNo: **9236**
Prep Date: **3/15/2013** Analysis Date: **3/18/2013** SeqNo: **263753** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		112	72.4	120			

Sample ID: **1303598-005AMS** SampType: **MS** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **6507** RunNo: **9236**
Prep Date: **3/15/2013** Analysis Date: **3/18/2013** SeqNo: **263769** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		4.902		112	72.4	120			

Sample ID: **1303598-005AMSD** SampType: **MSD** TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC** Batch ID: **6507** RunNo: **9236**
Prep Date: **3/15/2013** Analysis Date: **3/18/2013** SeqNo: **263771** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.081		111	72.4	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: **5ml-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **R9251** RunNo: **9251**

Prep Date: Analysis Date: **3/18/2013** SeqNo: **263924** Units: **mg/Kg**

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: 1,2-Dichloroethane-d4	0.43		0.5000		85.9	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.6	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **LCSS** Batch ID: **R9251** RunNo: **9251**

Prep Date: Analysis Date: **3/18/2013** SeqNo: **263925** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	107	70	130			
Toluene	0.98	0.050	1.000	0	98.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.9	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.8	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID: **1303648-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **R9251** RunNo: **9251**

Prep Date: Analysis Date: **3/18/2013** SeqNo: **263931** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.050	0.6173	0	105	67.5	124			
Toluene	0.66	0.050	0.6173	0	108	55.8	142			
Surr: 1,2-Dichloroethane-d4	0.28		0.3086		89.6	70	130			
Surr: 4-Bromofluorobenzene	0.28		0.3086		89.7	70	130			
Surr: Dibromofluoromethane	0.30		0.3086		96.9	70	130			
Surr: Toluene-d8	0.31		0.3086		102	70	130			

Sample ID: **1303648-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **R9251** RunNo: **9251**

Prep Date: Analysis Date: **3/18/2013** SeqNo: **263932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.050	0.6173	0	101	67.5	124	4.00	20	
Toluene	0.64	0.050	0.6173	0	103	55.8	142	4.12	20	
Surr: 1,2-Dichloroethane-d4	0.28		0.3086		89.3	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1303647**

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: **1303648-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **BatchQC** Batch ID: **R9251** RunNo: **9251**

Prep Date: Analysis Date: **3/18/2013** SeqNo: **263932** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.27		0.3086		87.3	70	130	0	0	
Surr: Dibromofluoromethane	0.29		0.3086		93.9	70	130	0	0	
Surr: Toluene-d8	0.31		0.3086		101	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: MB-6536	SampType: MBLK	TestCode: EPA Method 7471: Mercury							
Client ID: PBS	Batch ID: 6536	RunNo: 9314							
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265641	Units: mg/kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID: LCS-6536	SampType: LCS	TestCode: EPA Method 7471: Mercury							
Client ID: LCSS	Batch ID: 6536	RunNo: 9314							
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265642	Units: mg/kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0.003127	93.8	80	120			

Sample ID: 1303602-001AMS	SampType: MS	TestCode: EPA Method 7471: Mercury							
Client ID: BatchQC	Batch ID: 6536	RunNo: 9314							
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265644	Units: mg/kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.15	0.033	0.1660	0.01373	80.2	75	125			

Sample ID: 1303602-001AMSD	SampType: MSD	TestCode: EPA Method 7471: Mercury							
Client ID: BatchQC	Batch ID: 6536	RunNo: 9314							
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265645	Units: mg/kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.14	0.033	0.1653	0.01373	78.6	75	125	2.20	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: **MB-6535** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **6535** RunNo: **9300**

Prep Date: **3/18/2013** Analysis Date: **3/20/2013** SeqNo: **265117** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID: **LCS-6535** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **6535** RunNo: **9300**

Prep Date: **3/18/2013** Analysis Date: **3/20/2013** SeqNo: **265118** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	26	0.10	25.00	0	105	80	120			
Cadmium	28	0.10	25.00	0	112	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Lead	27	0.25	25.00	0	108	80	120			
Selenium	35	2.5	25.00	0	140	80	120			S
Silver	5.3	0.25	5.000	0	107	80	120			

Sample ID: **1303647-002AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **STOCKPILE** Batch ID: **6535** RunNo: **9300**

Prep Date: **3/18/2013** Analysis Date: **3/20/2013** SeqNo: **265125** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	31	5.0	24.14	4.977	106	75	125			
Barium	25	0.20	24.14	10.77	57.9	75	125			S
Cadmium	23	0.20	24.14	0	93.7	75	125			
Chromium	27	0.60	24.14	2.758	101	75	125			
Lead	26	0.50	24.14	7.659	77.5	75	125			
Selenium	23	5.0	24.14	0	97.0	75	125			
Silver	4.4	0.50	4.827	0	90.4	75	125			

Sample ID: **1303647-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **STOCKPILE** Batch ID: **6535** RunNo: **9300**

Prep Date: **3/18/2013** Analysis Date: **3/20/2013** SeqNo: **265126** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	31	5.0	24.74	4.977	107	75	125	2.21	20	
Barium	20	0.20	24.74	10.77	38.7	75	125	19.5	20	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: **1303647-002AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **STOCKPILE** Batch ID: **6535** RunNo: **9300**

Prep Date: **3/18/2013** Analysis Date: **3/20/2013** SeqNo: **265126** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	23	0.20	24.74	0	92.2	75	125	0.874	20	
Chromium	27	0.60	24.74	2.758	97.8	75	125	0.925	20	
Lead	29	0.50	24.74	7.659	84.8	75	125	8.23	20	
Selenium	24	5.0	24.74	0	96.0	75	125	1.38	20	
Silver	4.5	0.50	4.947	0	90.7	75	125	2.83	20	

Sample ID: **MB-6535** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **6535** RunNo: **9328**

Prep Date: **3/18/2013** Analysis Date: **3/21/2013** SeqNo: **265923** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	2.5								

Sample ID: **LCS-6535** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **6535** RunNo: **9328**

Prep Date: **3/18/2013** Analysis Date: **3/21/2013** SeqNo: **265925** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	30	2.5	25.00	0	120	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: 5ml-rb	SampType: MBLK	TestCode: EPA Method 8015B Mod: Gasoline Range
Client ID: PBS	Batch ID: R9251	RunNo: 9251
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263851 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	540		500.0		108	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015B Mod: Gasoline Range
Client ID: LCSS	Batch ID: R9251	RunNo: 9251
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263858 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	74.6	137			
Surr: BFB	480		500.0		95.1	70	130			

Sample ID: 1303648-001A MS	SampType: MS	TestCode: EPA Method 8015B Mod: Gasoline Range
Client ID: BatchQC	Batch ID: R9251	RunNo: 9251
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263867 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	15.43	2.062	92.4	50.3	148			
Surr: BFB	240		308.6		79.0	70	130			

Sample ID: 1303648-001A MSD	SampType: MSD	TestCode: EPA Method 8015B Mod: Gasoline Range
Client ID: BatchQC	Batch ID: R9251	RunNo: 9251
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263869 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.43	2.062	85.2	50.3	148	7.13	20	
Surr: BFB	270		308.6		87.2	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1303647

Received by/date: AF 03/16/13

Logged By: Anne Thorne 3/16/2013 10:30:00 AM

Completed By: Anne Thorne 3/18/2013

Reviewed By: AF 03/18/13

Chain of Custody

AF 03/18/13

1. Were seals intact?	Yes ☑	No ☑	Not Present ☐
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E Comanche St. Farmington NM 87401

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 and ASAP

Project Name: CoP Federal #9E

Project #:

Project Manager: D. Watson

Sampler: MW / CL

On Ice: ☒ Yes ☐ No

Sample Temperature: 3°C

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. 1303147	BTEX + [redacted] (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / [redacted])	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
~~MeOH Kit~~					~~MeOH~~													
3-15-13	1332	Soil	NORTH BASE	4 oz jar	—	-001	X		X									
3-15-13	1336	Soil	STOCKPILE	4 oz jar	—	-002							X					

Date:	Time:	Relinquished by:	Received by:	Date	Time
3-15-13	1717		Christine Walker	3/15/13	1717
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/15/13	1740	Christine Walker		3/16/13	10:30

Remarks: Bill to ConocoPhillips
WO: 10338500
Activity: C200
UserID: BENALE
SUPERVISOR: Carlos Ray
ordered By: Jess Heason

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

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

June 06, 2013

Debbie Watson
Animas Environmental
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: CoP Federal #9E

OrderNo.: 1306072

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/4/2013 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 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 qualifers 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1306072**
Date Reported: **6/6/2013**

CLIENT: Animas Environmental
Project: CoP Federal #9E
Lab ID: 1306072-001

Client Sample ID: ~~SC-5~~ SC-6 lrc
Collection Date: 6/3/2013 1:27:00 PM
Matrix: MEOH (SOIL) **Received Date:** 6/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **GSA**	
Diesel Range Organics (DRO)	710	10		mg/Kg	1	6/4/2013 12:16:06 PM	7743
Surr: DNOP	100	63-147		%REC	1	6/4/2013 12:16:06 PM	7743
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	130	25		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Surr: BFB	339	80-120	S	%REC	5	6/4/2013 11:41:01 AM	R11057
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Toluene	ND	0.25		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Ethylbenzene	0.33	0.25		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Xylenes, Total	4.0	0.50		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Surr: 4-Bromofluorobenzene	116	80-120		%REC	5	6/4/2013 11:41:01 AM	R11057

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1306072**

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID **MB-7743**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **7743**	RunNo: **11054**
Prep Date: **6/4/2013**	Analysis Date: **6/4/2013**	SeqNo: **312839** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.9		10.00		99.1	63	147			

Sample ID **LCS-7743**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **7743**	RunNo: **11054**
Prep Date: **6/4/2013**	Analysis Date: **6/4/2013**	SeqNo: **312840** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.9	77.1	128			
Surr: DNOP	5.0		5.000		99.3	63	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID **MB-7716** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **R11057** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.3	80	120			

Sample ID **LCS-7716** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **R11057** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313365** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	62.6	136			
Surr: BFB	1000		1000		104	80	120			

Sample ID **MB-7716** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313385** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.3	80	120			

Sample ID **LCS-7716** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313386** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	80	120			

Sample ID **1305C16-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **BatchQC** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313389** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		958.8		105	80	120			

Sample ID **1305C16-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **BatchQC** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313390** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		960.6		107	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID **MB-7716** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **R11057** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313400** Units: **mg/Kg**

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		99.9	80	120			

Sample ID **LCS-7716** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **R11057** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313401** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **MB-7716** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313419** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID **LCS-7716** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313420** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **1305C20-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313427** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID **1305C20-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **BatchQC** Batch ID: **7716** RunNo: **11057**

Prep Date: **6/3/2013** Analysis Date: **6/4/2013** SeqNo: **313428** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1306072 | RcptNo: 1

Received by/date: AG 06/04/13

Logged By: Michelle Garcia 6/4/2013 10:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 6/4/2013 10:07:14 AM Michelle Garcia

Reviewed By: 06/04/13

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

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	1.1	Good	Yes			

Chain-of-Custody Record

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

Client: Animas Environmental Services
Mailing Address: 624 E. Comanche, Farmington, NM 87401
Phone #: 505-564-2281
email or Fax#: 505-324-2022
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ NELAP ☐ Other ____
☐ EDD (Type) ____

Turn-Around Time: ☐ Standard ☒ Rush Same Day
Project Name: COP Federal #9E
Project #:
Project Manager: Debbie Watson
Sampler: Stephanie Lynn
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.4

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1306572	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
6/3/13	1327	Soil	~~Base Composite~~ SC-5	MeOH kit 1-4oz	MeOH	-001	X		X									

Date: 6/3/13 Time: 1733 Relinquished by: Stephanie Lynn Received by: Christine Walters Date: 6/3/13 Time: 1733
Date: 6/3/13 Time: 1754 Relinquished by: Christine Walters Received by: [signature] Date: 06/04/13 Time: 1000

Remarks: Bill to ConocoPhillips
NO: ~~8260B~~ 8015B
Activity Code: C200
User ID: KGARCIA
Supervisor: Mike Smith
Ordered By: Eric Smith
Area: 3

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.

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 Tafoya
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: Federal 9E	Facility Type: Gas Well

Surface Owner BLM	Mineral Owner BLM (NM-021119)	API No.3004523904

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	9	29N	12W	790	South	790	East	San Juan

Latitude 36.736 Longitude 108.09799

NATURE OF RELEASE

Type of Release Produced Fluids	Volume of Release Unknown	Volume Recovered 233 cu. yds.
Source of Release Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery March 15, 2013
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	RCVD JUL 31 '13
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	OIL CONS. DIV. DIST. 3

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Below Grade Tank Closure Activities

Describe Area Affected and Cleanup Action Taken.*
Historical hydrocarbon impacted soil was found during the BGT closure for the subject well. The excavation was 30'x 30' x 7' and 233 yds of soil was transported to IEI landfarm and 233 yds of clean soil was transported from Aztec Machine and placed in the excavation site. The soil sampling report is attached for review.

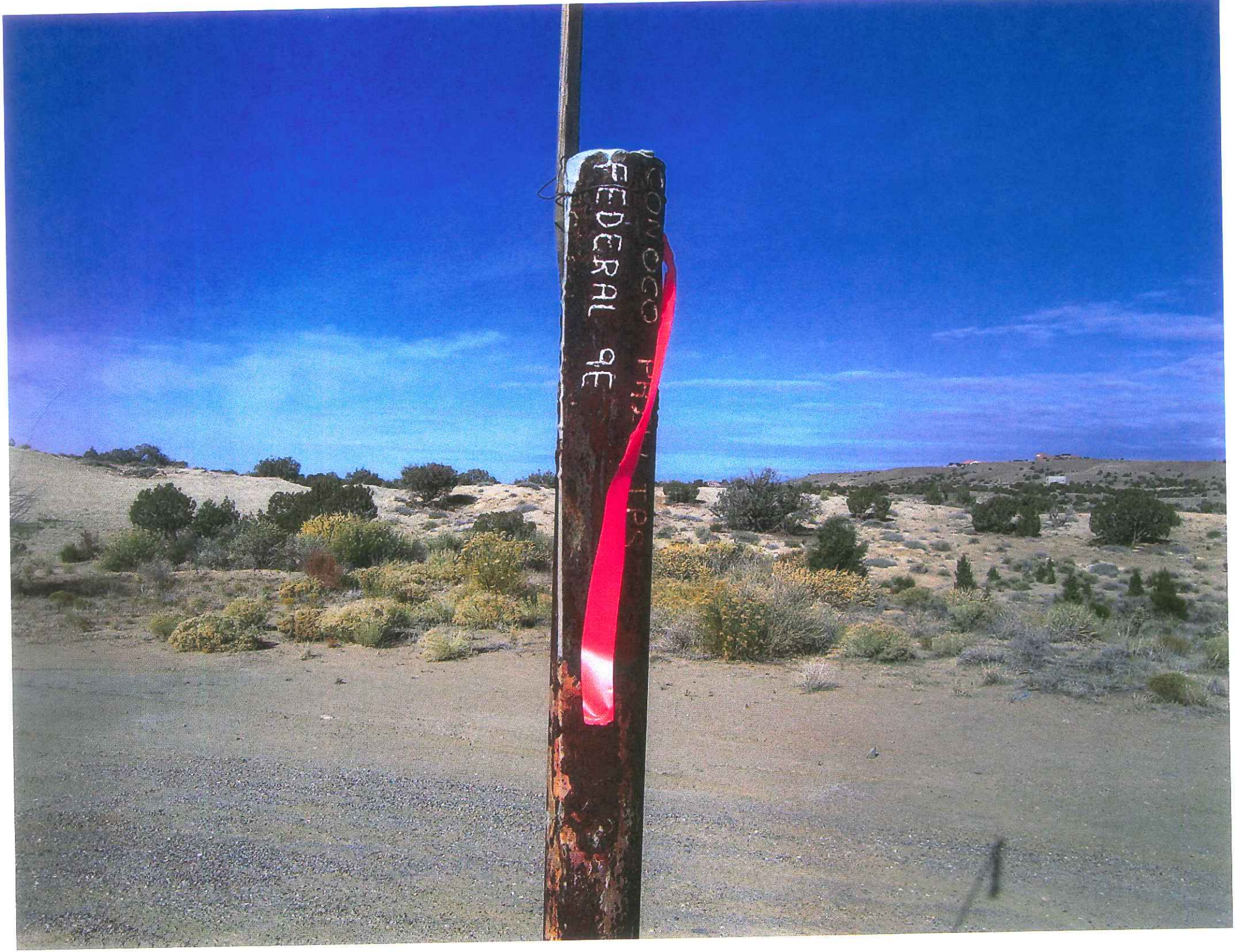
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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: Crystal L. Tafoya	OIL CONSERVATION DIVISION Approved by Environmental Specialist: Jonathan D. Kelly	
Printed Name: Crystal Tafoya		
Title: Field Environmental Specialist	Approval Date: 8/16/2013	Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: BGT Closure permit required following BGT Closure.	Attached ☐
Date: 7/30/2013 Phone: (505) 326-9837		

* Attach Additional Sheets If Necessary

nSK1322838281

45


FEDERAL #E